H.R. 503, A BILL TO AMEND THE HORSE PROTECTION ACT

HEARING

BEFORE THE

SUBCOMMITTEE ON COMMERCE, TRADE, AND CONSUMER PROTECTION

OF THE

COMMITTEE ON ENERGY AND COMMERCE
HOUSE OF REPRESENTATIVES

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H.R. 503, A BILL TO AMEND THE HORSE PROTECTION ACT

TUESDAY, JULY 25, 2006

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON COMMERCE, TRADE,
AND CONSUMER PROTECTION,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:11 p.m., in Rooms 2322 and 2123 of the Rayburn House Office Building, Hon. Cliff Stearns (Chairman) presiding.

Members present: Representatives Upton, Cubin, Radanovich, Bass, Pitts, Bono, Ferguson, Otter, Murphy, Blackburn, Barton [ex officio], Schakowsky, Green, Gonzalez, and Baldwin.

Also present: Representative Burton.

Staff present: Chris Leahy, Policy Coordinator; Will Carty, Professional Staff Member; Jonathon Cordone, Minority Counsel; Alec Gerlach, Minority Research and Press Assistant; Consuela Washington, Senior Minority Counsel; and Billy Harvard, Legislative Clerk.

MR. STEARNS. Good afternoon. The subcommittee will come to order. Our hearing today on H.R. 503, a bill to amend the Horse Protection Act, is surrounded by passionate advocates on both sides, and we appreciate that. What is notable is that all the passionate advocates care deeply about the welfare of horses, the humane conditions for their care, and have strong opinions about what this bill could mean for their livelihood, the horse industry and the beloved horses they all care about. And I would like to thank my friend and colleague, Chairman Ed Whitfield, for his hard work in bringing this important issue to the fore, his strong commitment to the welfare of horses, and his support for a comprehensive and objective hearing so Members will be able to better understand the issues that are involved and the positions of the various stakeholders.

This bill amends the Horse Protection Act to prohibit the shipping, transporting, moving, delivering, receiving, possessing, purchasing, selling or donation of any horse or other equine to be slaughtered for human consumption. Violators of the prohibition in the bill would be subject to specific criminal and civil penalties and prison terms. The authorization for administering the Horse Protection Act would be increased from $500,000 to $5 million annually. The bill is intended to

prevent the transportation and processing of horses for food and other products and the alleged inhumane treatment of those animals in their transportation and slaughter in the process. The bill permits the USDA to detain, for examination and evidence, any horse for which it has probable cause that the animal will be slaughtered and processed for food.

My colleagues, I think both sides can agree that the case of the abandoned or unwanted horse is one we all want to resolve. Supporters of H.R. 503 contend that many of the horses headed for the processing facilities suffer injury, severe stress in transport, and face an inhumane death under substandard conditions. They argue that the markets for the horse meat products produced at these processing facilities, mainly in Europe and Japan, perpetuate these inhumane conditions and contribute to the abuse of American horses.

Now the opponents of H.R. 503 argue that the unwanted horse is one of the main reasons there is a market for these animals at these processing facilities, and that better care and euthanasia practices would help resolve the issue of poor and underfunded care of horses. The opponents of the legislation also point out that eliminating the market for horse products and meat will lead to an explosion of horses that require care, and they claim over 80,000, and that would overburden the current capacity to provide adequate and humane care both in terms of facilities and financial resources. And what cost would be incurred because of this overburden? Would tax payers have to pay for the increased resources required? The supporters of the legislation believe that there is an adequate capacity for the care of unwanted horses and there is enough financial support to absorb these animals into the current care facility.

As someone who is from Florida, Ocala, Florida, horse country, I can understand the emotions that run deep with an issue that not only represents our responsibility to care for animals properly and with humanity, but truly captures a culture and a way of living that is uniquely American. I am an animal and horse lover and like all of us, want to find ways to avoid the unwanted horse scenario. That said, I am not a horse owner, a racing horse breeder, a farmer, or an animal processor. So I still am a bit distant from those perspectives on this issue and understand that this problem means much more to those who work and live in the American horse industry. I do, however, think whatever we propose, we must have a full understanding of the ultimate effects of the American horse population, no matter how we proceed, because there are arguments presented on both sides that seem to paint a pretty bleak picture for a large number of horses and their caregivers in America, in the event legislation is or is not passed. Therefore, I believe our focus today should be on discussing the best way to eliminate the unwanted

horse problem and how to find more humane approaches to that problem, as well as to study the particular issues presented by this bill. I also believe that today presents us with an opportunity to better understand what the bill could mean for the financial obligations involved in caring for additional horses, for choosing plans, or for supporting better and more humane ways of euthanizing unwanted and abandoned animals.

Again, I want to commend all of you for participating in this hearing today and your belief in protecting and treating horses humanely. I would also like to thank in particular Chairman Goodlatte and Congressman Sweeney for joining us today. Both of you, I appreciate your time, as well as the distinguished panel that we have that follows, and I look forward to their testimony. And with that, I recognize the Ranking Member, Ms. Schakowsky.

[The prepared statement of Hon. Cliff Stearns follows:]

PREPARED STATEMENT OF THE HON. CLIFF STEARNS, CHAIRMAN, SUBCOMMITTEE ON COMMERCE, TRADE, AND CONSUMER PROTECTION

Good afternoon. Our hearing today on H.R. 503, a bill to amend the "Horse Protection Act," is surrounded by passionate advocates on both sides of the bill. What is notable is that all the passionate advocates care deeply about the welfare of horses, humane conditions for their care, and have strong opinions about what this bill could mean for their livelihoods, the horse industry, and the beloved horses they all care about. First, I'd like to thank my friend and colleague, Chairman Ed Whitfield, for his hard work in bringing this important issue to the fore, his strong commitment to the welfare of horses, and his support for a comprehensive and objective hearing so members will be able to understand better the issues involved and the positions of the various stakeholders.

H.R. 503 amends the "Horse Protection Act" to prohibit the "shipping, transporting, moving, delivering, receiving, possessing, purchasing, selling, or donation of any horse or other equine to be slaughtered for human consumption." Violators of the prohibitions in the bill would be subject to specified criminal and civil penalties and prison terms. The authorization for administering the Horse Protection Act would be increased from $500,000 to $5 million annually. The bill is intended to prevent the transportation and processing of horses for food and other products and the alleged inhumane treatment of those animals in their transportation and slaughter in the process. The bill permits the USDA to detain for examination and evidence any horse for which it has probable cause that the animal will be slaughter and processed for food.

I think both sides can agree that the case of the abandoned or "unwanted" horse is one we all want to resolve. Supporters of H.R. 503 contend that many of the horses headed for the processing facilities suffer injury and severe stress in transport and face an inhumane death under substandard conditions. They argue that the markets for the horse meat products produced at these processing facilities -- mainly in Europe and Japan -- perpetuate these inhumane conditions and contribute to abuse of American horses. The opponents of H.R. 503 argue that the "unwanted" horse is one of the main reasons there is a market for these animals at these processing facilities and that better care and euthanasia practices would help resolve the issue of poor and under-funded care of horses. The opponents of the legislation also point out that eliminating the market for horse products and meat will lead to an explosion of horses that require care -- they claim over 80,000 -- and that this would overburden the current capacities to provide adequate and humane care, both in terms of facilities and financial resources, **and what cost**

would be incurred because of this overburden? Would taxpayers have to pay for the increased resources required? The supporters of the legislation believe that there is adequate capacity for the care of unwanted horses and there is enough financial support to absorb those animals into current care facilities.

As someone who is from Florida horse country, I can understand the emotion that runs deep with an issue that not only represents our responsibility to care for our animals properly and with humanity but truly captures a culture and way of living that is uniquely American. I am an animal and horse lover, and like all of us, want to find ways to avoid the "unwanted horse" scenario. That said, I'm not a horse owner, a racing horse breeder, a farmer, or an animal processor so I still am a bit distanced from those perspectives on this issue and understand that this problem means much more to those who work and live in the American horse industry. I do, however, think whatever we propose, we must have a full understanding of the ultimate effects on the American horse population no matter how we proceed because there are arguments presented on both sides that seem to paint a pretty bleak picture for a large number of horses and their caregivers in America in the event legislation is or is not passed. Therefore, I believe our focus today should be on discussing the best way to eliminate the "unwanted" horse problem and how to find more humane approaches to that problem, as well as to study the particular issues presented by H.R. 503. I also believe that today presents us with an opportunity to better understand what the bill could mean for the financial obligations involved in caring for additional horses, for closing plants, or for supporting better and more humane ways of euthanizing unwanted and abandoned animals.

Again, I want commend all of you before us today for your strong beliefs and passion to do what is right and just -- protecting and treating horses humanely, ensuring we do what's best for them, and for educating the Congress about an issue that means so much to American culture and history. I'd also like to thank, in particular, Chairman Goodlatte and Representative Sweeney for joining us today, as well as the distinguish panel before us. We look forward to you testimony.

MS. SCHAKOWSKY. Thank you, Chairman Stearns, for holding today's hearing on the issue of horse slaughter for human consumption. As a strong supporter of animal rights, a horse lover, and a former horse owner, I am proud to be a co-sponsor of H.R. 503, the American Horse Slaughter Prevention Act, which would put an end to this horrible practice. I would like to welcome Representatives Sweeney and Goodlatte, and I look forward to your views on this issue.

Horses are some of the most beautiful and beloved domesticated animals on earth. Just this summer the story of Barbaro, the Kentucky Derby winner that shattered his leg at the start of the Preakness, has transfixed millions of Americans. Since the injury, the thoroughbred has received an incredible outpouring of letters, if he can read, I don't know, flowers, homemade signs, apples, and carrots, from Americans around the country. Fans have even made pilgrimages to Barbaro's care facility in Pennsylvania to wish him well in his fond recovery. Americans are rooting for Barbaro because they have been taken with his strength, his beauty, and his strong personality. Americans have long appreciated horses for transport on ranches, as police mounts, as cherished companions. The American Horse Council reports that 1.9 million

Americans currently own horses, as I once did. Another 7.1 million Americans are involved in the industry as horse owners, service providers, employees, and volunteers, while tens of millions participate in horse events as spectators. These millions of Americans know that horses are creatures of splendor and beauty that should be treated with dignity and respect in life and death.

However, in 2005, over 90,000 horses were slaughtered at three American-based foreign-owned plants. The meat was shipped to Europe and Asia for consumption. Tens of thousands of horses were also shipped live to Canada where they were slaughtered for consumption abroad. Horses bound for slaughter must endure inhumane conditions on the way to and during slaughter. Horses are shipped frequently for long distances in terrible condition. They are crammed together in trucks built for cattle and pigs, and because of the crammed conditions, they are often trampled. Some horses arrive at the slaughterhouse seriously injured or dead. Once at the slaughterhouse, horses are often not rendered unconscious before they are killed, as mandated by Federal law.

Most people assume that all or most of the horses bought for slaughter are old or injured. In fact, according to USDA guidelines for handling and transporting equines to slaughter, 92.3 percent of horses that arrive at slaughter plants are in "good" condition, meaning they are not injured, lame, overweight, or underweight. Healthy animals, past and former racehorses, all are sent to slaughter. Anyone who has ridden a horse and who has been captured by its personality and strength can't support their inhumane slaughter. Not surprisingly, polls from California to Virginia show that between 60 and 82 percent of Americans do not support horse slaughter. I received hundreds of letters, and I am sure other members of the committee have, from constituents who oppose horse slaughter and support H.R. 503.

Congress has also expressed its desire to end horse slaughter by voting to amend the fiscal year 2006 Agriculture Appropriations bill to ban the practice. That amendment passed overwhelmingly by a vote of 269 to 158 in the House, and 69 to 28 in the Senate. Unfortunately, the USDA has skirted the law and continues to allow horses to be slaughtered in the United States. I believe it is time to listen to the American public and finally end the barbaric practice of horse slaughter by passing H.R. 503. It is long overdue, but I have to say that I also did talk yesterday with opponents of this legislation, who described the plight of unwanted and abandoned horses and I appreciate that recognition by the Chairman and the need to bring that part of the debate into consideration today. So I again thank you for holding today's hearing and I look forward to hearing from our witnesses.

MR. STEARNS. I thank the gentlelady. The distinguished Chairman of the full committee, Mr. Barton.

CHAIRMAN BARTON. Thank you, Mr. Chairman. I am going to put my written statement in the record and just speak extemporaneously. I want to thank our witnesses for being here. I have gone to some length to make sure, in conjunction with Mr. Whitfield and Mr. Stearns, that this be a balanced hearing. In our first panel I have my good friend, Congressman Sweeney, who is passionately for the bill, and my good friend, Bob Goodlatte, who is passionately against the bill. So that is certainly balanced. On the next panel I have my good friend and long-time supporter, Mr. Boone Pickens, and his lovely wife, Madeline, who are passionately for the bill. And I have the past president of the Texas Veterinary Association, Dr. Bonnie Beaver, who I have talked to about it several times, who is passionately against the bill. So I am kind of like Solomon when he was asked about the baby and his answer was to split the baby, this is a tough issue. I am, on balance, opposed to the bill. I did send a letter last year to Mr. Whitfield, saying that I would vote for last year's bill if it were to come to a vote, but the more I have learned about it, the more I think, on balance, it is the best public policy to be against it for a number of reasons. But I have promised that this hearing is going to be fair, and I want to commend Mr. Whitfield and Mr. Sweeney. For those of you that are supporters of the bill, you couldn't have more passionate, articulate committee-dedicated sponsors than those two gentlemen. They have absolutely done everything in a positive sense possible to bring this legislation forward, and the result is this hearing. And Mr. Goodlatte's committee, the Agriculture Committee, there is going to be a markup of the bill in the very near future. So I hope we have a balanced hearing and that we get the facts on the table and then we will let the Congress work its will. And with that, I yield back.

[The prepared statement of Hon. Joe Barton follows:]

PREPARED STATEMENT OF THE HON. JOE BARTON, CHAIRMAN, COMMITTEE ON ENERGY AND COMMERCE

Thank you Chairman Stearns for holding this hearing. I know that H.R. 503 is an emotional issue for some people, and it is my hope that today's hearing will give us a chance to look beyond the emotion and explore the facts of this issue and this bill.

I thank all of today's witnesses for coming. It is important that this discussion be fair and open, and I think we have the best witnesses from both sides to make sure that is the case.

It is no secret that I am opposed to H.R. 503. And despite what has been said, it is not because I dislike horses, or because I had some bad experience with them when I was young. My opposition to this bill stems from a realization that this bill comes with some negative consequences that I believe are being overlooked.

Ever since this issue was referred to my Committee, I have been bombarded by calls, letters, and meeting requests from people inside my own district, and across the country. I've heard from individual ranchers and horse owners as well as the American Quarter Horse Association, the American Veterinary Medical Association, the American Association of Equine Practitioners, American Farm Bureau Federation, National Cattleman's Beef Association, the Texas and Southwestern Cattle Raisers Association, and the Livestock Marketing Association.

These are just some of the groups opposed to this bill, and these are groups that, frankly, I consider to be representative of rural America. They have all said the same thing. H.R. 503 will lead to a miserable existence for thousands of horses, and is an outright strike at animal agriculture.

The care and the overall health of the animals—and the rights of their owners—should always be the primary concerns when taking up legislation of this nature. Processing unmanageable and unwanted horses provides a humane alternative to continuing a life of discomfort, inadequate care, or abandonment.

Mandatory USDA inspection, which abides by strict laws monitoring the welfare of animals in the processing facility, assures humane handling requirements are met. And I would like to note that since last year's Agriculture Appropriations bill was enacted, the three equine processing plants pay for those inspectors out of their own pockets. No expense to the taxpayer.

H.R. 503 provides no alternative for the thousands of horse owners for whom continued care of an animal is no longer economical or in some cases humane. We have several veterinarians on the panel today, and I look forward to hearing their views on the animal welfare side of this issue.

The other concern that this bill raises for me is one of private property rights. While a majority of my constituents live in the Arlington/Fort Worth area, the geography of my district is almost entirely rural. Animal agriculture is a large part of the economy for much of rural America, and agriculture is already one of the most extensively regulated industries in the United States.

In the name of animal welfare, the USDA tells producers how they can and can't transport their animals. In the name of consumer safety, the USDA tells producers what they can and can't feed their animals. Now we want to tell producers who they can and can't sell they're animals to. As a long-time proponent of limited government, I take issue with that.

The horse owners in question have fed, housed, and cared for their animals—for decades in many cases—at great personal expense. When an animal reaches the point when he is no longer productive for the owner, and no one else will purchase the animal, who are we to deny an owner the opportunity to recover a small portion of their investment? Why should they not be allowed to sell their animal to a legal, humane, and closely regulated processing facility?

Again, I understand that this is an extremely emotional issue for many people, but this Congress cannot and must not allow itself to govern by emotion. I'm glad that we have this opportunity today to get the facts about equine processing out in the open, and I look forward to hearing from our expert witnesses. I would particularly like to thank Dick Koehler (KAY-LER) for coming up from Fort Worth. Mr. Koehler runs one of the processing plants we here to discuss, and I'm glad we have a good Texan here who knows this process on a firsthand basis.

Thank you, and I yield back.

MR. STEARNS. I thank the gentleman. Ms. Baldwin.

MS. BALDWIN. Thank you, Mr. Chairman. I appreciate the fact that you are holding this important hearing and it is a timely hearing on H.R.

503, a bill to amend the Horse Protection Act to effectively ban the slaughter of horses for human consumption. As one of the nearly 200 co-sponsors of H.R. 503, I want to express my strong and longstanding support for the bill, and I thankfully look forward to the opportunity to vote for this legislation in committee and when it reaches the House floor, hopefully in the near future.

Over 90,000 horses, many of them young and healthy, are slaughtered in the United States annually for the purpose of human consumption. Most horse meat is sold abroad, with the United States exporting about 18,000 metric tons of such meat, valued at $61 million last year. Many horses slaughtered each year are either stolen or obtained through false pretenses by what are known as killer buyers at auction houses, hired by foreigners in the horse meat industry. Equally as troubling as the sale of horse meat is the way the animals are killed. Horses are often transported to slaughterhouses in crowded trailers, where they may wait for more than a day without food or water, an inhumane treatment of horses currently allowed under the Department of Agriculture regulations.

The conditions at some horse slaughterhouses are notorious, and the methods of killing are often cruel and inhumane. I believe that the way we treat our animals is a reflection of our society as a whole. Given the special place that horses occupy in our culture and in our history, and most simply because I think it is the right thing to do, we must ensure uniform and humane treatment of horses, even when they are abandoned. The current horse slaughtering industry is under-regulated and encourages theft, fraud, and overbreeding for the purpose of human consumption, and that is why I applaud the sponsors of this bill for their effort to amend the Horse Protection Act and comprehensively prohibit the slaughtering of horses for human consumption.

The market demand for horse meat in foreign countries should not drive the cruel and unnecessary practice of horse slaughter domestically, and I look forward to swift consideration of this bill in committee and in the House, and thank you again, Mr. Chairman, for holding this vital hearing. I yield back.

[The prepared statement of Hon. Tammy Baldwin follows:]

PREPARED STATEMENT OF THE HON. TAMMY BALDWIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN

Thank you Chairman for holding this important and timely hearing on H.R. 503, a bill to amend the Horse Protection Act to effectively ban the slaughter of horses for human consumption. As one of the nearly 200 co-sponsors of H.R. 503, I want to express my strong and long-standing support for the bill and I look forward to voting for the legislation when it reaches the House floor in the near future.

Over 90,000 horses, many of them young and healthy, are slaughtered in the United States annually for the purpose of human consumption. Most horsemeat is sold abroad, with the United States exporting about 18,000 metric tons of such meat valued at $61 million last year.

Many horses slaughtered each year are either stolen or obtained through false pretenses by "killer-buyers" at auction houses hired by French or Belgian owned horsemeat industry. Equally troubling as the sale of horsemeat is the way the animals are killed. Horses are often transported to slaughterhouses in crowded trailers, where they may wait for more than a day without food and water – an inhumane treatment of horses currently allowed under the Department of Agriculture regulations. The conditions at horse slaughterhouses are notorious, and the methods of killing are cruel and inhumane. Horses are sometimes beat on the neck, head, backs, and legs, and stunned with a metal rod into the brain.

I believe the way we treat our animals is a reflection of our society as a whole. Given the special place horses occupy in our culture and history, we must ensure uniform and humane treatment of horses, even when they are abandoned. The current horse slaughtering industry is under-regulated and encourages theft, fraud, and over-breeding for the purpose of human consumption. That is why I applaud the sponsors of this bill for their effort to amend the Horse Protection Act and comprehensively prohibit the slaughtering of horses for human consumption. The market demand for horsemeat in foreign countries should not drive the cruel and unnecessary practice of horse slaughter domestically. I look forward to the swift passage of this bill through Committee and the House, and thank you again Mr. Chairman for holding this hearing.

MR. STEARNS. The gentlelady from California, Ms. Bono.

MS. BONO. Thank you, Mr. Chairman. I would like to also thank you for holding this hearing today. My good friends, Congressman Ed Whitfield and Congressman John Sweeney, have been true champions of this bill. I am thankful for their efforts and I am with them 100 percent. I believe that, for me and for many of my colleagues, the story behind the need for this legislation has touched us deeply. I have always enjoyed the thrill and the freedom that comes from a great horseback ride. The animals are strong, intelligent creatures that deserve our respect. However, the processes by which they are slaughtered are anything but respectful. I realize many members will concede the point that these animals should be treated humanely, but wonder what the Federal nexus is. Simply put, the States are looking to the Federal government for guidance. The State of Texas tried to ban commercial slaughter of horses, but the State courts ruled that the Federal law preempts State law. So it is up to Congress to decide whether or not the commercial slaughter of horses should continue.

But let us look at some of the facts. Currently, there are three slaughterhouses in the United States. All three are foreign owned. The meat goes to foreigners as well, since there is no market for horse meat in the United States. Ending commercial slaughter will not lead to increase in abandoned horses, since many which are slaughtered are actually stolen from their rightful owners and sold under false pretenses. In my home State of California, we have had a ban on horse slaughter for

8 years and have seen no increase in abandoned or neglected horses. This bill will not interfere with private property rights, since owners could still euthanize a sick horse. Horses bound for the slaughterhouse are crammed into double-decker trailers, as my colleague just said. They are designed for smaller animals like cattle and they cannot be segregated, so many do not even survive the trip, as they are killed en route.

Finally, the slaughter process itself is grossly inhumane. It is not quiet or peaceful. Mr. Chairman, we are not talking about undermining a longstanding American industry that is out to serve Americans. Instead, I am asking for you and my colleagues to take a close and hard look at the current practice of horse slaughter and ask yourselves if this is something our country should condone. It is my opinion that based on the facts before us and the States looking to the Federal government for a nationwide policy, our answer can and must be against the commercial slaughter of horses. Thank you again. I look forward to the testimony today, I welcome my two colleagues, and I yield back the balance of my time.

MR. STEARNS. The gentlelady yields back. Mr. Green.

MR. GREEN. Thank you, Mr. Chairman. I would like to ask for a full statement to be placed in the record.

MR. STEARNS. By unanimous consent; so ordered.

MR. GREEN. First, I would like to thank you and our Ranking Member, Ms. Schakowsky, for holding this hearing and ultimately the markup tomorrow. I want to also thank Congressman Whitfield and Congressman Sweeney for their dedication in number of terms. I don't know how many times I have been a co-sponsor of it, but it has been a number of years for your dedication to this. We have 201 co-sponsors, including myself, who believe horses should not be slaughtered for human consumption. According to the USDA, 90,000 horses were slaughtered for human consumption in 2005. Most of the horses obviously were raised for other purposes, a majority for riding, but no longer wanted by their owners. They are collected by dealers who supply the foreign-owned plants from auctions, boarding facilities, and elsewhere. Unlike cows and pigs and other animals, horses are not raised in feedlots for human consumption, so horse owners often don't know who they are selling their animal to and it may be actually going to human consumption.

Since Americans don't eat horse meat, it is shipped overseas. The biggest consumers of horse meat are France, Italy, Belgium, and Japan, which consider it a delicacy and often used as an alternative to beef. I think it is ironic that Japan, for instance, regulates the amount of American beef that is imported into that country, but these regulations

are not imposed on American horse meat. Congress has passed several amendments in the past to end horse slaughter for consumer consumption, but the USDA has not implemented an outright ban. When Congress cut USDA funding for inspections of the horse meat, the plants started paying USDA on a fee-for-service basis, continuing inspections. It is time we passed legislation that would permanently ban this practice and end horse slaughter for human consumption. And again, Mr. Chairman, I am glad that the panelists are here today, and normally from Texas, I would support--but in this case, since two of three plants are in Texas, I am going to make an exception for my rule, that is why I am a co-sponsor of this bill and I am looking forward to the markup tomorrow, Mr. Chairman.

MR. STEARNS. I thank the gentleman. Mrs. Cubin.

MRS. CUBIN. Thank you, Mr. Chairman. I would like to make it clear right now, at the very beginning, that if you believe in the humane treatment of animals, this bill takes us a step backwards. If you believe in preserving a balanced and natural ecosystem, this bill moves us in the wrong direction. If you believe in personal property rights, this bill represents an assault on that uniquely American ideal.

Speaking of an American ideal, there are many here today who will say that we are slaughtering young, strong horses, which are symbols of the American West. I am here today to tell you that this is not the case. I am from Wyoming and one of the first memories I have in my life is sitting on the back of a horse. I love horses as much as anyone here, but I am here today to tell you that this is not the case, that we are not striking out at symbols of the American West. Many of these horses are old, ill, and starving due to overpopulation or they have otherwise ceased in their proper function. Ninety thousand horses per year must be adopted if this bill is enacted. When you take into consideration the fact that the wild horses that roam the plains of Idaho, Wyoming, Utah, and Colorado can't be adopted, how will be able to adopt an additional 90,000 horses that otherwise will be in the system?

There isn't a practical answer for that if this bill is enacted. But you don't need to take my word for it. Mr. Chairman, I have heard from over 60 reputable horse organizations, animal health organizations, and agricultural organizations, such as the American Veterinary Medical Association, the American Association of Equine Pet Practitioners, the American Quarter Horse Association, the American Painted Horse Association, owners, and more than a dozen State horse councils and others who are opposed to this legislation. Most importantly, I have heard loud and clearly from folks who know and love horses more than anyone in this room, Wyoming's ranchers. They are the ones who breed their horses. They help deliver them at birth. They train them. They

feed them every day. They care for them when they are sick. Every day of their lives they are interacting with the horses that they love. Wyoming's ranchers depend on horses for their livelihood. They know all there is to know about caring for a horse in the harsh seasons on the high plains and in the Rocky Mountains. They have to know in order for them to survive.

Mr. Chairman, these folks know their animals like they know themselves, and yet today we were considering a bill that will tie their hands, preventing them from making a humane choice for their horses. Today we are considering a bill that will sentence innumerable horses to a life of starvation and suffering. Today we are considering a bill that will have untold disastrous effects on the ecosystem. Today we are considering a bill that puts the feelings of other animal lovers above the rights of ownership. Mr. Chairman, I sincerely admire the motivation of the people who are here in support of this bill today. If only their love of these regal creatures could take care of all of the needs these wonderful animals have, the problem would be solved, but in practicality, that is not the case. We can't adopt another 90,000 horses a year. With that, I yield back the balance of my time.

[The prepared statement of Hon. Barbara Cubin follows:]

PREPARED STATEMENT OF THE HON. BARBARA CUBIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WYOMING

Thank you Mr. Chairman, I want to make this clear right now at the very beginning – no matter how you look at it, this is poor legislation. If you believe in the humane treatment of animals, this bill takes us a step backwards. If you believe in preserving a balanced and natural ecosystem, this bill moves us in the wrong direction. If you believe in personal property rights, this bill represents an outright assault on that uniquely American ideal.

Speaking of an American ideal, there are many here today who will say that we are slaughtering young, strong horses, which are symbols of the American West. I am here today to tell you that this not the case. Many of these horses are old, ill, starving due to overpopulation or have otherwise ceased their proper function.

But you don't need to take my word for it.

Mr. Chairman, I have heard from over 60 reputable horse organizations, animal health organizations, and agricultural organizations such as the American Veterinarian Medical Association, the American Association of Equine Practitioners, the American Quarter Horse Association, the American Painted Horse Association, owners, and more than a dozen state horse councils opposed to this legislation.

Most importantly, I have heard loud and clear from folks who know and love horses more than anyone in this room – Wyoming's ranchers. Wyoming's ranchers depend on horses for their livelihood. They know all there is to know about caring for a horse because in the harsh seasons out on the high plains or up in the Rocky Mountains, they have to know in order to survive.

Mr. Chairman, these folks know their animals like they know themselves. And yet, today, we are considering a bill that will tie their hands, preventing them from making the humane choice for their horses. Today we are considering a bill that will sentence

innumerable horses to a horrific life of pain and suffering. Today, we are considering a bill that will have untold disastrous effects on the ecosystem. Today we are considering a bill that puts the whims of supposed animal lovers above the rights of ownership.

With that, I yield back the balance of my time.

MR. STEARNS. I thank the gentlelady. Mr. Gonzalez.

MR. GONZALEZ. Thank you very much, Mr. Chairman, and welcome to one and all. Obviously this is something that many people have very strong feelings about. I think someone earlier said that much of this topic is emotional in nature, so let me go ahead and defend emotion, human emotion. I think emotions lead to compassion and that is not a bad thing, and maybe our laws should reflect some of that compassion. But in this particular debate, before I became a co-sponsor, I did meet with individuals who are well versed with the issues and the facts, and I think that our emotion and our compassion at the end of this debate will be fully buttressed and supported by the facts in this particular piece of legislation. And I want to have a good faith debate, but I just don't want individuals to simply say that this is totally emotionally based. And that is not a bad starting place and I think it gives us a road map that we can follow and I do truly believe, after listening to the proponents and the opponents, that the proponents present a more factual case in support of this particular piece of legislation. And I yield back.

MR. STEARNS. I thank the gentleman. We are going to continue the opening statements. I would like to announce to everybody in the audience, we are able to get the downstairs room, which is 2123, which is much larger. And I am sorry that so many people have to stand. We are going to finish the opening statements and I urge everybody to keep within the 3 minutes, listen to our two distinguished members of Congress, and then before the next panel comes up, we will go downstairs and then we have a line outside that is waiting. I want everybody to get in to hear this very important hearing. So we asked for a bigger room and we got the bigger room. So with that, we will continue our opening statements. Mrs. Blackburn.

MRS. BLACKBURN. Mr. Chairman, I am going to waive.

MR. STEARNS. I thank the gentlelady. Mr. Murphy,

MR. MURPHY. Thank you very much, Mr. Chairman, for holding this hearing and I am looking forward to hearing it and getting information from all sides here. I come to this from the perspective of my memories as a child. My first job was mucking stalls at my neighbor's farm. We had one farm with quarter horses and one with thoroughbreds. In exchange, I would get 50 cents an hour and I could ride the horses to my heart's content, even though I could barely come up to their shoulder. Now, as a Congressman, I represent racetrack and the

farmers who own their horses. I represent the owners of the Heinz Hitch, some of those large horses that pull that wagon along. But, I don't represent horses. I represent the farmers who own them. And I have been listening so far to the comments, a number of things have come up here, where we are concerned about the care, the transportation, the slaughter, and the treatment of horses, all of which are very important. As far as I can tell, there are laws covering how farmers should humanely raise horses and cows and pigs and chickens and goats, et cetera. There are laws covering how horses should be transported, whether going to the racetracks or going somewhere else. There are laws covering how a horse should be slaughtered. There are laws prohibiting farmers from killing their own horse when it reaches the end of their life. There are laws that prohibit farmers from burying a horse on their land.

When a farmer has a horse that is old or can no longer be ridden, raced, or worked, and this includes many Pennsylvania farmers who are Amish and Mennonite, the farmer can keep the horse in pasture, paying for the care and feeding and health and upkeep. That costs them. There are laws, in fact, that say they have to do that, or else they are accused of abusing the animal and treating it inhumanely. Or the farmer can have the horse put down, euthanized, shot, or taken away. If shot, that meat will get used for meat in a zoo. If euthanized, it gets sent off for rendering, which is used in products like lipstick. A horse can be cremated and a horse can be buried somewhere, but all of those cost the farmer a great deal of money. But the question comes down to whether or not the farmer has the right to decide.

Now I, in having ridden many horses in my lifetime and grew fond of them too. But the question is not how I feel about the horse. The question is, does the farmer have a right to decide that this is livestock? So they have a right to decide how what happens to that horse at the end of its life. Similarly, does a farmer have a right to decide what happens to his cows, his pigs, his goats, his chickens, and other livestock as well? Or do we anthropomorphize them and become emotionally attached and somehow say that the rules are different? Now let us keep in mind the examples we are hearing and I am open to hearing these points about how horses may be inhumanely treated against the law and how they may be transported, slaughtered, or raised. All of us should stand up against that mistreatment. Those are the laws in place and are there for good reason. I want to know however, if there are specifics as relates to when horses are used for human consumption, that it is somehow different. Let us not blend them all together. Let us look at those things in particular.

Unless we are going to outlaw all transportation, all rendering, all euthanizing, all killing of horses for any reason, somehow the irony is

not laws. Last week, as we were arguing stem cell research, the issue about embryos, about why some said it was okay to discard some embryos was because they were unwanted, and so people were saying it is okay, we can use those, and others were saying, no, it is not okay. It was a question in the debates very much between those who said even an embryo is life, it should be preserved, and those who said, no, it is unwanted. Do what you want with it. And now the irony is, we have flipped that argument the other way. If a horse is unwanted, you can't have it that way. You can't use it in a way that the farmer wants.

Now farmers are businesses across America. Agriculture is the number one business in Pennsylvania. As I said before, we have many Amish and Mennonite farmers out there, who at the end of the horse's life see this as livestock, as a means of making some money. And instead, if we say that, no, you can't, you have to raise this horse, continue to pay for this horse, where do we get the money from to do that? Or do we say someone has to adopt it. Who is going to adopt the horse? Or if we say to the farmer, the horse will still have to be killed, who is going to pay for that? These are all important questions and I am hoping that from some we hear from today, that it includes farmers who have to foot the bill, for the farmers who refer to this as livestock. So I am looking forward to this hearing and hearing about some details of this in answer to some of those questions. Thank you, Mr. Chairman.

MR. STEARNS. I thank the gentleman. Mr. Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. Thanks for holding this hearing and thanks to our witnesses, thanks to Chairman Goodlatte and Mr. Sweeney for joining us and the other witnesses we will hear from today. I am pleased to express my strong support for H.R. 503. I am a co-sponsor of the American Horse Slaughter Prevention Act. This legislation enjoys broad and bipartisan support in this Congress. It is strongly supported by the veterinarians, the horse racing and thoroughbred industries, animal welfare groups, and countless Americans across the country.

Currently, nearly 100,000 horses are slaughtered in American each year, killed not solely because they are old or sick, but rather so their meat can be eaten by humans. Human consumption of American horses is rampant in Asia and some European countries. Worse, the process of how these horses are killed in American slaughterhouses often does not follow United States law. An existing Federal law that governs how horses are transported to slaughterhouses only encourages cruel treatment. For example, horses can be transported for up to 28 hours and during that time can be denied food and water. It is clear that in the 1996 Commercial Transportation of Equines for Slaughter Act, and in the 2002 Agriculture Department regulations that enforce that law, clearly

these are not working and in fact are only serving to create additional incentives for ongoing cruelty to horses.

H.R. 503 would ban the slaughter of horses in America for human consumption abroad. This is a needed reform and it is long overdue. Federal law should not, as the 1996 law and its 2002 relations do, should not permit the inhumane treatment of horses as they are transported to slaughterhouses where their meat is packaged and shipped overseas for human consumption. The House last year voted overwhelmingly in support of an appropriations amendment that restricted Federal funds from being used to facilitate the slaughter of horses for human consumption, the ideal amendment in the Senate won approval with broad and bipartisan support. Clearly, both bodies of Congress have already taken a stand on this issue. Slaughtering horses for human consumption abroad is completely unacceptable and this practice must be stopped.

I want to commend my colleagues, Mr. Whitfield and Mr. Sweeney and others, for championing this cause and it really represents, I think, the will of Congress and the will of the American people. I also want to add a word of thanks to the Humane Society of the United States and other advocacy organizations. They have tirelessly and responsibly advocated the cause of this legislation and I believe their work has both reduced animal cruelty and frankly, raised awareness for animal care in this country and around the world. Again, I want to thank our witnesses for being here today and thank you, Mr. Chairman, for considering this issue.

MR. STEARNS. I thank the gentleman. The gentleman from New Hampshire, Mr. Bass.

MR. BASS. Thank you, Mr. Chairman, and I appreciate your holding this hearing and I appreciate the work of the two Members who are in front of us and my friend from Kentucky, Mr. Whitfield. And I think this is going to be a helpful hearing and I hope we can move this bill forward. I think it is a god bill and I think there are some misconceptions about its intent. There is nothing in here that says that a horse cannot be killed. There is, frankly, nothing in this bill, as far as I can tell, that says that a horse can't be eaten. But what it does say is that you can't make money off of the slaughter of horses for human consumption for food.

Now we do have, indeed, on farms pigs, chickens, cows, and so forth, which are either milked or slaughtered and so forth, but they are raised for that purpose, and I think that when one deals with the issue of horses, it is different. And although I think that there are some problems in this bill that need to be addressed, for example, the export of horses to other countries such as Canada and Mexico and whether or not they--what would happen under those circumstances, whether or not there are

facilities, rescue centers, sanctuaries, and so forth that are adequate to accommodate these animals should the slaughter prohibition go into effect, and also whether or not there would be adequate food supply for animals in zoos that need horse meat in order to survive. But ultimately, I don't think that a horse is the same as a cow or a pig because, in America, they have not been raised for the purpose of human consumption to begin with and this is something that I think is a relevant issue that needs to be addressed and I hope the committee takes action on this bill, and I yield back.

MR. STEARNS. Mr. Upton. Mr. Upton is not here. Mr. Otter.

MR. OTTER. Thank you, Mr. Chairman, and I appreciate all of the interest in this bill. Mr. Sweeney and I have had many long discussions about it. I would say that I could probably challenge anybody in this room, as many horses that I have owned. I have rodeoed since I was 18 years old and had horses all of those years. I still rodeo and I still have quite a few horses and as many as 80 horses at one time. And I do have a lot of problems with this bill, and probably the largest problem I have with this bill is that there are States that are having problems in enforcing their laws. We enforce our laws in Idaho, and if there are States that are having problems enforcing their laws, well then, I would suggest that they go to their State legislatures. But I don't know why the Federal government is involved in this. You know, I have looked around and it is pretty hard for me to find any constitutional basis for the Federal government to get into the business of regulating horse slaughter. Humane treatment, fine, but once the horse is slaughtered, I think--or any animal is slaughtered, we do have State laws and we obey those laws. So if you are not obeying the laws in your State, then you ought to go back to your State and ask that question.

Everybody has asked a question thus far. So who pays the bill? What do we do with these animals if we are not going to dispose of them in the way that we have? And I would tell you where we can start. Right now the Bureau of Land Management has a feed lot, or several feed lots, scattered around the western United States, where they have had to take the wild horses off the range because of a multitude of problems, including disease, overpopulation, and we are now spending upwards of $20 million a year to feed lot those horses, put those horses in confined feeding so that we can take care of them because you can't kill them, as you know. Wild horses have been exempt for a long, long time, but wild horses are not private property.

And so I think that this bill is going to raise a whole lot more questions than it is answers. The questions of private property, the questions of what do we tell the people? What do we tell the people that do eat horse meat, that need to eat horse meat? We are going to have

these horses being put down and not consumed, and at the same time there are millions of people in the world that are starving to death. So I would just ask the question that, before we run headlong into trying to solve the problem for a few States, that we then implement some sort of mandatory program over all 50, that we take a look at truly what we are doing here, because it is going to be expensive, it is going to be dysfunctional, and I think, in the long run, it is going to create a lot more problems than it solves. I yield back.

MR. STEARNS. I thank the gentleman. I think all of the committee members have had a chance to speak, and with unanimous consent agreement, we will allow Mr. Whitfield from Kentucky to have his chance, perhaps, for an opening statement, unless the gentlelady had waived. So Mr. Whitfield, unanimous consent to allow you an opening statement.

MR. WHITFIELD. Well, thank you, Mr. Stearns, and I genuinely appreciate this opportunity on this important bill. I want to thank John Sweeney for his leadership. A lot of people have asked this question: who pays the bill for unwanted horses? And I find it interesting that everybody is talking about, well, the Federal government should be responsible for this. What about the breeders? The largest breeder in America today are the quarter horse people. They had 144,000 new foals last year. Do they have any responsibility at all? Well, I think they do. Why should the taxpayers be taking care of this? They talk about unwanted horses because they are the most prolific breeders in the country. The thoroughbred industry is breeding 34,000 horses a year, and the quarter horse, over 144,000. So let us talk about breeder responsibility.

Now, Mr. Otter mentioned about why is the Federal government involved? If you look at Texas, you will find out that Texas has a State law that has been on the books for many years that makes it illegal to sell horse meat as food for human consumption. And John Cornyn and the Attorney General wrote a legal opinion and said this was a criminal offense. Beltex and Dallas Crown are engaged in this activity; it is a criminal offense. A lawsuit was filed by Beltex and by Dallas Crown and they won that suit because the Federal judge said this is about interstate commerce, this is about Federal preemption, and if it is going to be changed, the Federal government has to change it. That is why we are here looking at this bill, because only the Federal government can change it.

Now, they did a poll in Texas and they have done others around the country. Eighty-nine percent of the people polled in Texas didn't even know horses were being slaughtered in Texas. Seventy-two percent of the people said they are opposed to horses being slaughtered for human

consumption. Seventy-seven percent said they would oppose any legislation to legalize horse slaughter in Texas. Because, after John Corning's legal opinion, Betty Brown introduced legislation to make it legal and she couldn't even get it through the Texas legislature. So that is why the Federal government is involved in this, because the States can't do anything about it.

Now, people who say that animal rights groups are behind this bill, I would just give you a list here of individuals and organizations, like the Bull Riders Association and every horse group that you can name, opposed to this bill, we can name groups that support this bill. Every veterinarian you find opposed to this bill, we can find a veterinarian to support this bill. We have corporate leaders that are out there leading the charge to pass this legislation because they are responsible. We talk about private property rights. What about the individual whose horse is stolen? And we know many horses ended up at slaughter because they are stolen. And this new program that was started back in 1997 or 1998, in which the slaughterhouses pay $5 a head for every horse stolen, $3 to the Cattlemen's Association, and $2 to Texas A&M Extension Service, for the purpose of determining stolen horses. In a newspaper article in San Antonio just 2 years ago they were talking about it and they said we haven't found any stolen horses yet. And I think Mr. Koehler, in his testimony for Beltex today will indicate they have not found any stolen horses.

I know my time has expired, Mr. Chairman. I will just make one additional comment. I found a case in Kentucky, when one of my constituents who filed a lawsuit and received a judgment of $126,000 against a couple that obtained his horses by misrepresentation, sold them to killer buyers for Beltex, and took the horse to Beltex for slaughter. It is in the court records. We know that many horses being stolen are ending up being slaughter and that is one of the reasons we want to pass this legislation.

MR. STEARNS. I thank the gentleman. Mr. Pitts just came in. Would you like to have an--he will waive. With that, we will move to our panel, our distinguished members, and at this point, Mr. Sweeney, we are going to call on you first and we welcome you for your opening statement.

STATEMENTS OF THE HON. JOHN E. SWEENEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK, AND THE HON. BOB GOODLATTE, CHAIRMAN, COMMITTEE ON AGRICULTURE

MR. SWEENEY. Thank you, Mr. Chairman and Ranking Member Schakowsky. I really appreciate the opportunity to be here, and let me begin by saying that I am here obviously in support of my legislation, H.R. 503, the American Horse Slaughter Prevention Act, and I ask that my full statement be submitted into the record.

MR. STEARNS. By unanimous consent, so ordered.

MR. SWEENEY. Mr. Chairman, this has been a long day in coming. I first introduced legislation back in 2003 and we have faced obstruction, obfuscation, and delay. What I am struck by, the testimony of your great committee, is how thoroughly informed the members are. At least they focused on it. This issue is extremely important to me as a representative of upstate New York, and more specifically Saratoga Springs, because Saratoga Springs is the home of the Saratoga Racetrack, the oldest thoroughbred racetrack in America, and it is one of the larger horse farm communities in the Nation. In fact, tomorrow the racetrack opens up its 2006 season, so this is going to be a very timely hearing.

We Americans, as many have said, hold the horse in very high regard for good reason. This is why many in our country find it shocking when they hear each year that some 90,000 horses are slaughtered in the country, then shipped overseas to Europe and Asia, where they are served in restaurants as delicacies. The reason I sit before you today is to advocate for my legislation, which effectively bans the slaughter of horses in the United States for human consumption. In 2002, a horse named Ferdinand, the 1986 Kentucky Derby winner, was slaughtered and served as a meal overseas. In fact, he was advertised as, eat an American champion. Americans were shocked to hear that such a thing could ever occur to an animal that was so loved and respected. It was Ferdinand's death that brought this issue to the forefront, and as I said, since 2003, I have been the author of this legislation.

There have also been many attempts to curb this practice at the State level as well. Texas, as my good friend, Mr. Whitfield, and partner in this effort noted, has had a law prohibiting the sale of horse meat for human consumption on its books since 1949, yet slaughter facilities operating in Texas in violation of State law continue. This demonstrates the need and the rationale for Federal legislation. Also a 1998 ballot proposition to ban horse slaughter in California passed with 60 percent of the vote. Various other States have pending legislation, including Illinois, Delaware, and my home State of New York. We have made substantial strides in curbing horse slaughter for human consumption recently; however, our goal remains very far from the finish line.

Last year I offered an amendment to the Agriculture Appropriations bill to effectively pass a 1-year ban on horse slaughter. This amendment passed by a wide margin, 269 to 158. However, due to a maneuver by

the USDA circumventing congressional intent, horse slaughter continues. And I would just point out to my good friend, Mr. Murphy, that it wasn't until that maneuver that horses were classified as livestock. And most of the regulations that are on the books are not adhered to. My legislation amends the Horse Protection Act of 1970 to prohibit the shipping, transporting, moving, delivering, receiving, possessing, purchasing, selling, or donation of horses and other equines for slaughter for human consumption. Basically, this makes it impossible for an individual to slaughter a horse in the United States, but also prohibits an individual to transport a horse to Canada or Mexico for the purpose of slaughter. H.R. 503 differs significantly from prior legislation aimed at banning horse slaughter, in that it does not actually ban the act of slaughter. Allow me to explain why I chose to go this route.

My legislation in the 108th Congress specifically banned the act of slaughter of horses for human consumption. That legislation sat out on the Committee on Agriculture. Therefore, I rewrote this legislation for referral to the Energy and Commerce Committee. Currently, we have 202 co-sponsors. Not only do a vast majority of the Members of Congress support my efforts, but a majority of Americans do as well. Recently public opinion polls have clearly demonstrated this. Surveys conducted in Texas, Kentucky, and Virginia indicate that nearly 75 percent of voters oppose horse slaughter. Over 481 industry and horse organizations support this legislation. Even the mayor of Kaufman, Texas, home to one of the slaughter facilities, supports the bill. Why is this? The fact remains that we Americans hold horses to a higher standard. Horses are known personally. Everyone knows Mr. Ed, Secretariat, Silver, and I suggest that that is not the case with animals like cows and chickens. Would we ever think of slaughtering and serving a bald eagle in this country? Horses are American icons and deserve to be treated as such. Unlike cows and pigs, horses are not raised for food but for pleasure, work, and recreation. If another country chooses to raise horses for food, then so be it; however, they should slaughter their own horses, not American horses.

Horse meat is neither consumed in the United States nor is there a demand here. According to the USDA, more than 90,000 U.S. horses were slaughtered in 2005 for human consumption and exported to Europe and Asia. Three slaughter plants exist in the United States today, all foreign-owned. While they operate in the United States and slaughter American horses, both the meat and money go overseas. There are two slaughter plants located in Texas and one in Illinois. Opposition to my legislation makes false claims that H.R. 503 would result in overpopulation of horses and increase abuse and neglect. This is simply untrue. The horse population is estimated at 9 million. Each year

roughly 900,000 horses die of various causes. Of those 900,000 horses that die, about 90,000, 1 percent, are actually slaughtered. Surely this relatively small percentage of horses will be absorbed into the community.

Also, since California banned horse slaughter in 1998, there has been no documented rise in abuse or neglect, and a reduction in the theft of horses. There are many outlets for these remaining horses, humane euthanasia, adoption, or donation to one of the hundreds of rescue facilities in the United States. A veterinarian, for the nominal cost of $225, can humanely euthanize a horse. Another myth is that slaughter of horses is the same as humane euthanasia. Nothing could be further from the truth. Slaughter is not euthanasia and this is a key distinction. Euthanasia is administered by a licensed veterinarian via lethal injection. Slaughter is administered by an unskilled laborer via a captive bold pistol, which many times is not administered properly. Sometimes horses are still alive and semiconscious when they are processed into meat.

In conclusion, I am not here seeking to ban the slaughter of cows, pigs, or chickens. These animals are raised in the United States for food and do not share the cultural and historical prominence that the horse does. Our horses deserve better, the American people deserve better. The practice of horse slaughter is a contradiction to our culture, history, and economy. The time has come to end it. Again, I really thank you, Mr. Chairman, for this opportunity to testify before the panel, and for the first opportunity that we have had to really make this case, and I yield back.

[The prepared statement of Hon. John E. Sweeney follows:]

PREPARED STATEMENT OF THE HON. JOHN E. SWEENEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Chairman Stearns, Ranking Member Schakowsky, members of the Subcommittee, distinguished guests, let me begin by thanking you for the opportunity to testify in support of H.R. 503, the American Horse Slaughter Protection Act.

This is an issue that is extremely important to me, and I sincerely appreciate your willingness, and Chairman Barton's willingness, to consider this issue before your committee. As the representative of Saratoga Springs, New York, which is known for its beautiful Victorian homes, rich history, and most of all, horses. This issue resonates deeply in my Congressional District. Saratoga Springs is home to the Saratoga Racetrack, the oldest thoroughbred racetrack in the nation.

Saratoga prides itself on horses. For 6 magical weeks each summer, people come in droves from all over the country – and the world – to watch these majestic and graceful animals barrel down the stretch. Mr. Chairman, I am happy to say, that the Saratoga Racetrack opens its gates tomorrow for the 2006 season. That is why it is incredibly timely I sit before your committee this afternoon.

Saratoga Springs is one example of why the horse plays such a prominent role in American culture, business, and history. We watch in awe when a horse "wins by a

nose," we find it therapeutic to sit atop a horse as it trots through a field, and throughout history, we have relied on these able-bodies creatures to plow our fields and explore our continent. We as Americans, hold the horse in a very high regard – for good reason. This is why many in our country find it shocking to hear that each year, 90,000 horses are slaughtered in the country, then shipped overseas to Europe and Asia, where they are served in restaurants as a delicacy.

The reason I sit before you today is to advocate for my legislation – H.R. 503, the American Horse Slaughter Prevention Act. This legislation effectively bans the slaughter of horses in the United States for human consumption. Before I discuss this bill in greater detail, I would appreciate the opportunity to provide a brief historical background on the issue of horse slaughter, to demonstrate why this legislation is necessary.

In 2002, a horse named Ferdinand, who won the 1986 Kentucky Derby, the most prestigious horse race in the world, was slaughtered and served as a meal somewhere in Europe of Asia. This horse, who also was the winner of the 1987 Horse of the Year title and the 1987 Breeder's Cut Classic, certainly did not deserve such a fate. Like me, Americans were shocked to hear that such a thing could ever occur to an animal that was so loved and respected. Unfortunately the cruel truth is that it happens 90,000 times over each year. It was Ferdinand's death that brought this issue to the forefront.

Since 2001, the United States Congress has had the opportunity to act on legislation to end this horrible act through bill introduced by various members. Since the 108th Congress, I have been the champion of this legislation and have been actively engaged in banning this despicable foreign trade in the United States. Both bills, H.R. 857, the bill I introduced in the 108th Congress and H.R. 503, my effort in the 109th Congress, have received overwhelming, bi-partisan support by members of the House, Senate, the Horse Industry and the citizens of the United States.

There have also been many attempts to curb this practice at the state and local level as well. Many states across the country have worked to pass legislation to outlaw this practice. Texas has had a law prohibiting the sale of horsemeat for human consumption on its books since 1949.

In 1998, California passed a comprehensive and popular law by ballot initiative that prohibited horse slaughter as well as the sale and transport of horses to slaughter. The law is working, and working well. There has been no rise in abuse and neglect cases in the state since the law came into effect, as some had warned would occur. Instead, according to the California Bureau of Livestock Identification, the state has seen a 34% decrease in horse theft since the law came into effect.

There is also legislation pending in the Illinois, New York and Delaware legislature that bans horse slaughter or severely impedes the ability of individuals to slaughter horses for human consumption.

We have made substantial strides in curbing horse slaughter recently, yet we remain very far from the finish line. Last year, I offered an amendment to the FY06 Agriculture Appropriations bill, which prohibited taxpayer dollars from inspecting horses intended for slaughter. Without these inspections, it would impossible to slaughter horses in, or transport horses to slaughter outside, the US, thereby providing a temporary ban on horse slaughter. I offered this as a short-term solution to the problem as I continued to push my authorizing legislation, H.R. 503. My amendment passed by an overwhelming majority

vote of 269-158 [1]. Similarly, a companion amendment in the Senate, offered by Sen. Ensign of Nevada, passed by a vote of 69-28 [2].

However, despite passage in both chambers, the U.S. Department of Agriculture (USDA) circumvented clear congressional intent of the bill amendment and offering slaughter plants a fee-for-service option, allowing slaughter houses to pay for inspections. The slaughter plants themselves, not USDA would actually pay for the inspection process. This permitted the practice of slaughter to continue. Horse advocacy groups filed suit against the USDA to prevent the fee-for-service inspection option, yet the DC Superior Court ruled in favor of the USDA and slaughter plants, allowing the option to continue.

Furthermore, there was additional language added in the FY06 Agriculture Appropriations Conference Report that impedes me from effectively offering this amendment again. This was a technical change of the definition of animals under the jurisdiction of the Federal Meat Inspection Act. Horses were grouped into a new animal category - "amenable" species classification, precluding us from ever offering a similar amendment to future appropriations bill.[3]

In addition to amendments to the Agriculture Appropriations bill, Congressman Rahall, Congressman Whitfield, and I also offered an amendment to FY06 & 07 Interior Appropriations banning the sale and slaughter of wild free-roaming horses. This prevented the Bureau of Land Management from selling horses for slaughter after a provision that was snuck into the FY05 Omnibus Appropriations bill, which allowed wild horses to be slaughtered for human consumption overseas. While these amendments strictly dealt with wild horses, unlike the Agriculture amendment which dealt with all horses, the amendments passed the House in FY06 with overwhelming support - 249 – 159 and agreed to by voice-vote in FY07. Unfortunately this provision was not included in the FY06 Interior Appropriations Conference Report, and I am saddened to say that it is unlikely it will be included in the FY07 Conference Report as well.

The lopsided victories of these amendments demonstrate the need for my legislation to be considered before the full House of Representatives. My legislation amends the Horse Protection Act of 1970 to prohibit the "shipping, transporting, moving, delivering, receiving, possessing, purchasing, selling, or donation of horses and other equines for Slaughter for human consumption." Basically, this makes it impossible for an individual to slaughter a horse in the United States, but also for an individual to transport a horse to Canada or Mexico for the purpose of slaughter. The purpose of the bill is to prohibit the slaughter of horses for human food.

H.R. 503 also permits the USDA to detain, for examination and evidence, any horse for which it has probable cause that the animal will be slaughtered for food. Violators would be subject to specified criminal and civil penalties ($5000) and prison terms (2 years) per violation.[4]

H.R. 503 differs significantly from prior legislation aimed at banning horse slaughter, in that it does not actually ban the act of slaughter. Allow me to explain why I chose to go this route. My legislation in the 108th Congress, H.R. 857, specifically banned the act of slaughter of horses for human consumption. That legislation, sat in the

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[1] United States. Cong. House. 109th Congress, 1st Session. Roll Call Vote 233. H.AMDT. 236 to H.R. 2744 - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2006 [Amdt. introduced in the U.S. House; 8 June 2005].

[2] United States. Cong. Senate. 109th Congress, 1st Session. Roll Call Vote 237. S.AMDT. 1753 to H.R. 2744 - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2006 [Amdt. introduced in the U.S. House; 9 September 2005].

[3] Section 798. Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2006, Pub. L. no. 109-97. (2005).

[4] Section 6. Horse Protection Act. 15 U.S.C. §§ 1821 1831

Committee on Agriculture, as did other similar bills, introduced by Rep. Morella and Reynolds, with absolutely no consideration.

Therefore, I rewrote my legislation as an amendment to the Horse Protection Act of 1970, a bill that was considered under the sole jurisdiction of the House Interstate and Foreign Commerce Committee, which has since been consolidated into the current Energy and Commerce Committee. The Horse Protection Act prohibited the act of "soring," or branding of the feet, horses or transporting sore horses. Since H.R. 503 prohibits the "shipping, transporting, moving, delivering, receiving, possessing, purchasing, selling, or donation of horses and other equines to be slaughtered for human consumption," this bill effectively deals with issues pertaining to commerce, thus justifying its referral to this committee.

The time has come for this legislation to be considered. Not only do a vast majority of Members of Congress support my efforts, but a majority of Americans do as well. Recent public opinion polls have clearly demonstrated this. Surveys conducted in Texas, Kentucky and Virginia indicated that, 72% of Texas voters[5], 82% of voters in Kentucky[6], and 74% of Virginia voters[7] oppose horse slaughter for human consumption. In California, the 1998 ballot initiative (Proposition 6) banning horse slaughter for human consumption was passed with an overwhelming 60% of the vote. Over 481 reputable horse organizations, representing thousands of industry professionals, owners and riders, horse farms, state organizations and celebrities are on record in support of H.R. 503.

The fact remains that to Americans, the horse is held to a different standard. Horses are known personally. Everyone knows who Mr. Ed, Secretariat and Silver are. I dare anyone to name a list of famous cattle or chickens. They are American icons that deserve to be treated as such. Would we ever think of slaughtering and serving a bald eagle in this country? The same should be true of the horse. Horses and other equines play a vital role in the collective experience of the United States and deserve protection and compassion.

Furthermore, horses and other equines are domestic animals that are used primarily for recreation, pleasure, and sport. Unlike cows, pigs, and many other animals, horses and other equines are not raised for the purpose of being slaughtered for human consumption. If another country, France or Japan, chooses to raise horses for food, then so be it. That is their choice as a sovereign nation to do so. However, they should not serve American horses, marketed as "eating an American champion," as Ferdinand was. Horsemeat is not consumed nor is there a demand in the United States. According to the USDA, more than 90,000 U.S. horses were slaughtered in 2005 for human consumption, virtually all for export, to the largest markets of horsemeat, France, Belgium, Switzerland, Italy, Japan, and Mexico. The United States exported about 18,000 tons of horsemeat valued at $61 million in 2005.

Despite a 50% percent increase since 2002, resulting from the reopening of a slaughter facility in Illinois, slaughter remains lower than it was over 15 year ago. According to the USDA, 342,877 horses were slaughtered in 1989, compared to 91,757 in 2005. [8] Overall more than 4 million American horses have been brutally slaughtered since 1980. However, the US does not even rank within the top 5 countries, which slaughter horses. Asia, Europe and Mexico out-slaughter the US by over 700-900% more.

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[5] Survey conducted on May 4-6, 2003 by Mason-Dixon Polling & Research for Blue Horse Charities.

[6] Survey conducted by Voter/Consumer Research on behalf of the National Horse Protection Coalition in Oct. '05

[7] Survey conducted by McLaughlin & Associates on behalf of the National Horse Protection Coalition.

[8] U.S. Horse Slaughter Statistics. USDA's National Agricultural Statistics Service. Online. <http://www.saplonline.org/horses_stats.htm>

Only 3 slaughter-plants remain in the US today, all foreign owned. While they operate the United States and slaughter American horses, both the meat and the money go overseas. There are two slaughter plants located in Texas – Dallas Crown in Kaufman and Beltex Corporation in Fort Worth. These plants in Texas operate in clear violation of Texas state law. However since these horses are transported from and to destinations outside of Texas, the slaughter facilities claim they this state law is a violation of the Interstate Commerce Clause. This demonstrates the need for my federal legislation.

The third plant, Cavel International, is located in DeKalb, Illinois. Some have expressed concerns that after passage of H.R. 503, these facilities would be forced to shut down, thus eliminating jobs. This is simply not true. All three plants have the capacity to continue to operate by processing other animals, should H.R. 503 pass.

Furthermore, it is widely suspected that many of the laborers in these facilities are undocumented illegal immigrants. I suggest to my colleagues that these individuals should not even be employed in the country to begin with. Finally, if my legislation actually had negative effects on local economies, then the local municipalities would certainly actively oppose H.R. 503. However, the fact remains that these host communities of these slaughter facilities do not want them in their backyards. In March of 2006, the Kaufman Board of Adjustment voted unanimously to close Dallas Crown due to violations of zoning ordinances and pollution (smell and discharge to city's sewer system) to the local environment. The plant filed a counter suit, and a final ruling is expected at the end of this month.

According to a court affidavit by Paula Bacon, Mayor of Kaufman, TX, "Dallas Crown began operating in Kaufman in the early 1980's and has caused massive economic and environmental problems since its inception. It has also violated, and is currently in violation of, a multitude of local laws pertaining to waste management, air and water quality, and other environmental concerns…29 citations for wastewater violations have been issues to Dallas Crown, each carrying with them a potential fine of $2,000."[9]

The claim that H.R. 503 would hurt local economies is just one of the many false claims made by the opposition to my legislation. They claim that this legislation would result in an overpopulation of horses, which would actually lead to an increase of horse abuse and death. This is simply untrue. The horse population is estimated at 9 million. Each year, roughly 900,000 horses die of various causes. Of those 900,000 horses that die, about 90,000 (or only 1% of the horse population) are actually slaughtered. Surely this relatively small percentage of horses can be easily absorbed into the community.

Should H.R. 503 be signed into law, a number of resources and opportunities exist for horses that are no longer bound for slaughter. Should an owner no longer desire to keep the horse, it can be humanely euthanized by a licensed veterinarian for a nominal fee of approximately $225. Horses that are not humanely euthanized can continue to be kept by their owners, sold to a new owner, or can be placed in one of the hundreds of horse sanctuaries and rescue facilities springing up across the country. Education within the horse community about these humane alternatives to slaughter is already occurring, and will continue to do so.

According to the American Horse Defense Fund, 540 rescue facilities, and 34 Equine Sanctuaries operate around the country, with additional facilities being established. These equine rescue organizations will take horses that are unwanted and find them homes. The Association of Sanctuaries and the American Sanctuaries Association provide accreditation programs, a code of ethics and guidelines for the operation of sanctuaries and rescue organizations. Horse rescue groups must also provide

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[9] Declaration of Paula Bacon. Plaintiffs' Exhibit 9. Civ. No. 02-0265 (CKK). The Humane Society of the United States, et al. vs. Mike Johanns et al.

for the welfare of horses in their custody in compliance with state and local animal welfare laws.[10]

Another myth disseminated by the pro-slaughter entities is that slaughter of horses is the same has humane euthanasia. Nothing could be further from the truth. Slaughter is not euthanasia. According to the American Veterinary Medical Association's 2000 Report on the Panel of Euthanasia, euthanasia, is the act of inducing humane death in an animal, ensuring that if an animal's life has to be taken, it is done with the highest degree of respect, and with an emphasis on making the death as painless and distress free as possible.[11]

Euthanasia is administered properly, according to the AVMA and the National Horse Protection Coalition, primarily by chemical injection and in some emergency situations, gunshots.[12] Veterinary euthanasia averages from $50 to $225 per horse.[13] Slaughter is conducted via a captive bolt pistol, which is a metal rod shot into the horse's brain. Many times in slaughterhouses, this administered by an untrained laborer, which results in unnecessary suffering of the horse and even some horses to remain alive and semi-conscious as they are being processed.

Additionally, horses suffer horribly on the way to slaughter. The Animal and Plant Health Inspection Service (APHIS), a division of USDA, stipulates and requires that humane transport of horses to slaughter must include food, water, and rest be provided to each animal prior to shipment to the slaughter house. [14] However these regulations only adhere to treatment prior to transport, thereby allowing horses to be transported long distances often in deplorable conditions, in poorly equipped trucks and trailers, where they are exposed to bad weather and often inadequate rest, food, and water.

Since horses are not raised for slaughter in the US, they are crammed together and driven to slaughter in double-decker trucks designed for cattle and pigs. The truck ceilings are so low that the horses are unable to hold their heads in a normal, balanced position. In September 2004, a double-deck livestock trailer traveling from Minnesota to Kentucky, carrying 50 horses on the way to slaughter overturned. 21 horses were killed, and many sustained injuries, two of which were severe.

The AVMA and APHIS regulations for the transport of horses clearly state that horses by nature need to be separated.[15] During transport stallions, mares, and foals are unnaturally forced together, making fighting and injury common. This can lead to serious injury, or even death, en route to slaughter.

In conclusion, I testify before you not looking to attack other industries with thriving markets within the United States. We are not out to ban the slaughter of cows, pigs, or chickens. These animals are raised in the United States for food and do not share the cultural and historical prominence that the horse does. Plain and simple, our horses deserve better. This is an industry that exists only outside the borders of the United States, where horsemeat is consumed only as a delicacy. The practice of horse slaughter is a contradiction to our culture, history and economy. The time has come to end it. Again, I thank you for the opportunity to testify before the panel and urge support for this important legislation.

MR. STEARNS. I thank my colleague. Mr. Goodlatte.

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[10] Ibid.
[11] 2000 Report of the AVMA Panel on Euthanasia. JAVMA, Vol. 218, No. 5, March 1, 2001.
[12] Ibid.
[13] American Horse Defense Fund. Alternatives to Auction and Slaughter: A guide for Equine Owners. 2005
[14] USDA, Animal and Inspection Service Publication. "Take Care of Our Horses – Commercial Transportation of Equines to Slaughter."
[15] Ibid.

MR. GOODLATTE. Mr. Chairman, thank you very much. It is a pleasure to be here with you to discuss horse slaughter. I have heard the opening statements of the members of the committee and I very much respect those statements, and I can tell you that, while I very much agree with the sentiments expressed by a minority here, in the Agriculture Committee, it is exactly the opposite. Every member of the committee represents rural America and the conclusion is overwhelmingly in the opposite direction and I would like to tell you why.

Ms. Schakowsky, I very much have seen and understand the emotions and the enthusiasm that has been expressed. I have certainly seen that myself. Some would say that I have been the victim of some of that enthusiasm, but nonetheless, I understand that. That is a part of the American way, that is a part of this process. The other part of this process is taking into account the facts that are before us. It has been mentioned here that there are a lot of consequences of what will become of horses if they do not go to slaughter and that is what I am here to talk about, not what happens to a horse after it goes through that process.

So let us look at the facts. More than 60 reputable horse organizations, animal health organizations, and agricultural organizations have joined together to oppose this legislation, and they represent some of the most respected people who own and care for horses in the United States. The American Quarter Horse Association, the largest association of horse owners in the world, strongly opposes this legislation. The American Paint Horse Association, the second largest association of horse owners, opposes this legislation. Every State horse council in the United States that has taken a position on this has opposed this legislation. Ten States represented on this subcommittee have State horse councils that oppose this legislation: New York State, Illinois, Ohio, Michigan, North Carolina, New Jersey, Texas, Colorado, Florida, and Wisconsin. The horse councils, the association of all the different breeds of horses in the State, have come together and voted to oppose this legislation. If you haven't heard your State's name called, that is because your State horse council either doesn't exist or has not taken a position on the issue. To my knowledge, no State horse council has endorsed this legislation.

H.R. 503 is also opposed by those who see to the health of horses, very respected organizations like the American Veterinary Medical Association and the American Association of Equine Practitioners, the horse doctors. More than 7,000 members, the people who provide health care for our horses, are concerned about the implications of this legislation. They, as I, are concerned that if enacted, the bill would negatively impact the health and welfare of horses across the country and would significantly increase the numbers and problem of unwanted

horses in the United States. Other organizations opposed to this legislation include the American Farm Bureau Federation, the Equine Nutrition and Physiology Society, the Animal Welfare Council, the National Horse Show Commission, the National Cattlemen's Beef Association, and many, many others.

As a public policy matter, this issue should be about what is the best approach for the humane treatment of horses. Like most of Americans, I support the humane treatment of all animals, including those in our Nation's farms and stockyards, in research facilities, in processing plants, exhibitions, and in our homes. Further, I believe that inhumane treatment of animals should not be tolerated. It is our responsibility to be good stewards of the land and the animals under our charge. Having said that, what do we do to solve the problem of unwanted horses in America? What are the rights of individuals to decide what to do with their animals? What are the implications for other livestock sectors if we ban humane slaughter for one species? Why would the Federal government put a legitimate business, in effect, thousands of people out of work? These are just a few of the unresolved public policy implications of this legislation.

Organizations that represent literally millions of horse owners in this country and elsewhere around the world oppose this legislation because of their concern, not about whether somebody else is eating horse meat, but whether hundreds of thousands of horses will be treated humanely if we make this dramatic change. No other Nation in the world has taken that step. What will happen to the approximately 65,000 to 95,000 horses per year that are currently processed in the U.S. horse slaughter plants, as well as the estimated more than 25,000 that are sent to Canada and Mexico for slaughter, if humane euthanasia in a horse processing facility is no longer an option? Right now the only federally regulated transportation and euthanasia of horses are the programs that this bill seeks to abolish. Ironically, government supervision of humane treatment of horses would be the first casualty of H.R. 503.

Unlike many of the very wealthy horse owners pushing this legislation, many owners are no longer able to provide financial or physical humane care for their horses. Many horses are infirm, have behavioral problems, or are dangerous. There are many reasons why a horse becomes unwanted. There are not enough rescue retirement facilities available to take care of the current numbers of unwanted horses. This bill would drastically and exponentially increase the numbers of unwanted horses, leaving many to abandonment, neglect, or starvation. Horse owners should continue to have the option to choose slaughter for equines they no longer can or desire to appropriately tend.

The proponents of H.R. 503 don't seem to care about the problems passage of their legislation would create. If their true purpose of this legislation was to provide for humane treatment of horses, then they would address the issue of the fate of the thousands of animals this would affect, accumulating exponentially each year. H.R. 503 focuses on what happens after an animal is dead rather than when it is alive. It does not matter to the horse; it is dead. The proponents of the legislation have stated publicly they do not care if unwanted horses are euthanized. They just care about the disposition of the remains of the unwanted horse. My concern, as well as the concern of all of the horse lovers who oppose this bill, is, what do we do with these horses when they are alive? How are they properly and humanely cared for? What will happen to the thousands of horses that are shipped to slaughter plants in other countries? Make no mistake about it. This legislation, while intending to prohibit export of horses to other countries, has no mechanism to cause this to happen. If the bill goes to stop export of horses for slaughter, its authors definitely need to provide some way to make that happen, or we will simply be exporting the issue outside the humane regulation of our government.

These are just a very few of the repercussions that will occur as a result of the passage of this legislation. Time limits today do not allow me to fully outline all of my concerns, but let me list a few more questions that need to be answered. Besides what happens to the hundreds of thousands of horses this legislation would affect, what happens to the people who work at these businesses? How do States and counties that have a statutory obligation to deal with unwanted animals cope with the abandoned horses that will be left on their doorstep as a result of this bill? Since the bill provides no mechanism to ensure horses are not abandoned by owners, who will deal with the abandoned, starving horses whose owners lack the ability to care for them? The horse sanctuaries and retirement facilities are already inadequate in numbers and ability to take care of the existing unwanted horses that are sent to them. Even the proponents of H.R. 503 have been quoted as saying, these types of facilities are currently inadequate. Of the horses that go to sanctuaries, who is going to ensure that there is enough space, money, and expertise to properly care for hundreds of thousands of animals that can easily live to 30 years of age? Who is going to pay for that? Who is going to regulate them?

Since the proponents say that they would prefer that unwanted horses are euthanized instead of being processed into a useful product, what about the disposal of the potentially tens of thousands of extra carcasses per year? Every State and even many counties have different laws relating to the proper disposal of carcasses. Who will pay for that? All

States regulate the disposal of animal carcasses. Local governments already grapple with the problem of unwanted cats and dogs and their disposal. Horses are on average 50 times larger animals. There will be tremendous difficulty for many local governments to properly dispose of carcasses of euthanized horses. It will be expensive and will create environmental and wildlife concerns, which leads me to the overarching question: why is Congress rushing to enact legislation that causes many problems and solves none, especially when there is no consensus in the livestock community. Even if the goal of this legislation was desirable, and I do not accept the premise, this is not a bill that will improve the treatment of horses. Too little has been done to deal with the consequences of destroying a legitimate industry by government fiat. If anything, H.R. 503 in its current form will lead to more suffering for the horses it purports to help.

This draconian legislation will have far reaching and significant detrimental effects for horses, horse owners, and the larger agriculture sector. As Chairman of the House Agriculture Committee, it is my responsibility and privilege to thoroughly review and explore all legislation and Federal policies that affect the agriculture community. This legislation is woefully inadequate, emotionally misguided, and fails to serve the best interests of the American horse and horse owner, despite what the proponents would have you believe. That is why every major horse owner organization in the country that has taken a stand on the issue has taken a strong stand against H.R. 503.

Again, I thank you for allowing me testify today. I thank the proponents of this legislation for their sincerity, but I strongly disagree with the merits of their legislation.

[The prepared statement of Hon. Bob Goodlatte follows:]

PREPARED STATEMENT OF THE HON. BOB GOODLATTE, CHAIRMAN, COMMITTEE ON AGRICULTURE

Mr. Chairman, I thank you for the opportunity to testify today. I welcome the opportunity to bring some sense to the discussion about banning horse owners from making decisions for themselves. This is an important topic, not only to horse owners and tax payers. It also has broader and far-reaching implications for the entire animal agricultural community. The proponents of H.R.503 are not engaged in a public policy discussion, they are engaged in a public relations campaign. They have bumper stickers and they have sound bites. They do not have the facts. As Chairman of the House Agriculture Committee I have a duty and a responsibility to be guided by sound fact and reason. You will note that the other witnesses testifying in opposition to H.R.503 are all experts in their fields, have significant experience, and have based their testimony on the facts.

So let's look at the facts. More than 60 reputable horse organizations, animal health organizations, and agricultural organizations have joined together to oppose this legislation, and they represent some of the most respected people who own and care for horses in the United States.

The American Quarter Horse Association, the largest association of horse owners in the world, strongly opposes this legislation. The American Paint Horse Association, the second largest association of horse owners, opposes this legislation. More than a dozen State horse councils oppose this legislation, including the Virginia Horse Council. Ten states represented on this subcommittee have State horse councils that oppose this legislation: New York State, Illinois, Ohio, Michigan, North Carolina, New Jersey, Texas, Colorado, Florida and Wisconsin.

H.R.503 is also opposed by those who see to the health of our horses, very respected organizations like the American Veterinary Medical Association and the American Association of Equine Practitioners. More than 7,000 veterinarians, the people who provide health care for our nation's horses, are concerned about the implications of this legislation. They, as I, are concerned that if enacted, the bill would negatively impact the health and welfare of horses across the country and would significantly increase the numbers, and problem of, unwanted horses in the U.S.

Other organizations opposed to this legislation include the American Farm Bureau Federation, the Equine Nutrition and Physiology Society, the Animal Welfare Council, the National Horse Show Commission, the National Cattlemen's Beef Association, and many, many others.

As a public policy matter this issue should be about what is the best approach for the humane treatment of horses. Like most Americans, I support the humane treatment of all animals, including those on our nation's farms and stockyards, in research facilities, processing plants, exhibitions, and in our homes. Further, I believe that inhumane treatment of animals should not be tolerated. It is our responsibility to be good stewards of the land and the animals under our charge.

Having said that, what do we do to solve the problem of unwanted horses in America? What are the rights of individuals to decide what to do with their animals? What are the implications for other livestock sectors if we ban humane slaughter for one species? Why would the Federal government put a legitimate business and in effect thousands of people out of work? These are just a few of the unresolved public policy implications of this legislation.

Organizations that represent literally millions of horse owners in this country and elsewhere around the world oppose this legislation because of their concern, not about whether somebody else is eating horsemeat, but whether hundreds of thousands of horses will be treated humanely if we make this dramatic change. What will happen to the approximately 65,000-95,000 horses <u>per year</u> that currently are processed in the U.S. horse slaughter plants, as well as the estimated more than 25,000 that are sent to Canada and Mexico for slaughter, if humane euthanasia in a horse processing facility is no longer an option? Right now the <u>only</u> Federally regulated transportation and euthanasia of horses are the programs that this bill seeks to abolish. Ironically, government supervision of humane treatment of horses would be the first casualty of H.R.503.

Unlike many of the very wealthy horse owners pushing this legislation, many owners are no longer able to provide financial or physical humane care for their horses. Many horses are infirm, have behavioral problems, or are dangerous. There are many reasons why a horse becomes unwanted. There are not nearly enough rescue/retirement facilities available to take care of the current numbers of unwanted horses. This bill would drastically and exponentially increase the numbers of unwanted horses, leaving many to abandonment, neglect, or starvation. Horse owners should continue to have the option to choose slaughter for equine they no longer can or desire to appropriately tend.

The proponents of H.R.503 don't seem to care about the problems passage of their legislation would create. If their true purpose of this legislation was to provide for humane treatment of horses, then they would address the issue of the fate of the thousands of animals this would effect, accumulating exponentially <u>each</u> year.

H.R.503 focuses on what happens after an animal is dead rather than when it is alive. It does not matter to the horse – it is dead. The proponents of the legislation have stated publicly that they do not care if unwanted horses are euthanized, they just care about the disposition of the remains of the unwanted horse. My concern, as well as the concern of all of the horse lovers who oppose this bill, is what do we do with these horses when they are alive? How are they properly and humanely cared for?

What will happen to the thousands of horses that are shipped to slaughter plants in other countries? Make no mistake about it – this legislation, while intending to prohibit export of U.S. horses to other countries, has no mechanism to cause this to happen. If the bill's goal is to stop export of horses for slaughter, its authors definitely need to provide some way to make that happen, or we will simply be exporting the issue outside the humane regulation of our government.

These are just a very few of the repercussions that will occur as a result of the passage of this legislation. Time limits today do not allow me to fully outline all of my concerns but let me list a few more as questions that need to be answered. Besides what happens to the hundreds of thousands of horses this legislation would effect, what happens to the people who work at these businesses? How do states and counties that have a statutory obligation to deal with unwanted animals cope with the abandoned horses that will be left on their doorstep as a result of this bill? Since the bill provides no mechanism to ensure horses are not abandoned by owners, who will deal with the abandoned, starving horses whose owners lack the ability to care for them?

The horse sanctuaries and retirement facilities are already inadequate in numbers and ability to take care of the existing unwanted horses that are sent to them. Even the proponents of H.R.503 have been quoted as saying these types of facilities are currently inadequate. Of the horses that go to sanctuaries, who is going to ensure that there is enough space, money, and expertise to properly care for hundreds of thousands of animals that can easily live to 30 years of age? Who is going to pay for that? Who is going to regulate them?

Since the proponents say they would prefer that unwanted horses are euthanized instead of being processed into a useful product, what about disposal of the potentially tens of thousands of extra carcasses per year? Every state and even many counties have different laws relating to the proper disposal of carcasses. Who will pay for that? All states regulate the disposal of animal carcasses. Local governments already grapple with the problem of unwanted dogs and cats and their disposal. Horses are on average fifty times larger animals. There will be tremendous difficulty for many local governments to properly dispose of carcasses of euthanized horses. It will be expensive and will create environmental and wildlife concerns.

Which leads me to the overarching question: Why is Congress rushing to enact legislation that causes many problems and solves none, especially when there is no consensus in the livestock community? Even if the goal of this legislation was desirable, and I do not accept the premise, this is not a bill that will improve the treatment of horses. Too little has been done to deal with the consequences of destroying a legitimate industry by government fiat. If anything, H.R.503 in its current form will lead to more suffering for the horses it purports to help.

This draconian legislation will have far-reaching and significant detrimental effects for both horses, horse owners and the larger agriculture sector.

As Chairman of the House Agriculture Committee, it is my responsibility and privilege to thoroughly review and explore all legislation and Federal policies that affect the agriculture community. This legislation is woefully inadequate, emotionally misguided, and fails to serve the best interest of the American horse, and horse owner, despite what the proponents would have you to believe. That's why every major horse owner organization in the country has taken a strong stand against H.R.503. Again, thank

you for allowing me a chance to testify today and I have additional documents to submit for the record.

MR. STEARNS. I thank my colleagues. As I mentioned earlier, I asked for a request that we go and take a temporary recess and move down to 2123, where we have people that are outside who would like to get in and then we will have a larger room. So if my colleagues will consider this, we are just going to vote and the committee will reconvene in 15 minutes. I would say to my colleagues that generally we don't ask questions to you and we will call up the panel behind you, so that subcommittee will reconvene in 15 minutes, downstairs at 2123. This is just a temporary break so we get more room for everybody.

[Recess.]

MR. STEARNS. The subcommittee will reconvene, and I thank all of you for your patience. I think we are a lot more comfortable here, and particularly the witnesses.

So with that, we will welcome the second panel: Mr. Boone Pickens, Chief Executive Officer of BP Capital; Dr. Bonnie V. Beaver, Doctor of Veterinary Medicine; Dr. Patricia Hogan, New Jersey Equine Clinic; Dr. Douglas Corey, Doctor of Veterinary Medicine; President-Elect of the American Association of Equine Practitioners; Mr. Russell Williams, Vice Chairman of the American Horse Council and Vice President of Hanover Shoe Farms; and Mr. Dick Koehler, Vice President of Beltex Corporation.

We welcome all of you and we welcome your opening statements, roughly about 5 minutes. Mr. Pickens, welcome, and you are first. And I would just suggest you turn the mic on and make sure it is close enough to you so that we can hear you clearly.

STATEMENTS OF BOONE PICKENS, CHIEF EXECUTIVE OFFICER, BP CAPITAL; BONNIE V. BEAVER, DVM, EXECUTIVE DIRECTOR, AMERICAN COLLEGE OF VETERINARY BEHAVIORISTS, TEXAS A&M UNIVERSITY; PATRICIA HOGAN, VMD, ACVS, NEW JERSEY EQUINE CLINIC; DOUGLAS G. COREY, DVM, PRESIDENT-ELECT, AMERICAN ASSOCIATION OF EQUINE PRACTITIONERS; RUSSELL WILLIAMS, VICE CHAIRMAN, AMERICAN HORSE COUNCIL; VICE PRESIDENT, HANOVER SHOE FARMS; AND DICK KOEHLER, VICE PRESIDENT, BELTEX CORPORATION

MR. PICKENS. Okay. Thank you. Thank you, Mr. Chairman, and to the members of the subcommittee. I appreciate the opportunity to testify this afternoon. As some of you may know, I am a newcomer to this

issue. But Texas has a dirty secret that should shame all of us. Although the slaughter of horses for human consumption is illegal in Texas, foreign-owned companies who process horse meat here are using Federal loopholes to continue killing horses. As a result, Texas provided a large part of the 39.5 million pounds of horse meat shipped to France, Belgium, and Japan in 2005.

There are three horse slaughter plants in the United States, all foreign owned. Two of them are in North Texas: Dallas Crown in Kaufman, Texas, and Beltex in Fort Worth; and one is in Illinois. Every day, horse carcasses are shipped out of D/FW Airport bound for Paris, and this is a black eye on our State and Nation that demands action.

According to the USDA, these three foreign-owned plants slaughtered nearly 100,000 American horses in 2005. Owners across the country regularly take their horses to legitimate sale barns, never suspecting that within 4 days their horse could end up on a plate in a high-end restaurant in France. The processors brag that they can take a horse from stable to table in 4 days. And despite the fact that none of the horse meat is sold or consumed in the United States, the horse slaughterhouses receive USDA oversight that costs millions of taxpayer dollars.

All of our horse meat that is sold is consumed as delicacy in high-dollar markets and restaurants across Europe and Japan. To add insult to injury, these slaughterhouses use accounting loopholes to pay little or no taxes, shipping 100 percent of the horse meat and the profits to France and Belgium.

You would be shocked at the horses sent to these slaughterhouses. According to the USDA, nearly all of the thoroughbreds, Arabians, quarterhorses, and wild mustangs arriving at these plants are "healthy, young horses that are in good-to-excellent condition," and that is a quote. Because of the quick kill and export, these slaughter plants have become a convenient dumping ground for stolen horses. In fact, horse theft in California dropped 34 percent after that State instituted a ban on horse slaughter in 1998.

I want to commend Congressman Whitfield for his leadership on the American Horse Slaughter Prevention Act, a strongly bipartisan bill to end the slaughter of horses in the United States for human consumption. That bill has the support of 200 cosponsors, almost a majority in the House. The bill is championed by more than 100 organizers, including such industry groups as the National Thoroughbred Racing Association and Churchill Downs.

The 109th congressional session can stop the unabated slaughter of horses that continues in our Nation. Every poll taken on this subject shows that Americans are overwhelmingly opposed to horse slaughter.

In a recent Texas poll, more than 70 percent opposed the slaughter of horses.

The horse has a special place in American culture and history. It helped settle this country and provided inspiration for the horsepower that now powers the vehicles that make this Nation go. It is no surprise that when reports surfaced that 1986 Kentucky Derby winner, Ferdinand, ended up in a Japan slaughterhouse 3 years ago, that galvanized a movement to close the U.S. slaughter plants. Hopefully it will not take the slaughter of another Derby winner to put the spotlight on this important issue and shut these killing factories down once and for all. I strongly oppose horse slaughter. It is un-American. And I urge your vote in putting a stop to this.

In conclusion, I did an op-ed piece today that was in the Dallas Morning News and have already received--this was this morning that it appeared--over 100 e-mails opposing horse slaughter. And I had two--only two--that were for the slaughter of horses. So of over 100 e-mails, only two were for slaughter, over 100 were against slaughter. Thank you.

I will file this with the committee today, but I would like to include with that that op-ed piece if I could.

MR. STEARNS. By unanimous consent, so ordered. We will make it part of the record, Mr. Pickens.

[The information follows:]

T. Boone Pickens: Stop the Slaughter
Congress should shut down killing factories and end the export of horsemeat
Tuesday, July 25, 2006

Texas has a dirty little secret that should shame all of us who live here.

Although the slaughter of horses for human consumption is illegal in Texas, foreign-owned companies that process horsemeat here are using federal loopholes to continue killing horses. As a result, Texas provided a large portion of the 39.5 million pounds of horsemeat shipped to France, Belgium and Japan in 2005, according to the U.S. Department of Agriculture. There are three horse slaughter plants in the U.S.—all foreign-owned—and two are in North Texas (Dallas Crown in Kaufman and Beltex in Fort Worth). very day, horse carcasses are shipped out of Dallas/Fort Worth International Airport, bound for Paris.

This is a black eye on our state and nation, and it demands action.

According to the USDA, these three foreign-owned plants slaughtered nearly 100,000 American horses last year. Owners across the country take their horses to legitimate sale barns and never suspect that, within days, these horses may end up on plates in high-end restaurants in Europe and Japan. The meat processors brag they can take a horse "from stable to table in four days."

And, despite the fact that none of the horsemeat is sold or consumed in the U.S., the slaughterhouses receive USDA oversight that costs millions of taxpayer dollars. To add insult to injury, these slaughterhouses use accounting loopholes to pay few or no taxes—shipping 100 percent of the horsemeat and profits to France and Belgium.

You would be shocked at the beautiful horses sent to these slaughterhouses. According to the USDA, nearly all of the Thoroughbreds, Arabians, quarter horses and wild mustangs arriving at these plants are healthy young horses in "good to excellent condition." Because of the quick kill and export, these plants have become convenient dumping grounds for stolen horses. In fact, after California instituted a ban on horse slaughter in 1998, horse thefts there dropped 34 percent.

Congressional hearings are scheduled to begin this week on the American Horse Slaughter Prevention Act (HR503), a strongly bipartisan bill to end the slaughter of horses in the U.S. for human consumption. The bill has the support of 200 co-sponsors and is championed by more than 100 organizations, including such industry groups as the National Thoroughbred Racing Association and Churchill Downs.

Every poll taken on this subject shows that Americans are overwhelmingly opposed to horse slaughter: In a recent Texas poll, more than 70 percent opposed it.

The horse has a special place in American culture and history. It helped settle this country and provided inspiration for the "horsepower" inside the vehicles that make this nation go. It's no surprise that, when reports surfaced that 1986 Kentucky Derby winner Ferdinand ended up in a Japan slaughterhouse three years ago, they galvanized a movement to close the U.S. plants.

Let's hope it won't take the slaughter of another Derby winner to put the spotlight on this important issue and shut down these killing factories once and for all.

I strongly oppose horse slaughter. It is un-American. Contact your congressional members and let them know these horses deserve better.

T. Boone Pickens has been a world leader in the oil and gas industry for 50 years. He now runs BP Capital LLC, a Dallas-based energy trading partnership. Lifelong animal lovers, T. Boone and Madeleine Pickens earned national attention by funding the airlift rescue of stranded cats and dogs after Hurricane Katrina. His e-mail address is boone@boonepickens.com.

[The prepared statement of Boone Pickens follows:]

PREPARED STATEMENT OF BOONE PICKENS, CHIEF EXECUTIVE OFFICER, BP CAPITAL

Our Dirty Little Secret

Texas has a dirty little secret that should shame all of us who live here.

Although the slaughter of horses for human consumption is illegal in Texas, foreign-owned companies who process horsemeat here are using federal loopholes to continue killing horses. As a result, Texas provided a large part of the 39.5 million pounds of horsemeat shipped to the France, Belgium and Japan in 2005 (according to U.S. Department of Agriculture figures).

There are three horse slaughter plants in the U.S. – all foreign-owned – and two of them are right here in North Texas (Dallas Crown in Kaufman and Beltex in Fort Worth). Every day horse carcasses are shipped out of DFW Airport bound for Paris' Charles DeGaulle airport.

This is a black eye on our state and nation that demands action.

According to the USDA, these three foreign-owned plants slaughtered nearly 100,000 American horses in 2005. Owners across the country regularly take their horses to legitimate sale barns never suspecting that within four days their horse could end up on a plate in a high-end restaurant in France. The processors brag that they can take a horse "from stable to table in four days!"

And, despite the fact that none of the horsemeat is sold or consumed in the U.S., the horse slaughterhouses receive USDA oversight that costs millions of taxpayer dollars –

all for horsemeat that is sold and consumed as a delicacy in high-dollar markets and restaurants across Europe and Japan. To add insult to injury, these slaughterhouses use accounting loopholes to pay little or no taxes – shipping 100% of the horsemeat and the profits to France and Belgium.

You would be shocked at the horses sent to theses slaughterhouses. According to the USDA, nearly all of the thoroughbreds, Arabians, quarter horses and wild mustangs arriving at these plants are healthy young horses that are in "good to excellent condition." Because of the quick kill and export, these slaughter plants have become a convenient dumping ground for stolen horses. In fact, horse theft in California dropped 34 percent after that state instituted a ban on horse slaughter in 1998.

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The 109th Congressional session can stop the unabated slaughter of horses that continues in our nation. Every poll taken on this subject shows that Americans are overwhelmingly opposed to horse slaughter – in a recent Texas poll, more than 70 percent opposed horse slaughter.

The horse has a special place in American culture and history. It helped settle this country, and provided inspiration for the horsepower that now powers the vehicles that make this nation go. It's no surprise, that when reports surfaced that 1986 Kentucky Derby winner Ferdinand ended up in a Japan slaughterhouse three years ago, they galvanized a movement to close the U.S. plants. Hopefully, it will not take the slaughter of another Derby winner to put the spotlight on this important issue, and shut these killing factories down once and for all.

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MR. STEARNS. Dr. Beaver.

DR. BEAVER. Distinguished Congressmen, my name is Bonnie Beaver and I am a past president of the American Veterinary Medical Association. I am here to explain why the AVMA is opposed to H.R. 503, The American Horse Slaughter Prevention Act. In addition to my short bibliography, which you have, I want to mention my involvement with horses. As a child Roy Rogers was my hero and I named my first horse Trigger. Horses were my passion, so I became a veterinarian. Horses remain my passion and that is why I am here today. I strongly support the AVMA's opposition to H.R. 503 because it does not adequately address certain issues that are important in the adequate welfare for horses.

We are also concerned about misinformation that has been circulating regarding euthanasia techniques. First, let me discuss a few misconceptions regarding euthanasia and horse handling. The AVMA

convened a panel of experts, veterinarians and scientists, including members from HSUS, to evaluate the research status of chemical and physical euthanasia methods. I chaired that panel. That panel's report, a copy of which has been provided for the record, defines euthanasia as humane death, in which unconsciousness comes rapidly in the process.

The AVMA panel on euthanasia report recommends two types of euthanasia for horses; an overdose of barbiturates, anesthesia; and the use of a penetrating captive bolt with appropriate restraint. The penetrating captive bolt is not a stun gun. It causes instantaneous death due to the destruction of brain tissue. Let me repeat, instantaneous death. The comments about appropriate restraint do not mean that the horse's head must be completely immobilized, but instead, that it should be in a position to allow skin contact with the penetrating captive bolt.

No form of euthanasia is pretty to watch because horses are large animals and terminal movements after brain death can easily be misinterpreted as struggling efforts. There is also the misconception that horses panic when they come into a restraint box. In fact, causing excitement or panic can result in the injury to both the horse and persons nearby. Instead, working the animals quietly, as required by USDA regulations, allows the horse to enter the restraint box without injury. Once in confinement, horses become passive because they recognize that their instinctive ability to flee has been thwarted.

We understand that the supporters of H.R. 503 are arguing that the transportation of horses to slaughter plants is also inhumane. I would remind you that current USDA regulations, which we included for the written record, were developed and implemented with significant input from the AVMA, the American Association of Equine Practitioners and other horse groups, as well as from the Humane Society of the United States and other groups currently arguing against the very regulations they helped design. Welfare is the biggest concern of the AVMA for those horses that would be impacted by the ban on horse slaughter.

Currently, horse rescue and retirement facilities in the United States have a maximum capacity of about 6,000 horses. It would be an extreme challenge to create facilities for 15 times that number every year. As shown in the horse welfare collation fiscal impact document, which is included for the record and has already been experienced in the case of the wild horses in the western United States, the cumulative cost for the large number of horses is very expensive. The American Horse Slaughter Prevention Act does not address financial support required for the care of those horses given up by their owners and inadequate funding has a huge potential to create opportunities for inadequate facilities and care.

Watching a horse slowly die from starvation or disease is not only distressing, it is cruel. Furthermore, horse retirement facilities and sanctuaries are not regulated, so there is no way to ensure the horses living there will receive adequate care. Carcass disposal of euthanized horses can create wildlife and environmental concerns. Scavenger species can be killed by the chemical agents in discarded tissues. Burial is not permitted in many areas and chemicals will contaminate the soil. While euthanasia, carcass removal and burial are each expensive, cremation can cost as much as $1,500. Bio-digesters are not commonly available yet.

The AVMA is concerned that a well-intentioned effort will have serious consequences on the welfare of unwanted horses. The people supporting this bill fail to take into account the ramifications that would result from its passage. They are making this into an emotionally charged issue instead of offering solutions to the problems that would be created. We ask that you please do what is right for the horses' welfare and not support H.R. 503. Thank you.

[The prepared statement of Bonnie Beaver, DVM, follows:]

THE PREPARED STATEMENT OF BONNIE BEAVER, DVM, EXECUTIVE DIRECTOR, AMERICAN COLLEGE OF VETERINARY BEHAVIOURISTS, TEXAS A&M UNIVERSITY

Summary of Testimony

- The AVMA opposes HR 503, The American Horse Slaughter Prevention Act.
- HR 503 fails to adequately address the unintended consequences of imposing a ban on the processing of horses.
- The Penetrating Captive Bolt Gun causes instantaneous death and is an acceptable form of euthanasia for horses.
- Transportation of Horses to Slaughter is highly regulated by the USDA. The transportation guidelines were developed with input from the AVMA, AAEP, other horse groups, the Humane Society of the United States, and other animal protection groups.
- Welfare is the biggest concern of the AVMA for those horses that would be impacted by a ban on horse slaughter.
- There are not enough rescue and retirement facilities, and these facilities are not regulated so there is no way to ensure that the horses would get adequate care.
- The legislation does not address the financial support required to care for the horses given up by their owners.
- The legislation does not address the disposal of over 90,000 horse carcasses if horse slaughter is banned.

Distinguished Members of Congress, my name is Bonnie Beaver and I am a past president of the American Veterinary Medical Association. I am here to explain why the AVMA opposes HR 503 – The American Horse Slaughter Prevention Act.

I have provided you with my professional credentials, but I also want to briefly mention my involvement with horses. As a child, Roy Rogers was my hero and I named

my first horse Trigger. Horses were my passion, and had much to do with why I became a veterinarian. They remain my passion, and that is why I am appearing before you today.

I strongly support the AVMA's opposition to HR 503 because the bill does not adequately address certain issues that are critically important to ensuring the welfare of horses that would be affected by it. We are also concerned that incorrect information has been circulated regarding what euthanasia techniques are appropriate for horses.

First, let me correct a few misconceptions regarding the handling and euthanasia of horses. The AVMA convened a panel of experts, veterinarians and scientists, which I chaired, to evaluate what was known about chemical and physical euthanasia methods. In that panel's report, a copy of which has been provided for the record, euthanasia is defined as a "humane death" in which unconsciousness is rapid and followed by the cessation of vital functions. The report of the AVMA Panel on Euthanasia recommends two types of euthanasia for horses—an overdose of barbiturate anesthetic and the use of a penetrating captive-bolt gun with appropriate head restraint. The penetrating captive bolt is NOT a stun gun. It causes instantaneous death due to the destruction of brain tissue. Let me repeat – instantaneous death. Statements contained in the panel's report about the importance of appropriate head restraint do not mean that the horse's head must be completely immobilized, but instead that it should be in a position to allow skin contact with the penetrating captive-bolt gun. Involuntary movements after brain death are common in horses undergoing euthanasia, and are often misinterpreted as struggling by those without a clear understanding of the process. Although such movements may be discomforting for the people who are watching, such movements are not and should not be interpreted as an indication that a horse is experiencing distress.

It has also been incorrectly stated that horses entering restraint boxes prior to application of the penetrating captive bolt invariably panic. In fact, states of excitement or panic in horses can result in injury to both the horse and people nearby, so this is something those involved with the horse slaughter process work very hard to prevent. Instead, and as required by USDA regulations, experienced individuals handle the horse appropriately and quietly; this allows the horse to enter the restraint box without injury. Once confined, horses become passive because they recognize that their instinctive ability to flee has been thwarted.

Second, we understand that supporters of HR 503 contend that methods used to transport horses to slaughter plants are inhumane. I will take this opportunity to remind you that current USDA regulations on the transport of horses to slaughter, which we have included for the written record, were developed and implemented with significant input from the AVMA, the American Association of Equine Practitioners, other horse-related groups and humane organizations. Among the humane organizations involved were the Humane Society of the United States and several other of the advocacy groups that are currently arguing against these regulations. We have yet to receive a satisfactory response from these groups about why they now object to the very regulations they helped draft.

Third, and foremost, the welfare of the horses that would be impacted by a ban on slaughter is the biggest concern of the AVMA. Currently, horse rescue and retirement facilities in the United States have a maximum capacity of about 6000 horses. It would be a daunting, and probably impossible, task to create facilities that could house an additional 10 times that number of horses every year. Creating these facilities and properly caring for each horse in them costs money. As shown in the Horse Welfare Coalition Fiscal Impact document, which has been included for the record, and as we have already experienced in the process of trying to manage wild Mustangs in the western United States, cumulative costs incurred for the care of a large number of horses are high. The American Horse Slaughter Prevention Act does not provide the financial support required to ensure that horses given up by their owners will be adequately cared for, and inadequate funding has a huge potential to create opportunities for inadequate care. Watching a horse slowly die from starvation or disease is not only distressing, it's

cruel. Furthermore, horse retirement facilities and sanctuaries are not regulated so there is no way to ensure the horses living there will receive adequate care.

Finally, disposing of the carcasses of euthanatized horses can be expensive and creates wildlife and environmental concerns. Euthanasia, carcass removal, and burial are each expensive, and cremation can cost as much as $1500. Scavenger species can be killed by chemical agents in discarded tissues. Burial is not permitted in many areas, and chemicals can contaminate the soil. Other disposal methods, such as biodigestors, show promise but are not yet readily available.

The AVMA is concerned that HR 503, although a well-intended effort, will have serious negative consequences for the welfare of unwanted horses. The people supporting this bill fail to take into account the ramifications of its passage. They are making this into an emotionally charged issue instead of offering solutions to the problem of unwanted horses, and are potentially creating more welfare and environmental concerns in the process. We ask that you please do what is right for the horses' welfare and not support HR 503.

Thank you.

2000 Report of the AVMA Panel on Euthanasia

2000 Report of the AVMA Panel on Euthanasia

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Members of the AVMA Panel

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Wendy Underwood, DVM, MS, DACVIM, Lilly Corporate Center, Eli Lilly and Co, Indianapolis, IN 46285, representing the National Institute for Animal Agriculture Euthanasia Task Force.

Gus W. Thornton, DVM, DACVIM, Massachusetts Society for the Prevention of Cruelty to Animals (MSPCA), American Humane Education Society (AHES), 350 S Huntington Ave, Boston, MA 02130, representing an animal protection agency.

Barbara Kohn, DVM, USDA/APHIS/Animal Care, 4700 River Road, Unit 84, Riverdale, MD 20737-1234, representing the USDA/APHIS.

PREFACE

At the request of the AVMA Council on Research, the Executive Board of the AVMA convened a Panel on Euthanasia in 1999 to review and make necessary revisions to the fifth Panel Report, published in 1993.[1] In this newest version of the report, the panel has updated information on euthanasia of animals in research and animal care and control facilities; expanded information on ectothermic, aquatic, and fur-bearing animals; added information on horses and wildlife; and deleted methods or agents considered unacceptable. Because the panel's deliberations were based on currently available scientific information, some euthanasia methods and agents are not discussed.

Welfare issues are increasingly being identified in the management of free-ranging wildlife, and the need for humane euthanasia guidelines in this context is great. Collection of animals for scientific investigations, euthanasia of injured or diseased wildlife species, removal of animals causing damage to property or threatening human safety, and euthanasia of animals in excess population are drawing more public attention. These issues are acknowledged in this report and special considerations are described for handling animals under free-ranging conditions, where their needs are far different from those of their domestic counterparts.

This report is intended for use by members of the

veterinary profession who carry out or oversee the euthanasia of animals. Although the report may be interpreted and understood by a broad segment of the general population, a veterinarian should be consulted in the application of these recommendations. The practice of veterinary medicine is complex and involves diverse animal species. Whenever possible, a veterinarian experienced with the species in question should be consulted when selecting the method of euthanasia, particularly when little species-specific euthanasia research has been done. Although interpretation and use of this report cannot be limited, the panel's overriding commitment is to give veterinarians guidance in relieving pain and suffering of animals that are to be euthanatized. The recommendations in this report are intended to serve as guidelines for veterinarians who must then use professional judgment in applying them to the various settings where animals are to be euthanatized.

INTRODUCTION

The term euthanasia is derived from the Greek terms *eu* meaning good and *thanatos* meaning death.[2] A "good death" would be one that occurs with minimal pain and distress. In the context of this report, euthanasia is the act of inducing humane death in an animal. It is our responsibility as veterinarians and human beings to ensure that if an animal's life is to be taken, it is done with the highest degree of respect, and with an emphasis on making the death as painless and distress free as possible. Euthanasia techniques should result in rapid loss of consciousness followed by cardiac or respiratory arrest and the ultimate loss of brain function. In addition, the technique should minimize distress and anxiety experienced by the animal prior to loss of consciousness. The panel recognized that the absence of pain and distress cannot always be achieved. This report attempts to balance the ideal of minimal pain and distress with the reality of the many environments in which euthanasia is performed. A veterinarian with appropriate training and expertise for the species involved should be consulted to ensure that proper procedures are used.

Criteria for painless death can be established only after the mechanisms of pain are understood. Pain is that sensation (perception) that results from nerve impulses reaching the cerebral cortex via ascending neural pathways. Under normal circumstances, these pathways are relatively specific, but the nervous system is sufficiently plastic that activation of nociceptive pathways does not always result in pain and stimulation of other (non-nociceptive) peripheral and central neurons can give rise to pain. The term nociceptive is derived from the word *noci* meaning to injure and *ceptive* meaning to receive, and is used to describe neuronal input caused by noxious stimuli, which threaten to, or actually do, destroy tissue. These noxious stimuli initiate nerve impulses by acting at primary nociceptors and other sensory nerve endings that respond to noxious and non-noxious stimuli from mechanical, thermal, or chemical activity. Endogenous chemical substances such as hydrogen ions, potassium ions, ATP, serotonin, histamine, bradykinin, and prostaglandins, as well as electrical currents, are capable of generating nerve impulses in nociceptor nerve fibers. Activity in nociceptive pathways can also be triggered in normally silent receptors that become sensitized by chronic pain conditions.[3,4]

Nerve impulse activity generated by nociceptors is conducted via nociceptor primary afferent fibers to the spinal cord or the brainstem where it is transmitted to two general sets of neural networks. One set is related to nociceptive reflexes (eg, withdrawal and flexion reflexes) that are mediated at the spinal level, and the second set consists of ascending pathways to the reticular formation, hypothalamus, thalamus, and cerebral cortex (somatosensory cortex and limbic system) for sensory processing. It is important to understand that ascending nociceptive pathways are numerous, often redundant, and are capable of considerable plasticity under chronic conditions (pathology or injury). Moreover, even the transmission of nociceptive neural activity in a given pathway is highly variable. Under certain conditions, both the nociceptive reflexes and the ascending pathways may be suppressed, as, for example, in epidural anesthesia. Under another set of conditions, nociceptive reflex actions may occur, but activity in the ascending pathways is suppressed; thus, noxious stimuli are not perceived as pain. It is incorrect to use the term pain for stimuli, receptors, reflexes, or pathways because the term implies perception, whereas all the above may be active without consequential pain perception.[5,6]

Pain is divided into two broad categories: (1) sensory-discriminative, which indicates the site of origin and the stimulus giving rise to the pain; and (2) motivational-affective in which the severity of the stimulus is perceived and the animal's response is determined. Sensory-discriminative processing of nociceptive impulses is most likely to be accomplished by subcortical and cortical mechanisms similar to those used for processing other sensory-discriminative input that provides the individual with information about the intensity, duration, location, and quality of the stimulus. Motivational-affective processing involves the ascending reticular formation for behavioral and cortical arousal. It also involves thalamic input to the forebrain and the limbic system for perceptions such as discomfort, fear, anxiety, and depression. The motivational-affective neural networks also have strong inputs to the limbic system, hypothalamus and the autonomic nervous system for reflex activation of the cardiovascular, pulmonary, and pituitary-adrenal systems. Responses activated by these systems feed back to the forebrain and enhance perceptions derived via motivational-affective inputs. On the basis of neurosurgical experience in humans, it is possible to separate the sensory-discriminative components from the motivational-affective components of pain.[7]

For pain to be experienced, the cerebral cortex and subcortical structures must be functional. If the cerebral cortex is nonfunctional because of hypoxia, depression by drugs, electric shock, or concussion, pain is not experienced. Therefore, the choice of the euthanasia agent or method is less critical if it is to be used on an animal that is anesthetized or unconscious, provided that the animal does not regain consciousness prior to death.

An understanding of the continuum that represents stress and distress is essential for evaluating techniques that minimize any distress experienced by an animal being euthanatized. Stress has been defined as the effect of physical, physiologic, or emotional factors (stressors) that induce an alteration in an animal's homeostasis or adaptive state.[8] The response of an animal to stress represents the adaptive process that is necessary to restore the baseline mental and physiologic state. These responses may involve changes in an animal's neuroendocrinologic system, autonomic nervous system, and mental status that may result in overt behavioral changes. An animal's response varies according to its experience, age, species, breed, and current physiologic and psychologic state.[9]

Stress and the resulting responses have been divided into three phases.[10] Eustress results when harmless stimuli initiate adaptive responses that are beneficial to the animal. Neutral stress results when the animal's response to stimuli causes neither harmful nor beneficial effects to the animal. Distress results when an animal's response to stimuli interferes with its well-being and comfort.[11]

As with many other procedures involving animals, some methods of euthanasia require physical handling of the animal. The amount of control and kind of restraint required will be determined by the animal's species, breed, size, state of domestication, degree of taming, presence of painful injury or disease, degree of excitement, and method of euthanasia. Proper handling is vital to minimize pain and distress in animals, to ensure safety of the person performing euthanasia, and, often, to protect other people and animals.

An in-depth discussion of euthanasia procedures is beyond the scope of this report; however, personnel who perform euthanasia must have appropriate certification and training, experience with the techniques to be used, and experience in the humane restraint of the species of animal to be euthanatized, to ensure that animal pain and distress are minimized during euthanasia. Training and experience should include familiarity with the normal behavior of the species being euthanatized, an appreciation of how handling and restraint affects that behavior, and an understanding of the mechanism by which the selected technique induces loss of consciousness and death. Prior to being assigned full responsibility for performing euthanasia, all personnel must have demonstrated proficiency in the use of the technique in a closely supervised environment. References provided at the end of this document may be useful for training personnel.[12-21]

Selection of the most appropriate method of euthanasia in any given situation depends on the species of animal involved, available means of animal restraint, skill of personnel, number of animals, and other considerations. Available information focuses primarily on domestic animals, but the same general considerations should be applied to all species.

This report includes four appendices that summarize information from the text. Appendix 1 lists acceptable and conditionally acceptable methods of euthanasia, categorized by species. Appendices 2 and 3 provide summaries of characteristics for acceptable and conditionally acceptable methods of euthanasia. Appendix 4 provides a summary of some unacceptable euthanasia agents and methods. Criteria used for acceptable, conditionally acceptable, and unacceptable methods are as follows: acceptable methods are those that consistently produce a humane death when used as the sole means of euthanasia; conditionally acceptable methods are those techniques that by the nature of the technique or because of greater potential for operator error or safety hazards might not consistently produce humane death or are methods not well documented in the scientific literature; and unacceptable techniques are those methods deemed inhumane under any conditions or that the panel found posed a substantial risk to the human applying the technique. The report also includes discussion of several adjunctive methods, which are those methods that cannot be used as the sole method of euthanasia, but that can be used in conjunction with other methods to produce a humane death.

GENERAL CONSIDERATIONS

In evaluating methods of euthanasia, the panel used the following criteria: (1) ability to induce loss of consciousness and death without causing pain, distress, anxiety, or apprehension; (2) time required to induce loss of consciousness; (3) reliability; (4) safety of personnel; (5) irreversibility; (6) compatibility with requirement and purpose; (7) emotional effect on observers or operators; (8) compatibility with subsequent evaluation, examination, or use of tissue; (9) drug availability and human abuse potential; (10) compatibility with species, age, and health status; (11) ability to maintain equipment in proper working order; and (12) safety for predators/scavengers should the carcass be consumed.

The panel discussed the definition of euthanasia used in this report as it applies to circumstances when the degree of control over the animal makes it difficult to ensure death without pain and distress. Slaughter of animals for food, fur, or fiber may represent such situations. However, the same standards for euthanasia should be applied to the killing of animals for food, fur, or fiber, and wildlife or feral animals. Animals intended for food should be slaughtered humanely, taking into account any special requirements of the US Department of Agriculture.[22] Painless death can be achieved by properly stunning the animal, followed immediately by exsanguination. Handling of animals prior to slaughter should be as stress free as possible. Electric prods or other devices should not be used to encourage movement of animals and are not needed if chutes and ramps are properly designed to enable animals to be moved and restrained without undue stress.[23-27] Animals must not be restrained in a painful position before slaughter.

Ethical considerations that must be addressed when euthanatizing healthy and unwanted animals reflect professional and societal concerns.[28,29] These issues are complex and warrant thorough consideration by the profession and all those concerned with the welfare of animals. Whereas the panel recognizes the need for those responsible for the euthanasia of ani-

mals to be cognizant of these issues, it does not believe that this report is the appropriate forum for an in-depth discussion of this topic.

It is the intent of the panel that euthanasia be performed in accordance with applicable federal, state, and local laws governing drug acquisition and storage, occupational safety, and methods used for euthanasia and disposal of animals. However, space does not permit a review of current federal, state, and local regulations.

The panel is aware that circumstances may arise that are not clearly covered by this report. Whenever such situations arise, a veterinarian experienced with the species should use professional judgment and knowledge of clinically acceptable techniques in selecting an appropriate euthanasia technique. Professional judgment in these circumstances will take into consideration the animal's size and its species-specific physiologic and behavioral characteristics. In all circumstances, the euthanasia method should be selected and used with the highest ethical standards and social conscience.

It is imperative that death be verified after euthanasia and before disposal of the animal. An animal in deep narcosis following administration of an injectable or inhalant agent may appear dead, but might eventually recover. Death must be confirmed by examining the animal for cessation of vital signs, and consideration given to the animal species and method of euthanasia when determining the criteria for confirming death.

ANIMAL BEHAVIORAL CONSIDERATIONS

The need to minimize animal distress, including fear, anxiety, and apprehension, must be considered in determining the method of euthanasia. Gentle restraint (preferably in a familiar and safe environment), careful handling, and talking during euthanasia often have a calming effect on animals that are used to being handled. Sedation and/or anesthesia may assist in achieving the best conditions for euthanasia. It must be recognized that any sedatives or anesthetics given at this stage that change circulation may delay the onset of the euthanasia agent. Preparation of observers should also be taken into consideration.

Animals that are wild, feral, injured, or already distressed from disease pose another challenge. Methods of pre-euthanasia handling suitable for domestic animals may not be effective for them. Because handling may stress animals unaccustomed to human contact (eg, wildlife, zoo, and feral species), the degree of restraint required to perform any euthanasia procedure should be considered when evaluating various methods. When handling these animals, calming may be accomplished by minimizing visual, auditory, and tactile stimulation. When struggling during capture or restraint may cause pain, injury, or anxiety to the animal or danger to the operator, the use of tranquilizers, analgesics, and/or anesthetics may be necessary. A route of injection should be chosen that causes the least distress in the animal for which euthanasia must be performed. Various techniques for oral delivery of sedatives to dogs and cats have been described that may be useful under these circumstances.[30,31]

Facial expressions and body postures that indicate various emotional states of animals have been described for some species.[32-37] Behavioral and physiologic responses to noxious stimuli include distress vocalization, struggling, attempts to escape, defensive or redirected aggression, salivation, urination, defecation, evacuation of anal sacs, pupillary dilatation, tachycardia, sweating, and reflex skeletal muscle contractions causing shivering, tremors, or other muscular spasms. Unconscious as well as conscious animals are capable of some of these responses. Fear can cause immobility or "playing dead" in certain species, particularly rabbits and chickens. This immobility response should not be interpreted as loss of consciousness when the animal is, in fact, conscious. Distress vocalizations, fearful behavior, and release of certain odors or pheromones by a frightened animal may cause anxiety and apprehension in other animals. Therefore, for sensitive species, it is desirable that other animals not be present when individual animal euthanasia is performed.

HUMAN BEHAVIORAL CONSIDERATIONS

When animals must be euthanatized, either as individuals or in larger groups, moral and ethical concerns dictate that humane practices be observed. Human psychologic responses to euthanasia of animals need to be considered, with grief at the loss of a life as the most common reaction.[38] There are six circumstances under which we are most aware of the effects of animal euthanasia on people.

The first of these is the veterinary clinical setting where owners have to make decisions about whether and when to euthanatize. Although many owners rely heavily on their veterinarian's judgment, others may have misgivings about making their own decision. This is particularly likely if an owner feels responsible for allowing an animal's medical or behavioral problem to go unattended so that euthanasia becomes necessary. When owners choose to be present during euthanasia, they should be prepared for what will happen. What drugs are being used and how the animal could respond should be discussed. Behaviors such as vocalization, muscle twitches, failure of the eyelids to close, urination, or defecation can be distressing. Counseling services for grieving owners are now available in some communities[39] and telephone counseling is available through some veterinary schools.[40,41] Owners are not the only people affected by euthanasia of animals. Veterinarians and their staffs may also become attached to patients they have known and treated for many years and may continue to struggle with the ethical implications of ending an animal's life.

The second is animal care and control facilities where unwanted, homeless, diseased, and injured animals must be euthanatized in large numbers. Distress may develop among personnel directly involved in performing euthanasia repeatedly. Emotional uneasiness, discomfort, or distress experienced by people involved with euthanasia of animals may be minimized. The person performing euthanasia must be technically proficient, use humane handling methods, understand the reasons for euthanasia, and be familiar with the

method of euthanasia being employed (ie, what is going to happen to the animal). When the person is not knowledgeable about what to expect, he or she may mistakenly interpret any movement of animals as consciousness and a lack of movement as loss of consciousness. Methods that preclude movement of animals are more aesthetically acceptable to most technical staff even though lack of movement is not an adequate criterion for evaluating euthanasia techniques. Constant exposure to, or participation in, euthanasia procedures can cause a psychologic state characterized by a strong sense of work dissatisfaction or alienation, which may be expressed by absenteeism, belligerence, or careless and callous handling of animals.[42] This is one of the principal reasons for turnover of employees directly involved with repeated animal euthanasia. Management should be aware of potential personnel problems related to animal euthanasia and determine whether it is necessary to institute a program to prevent, decrease, or eliminate this problem. Specific coping strategies can make the task more tolerable. Some strategies include adequate training programs so that euthanasia is performed competently, peer support in the workplace, professional support as necessary, focusing on animals that are successfully adopted or returned to owners, devoting some work time to educational activities, and providing time off when workers feel stressed.

The third setting is the laboratory. Researchers, technicians, and students may become attached to animals that must be euthanatized.[43] The same considerations afforded pet owners or shelter employees should be provided to those working in laboratories.

The fourth situation is wildlife control. Wildlife biologists, wildlife managers, and wildlife health professionals are often responsible for euthanatizing animals that are injured, diseased, in excessive number, or that threaten property or human safety. Although relocation of some animals is appropriate and attempted, relocation is often only a temporary solution to a larger problem. People who must deal with these animals, especially under public pressure to save the animals rather than destroy them, can experience extreme distress and anxiety.

The fifth setting is livestock and poultry slaughter facilities. The large number of animals processed daily can take a heavy toll on employees physically and emotionally. Federal and state agricultural employees may also be involved in mass euthanasia of poultry and livestock in the face of disease outbreaks, bioterrorism, and natural disasters.

The last situation is public exposure. Because euthanasia of zoo animals, animals involved in roadside or racetrack accidents, stranded marine animals, nuisance or injured wildlife, and others can draw public attention, human attitudes and responses should be considered whenever animals are euthanatized. Natural disasters and foreign animal disease programs also present public challenges. These considerations, however, should not outweigh the primary responsibility of using the most rapid and painless euthanasia method possible under the circumstances.

MODES OF ACTION OF EUTHANATIZING AGENTS

Euthanatizing agents cause death by three basic mechanisms: (1) hypoxia, direct or indirect; (2) direct depression of neurons necessary for life function; and (3) physical disruption of brain activity and destruction of neurons necessary for life.

Agents that induce death by direct or indirect hypoxia can act at various sites and can cause loss of consciousness at different rates. For death to be painless and distress-free, loss of consciousness should precede loss of motor activity (muscle movement). Loss of motor activity, however, cannot be equated with loss of consciousness and absence of distress. Thus, agents that induce muscle paralysis without loss of consciousness are not acceptable as sole agents for euthanasia (eg, depolarizing and nondepolarizing muscle relaxants, strychnine, nicotine, and magnesium salts). With other techniques that induce hypoxia, some animals may have motor activity following loss of consciousness, but this is reflex activity and is not perceived by the animal.

A second group of euthanatizing agents depress nerve cells of the brain, inducing loss of consciousness followed by death. Some of these agents release inhibition of motor activity during the first stage of anesthesia, resulting in a so-called excitement or delirium phase, during which there may be vocalization and some muscle contraction. These responses do not appear to be purposeful. Death follows loss of consciousness, and is attributable to cardiac arrest and/or hypoxemia following direct depression of respiratory centers.

Physical disruption of brain activity, caused by concussion, direct destruction of the brain, or electrical depolarization of neurons, induces rapid loss of consciousness. Death occurs because of destruction of midbrain centers controlling cardiac and respiratory activity or as a result of adjunctive methods (eg, exsanguination) used to kill the animal. Exaggerated muscular activity can follow loss of consciousness and, although this may disturb some observers, the animal is not experiencing pain or distress.

INHALANT AGENTS

Any gas that is inhaled must reach a certain concentration in the alveoli before it can be effective; therefore, euthanasia with any of these agents takes some time. The suitability of a particular agent depends on whether an animal experiences distress between the time it begins to inhale the agent and the time it loses consciousness. Some agents may induce convulsions, but these generally follow loss of consciousness. Agents inducing convulsions prior to loss of consciousness are unacceptable for euthanasia.

Certain considerations are common to all inhalant agents. (1) In most cases, onset of loss of consciousness is more rapid, and euthanasia more humane, if the animal is rapidly exposed to a high concentration of the agent. (2) The equipment used to deliver and maintain this high concentration must be in good working order and in compliance with state and federal regulations. Leaky or faulty equipment may lead to

slow, distressful death and be hazardous to other animals and to personnel. (3) Most of these agents are hazardous to personnel because of the risk of explosions (eg, ether), narcosis (eg, halothane), hypoxemia (eg, nitrogen and carbon monoxide), addiction (eg, nitrous oxide), or health effects resulting from chronic exposure (eg, nitrous oxide and carbon monoxide). (4) Alveolar concentrations rise slowly in an animal with decreased ventilation, making agitation more likely during induction. Other noninhalant methods of euthanasia should be considered for such animals. (5) Neonatal animals appear to be resistant to hypoxia, and because all inhalant agents ultimately cause hypoxia, neonatal animals take longer to die than adults. Glass et al.[44] reported that newborn dogs, rabbits, and guinea pigs survived a nitrogen atmosphere much longer than did adults. Dogs, at 1 week old, survived for 14 minutes compared with a 3-minute survival time after a few weeks of age. Guinea pigs survived for 4.5 minutes at 1 day old, compared with 3 minutes at 8 days or older. Rabbits survived for 13 minutes at 6 days old, 4 minutes at 14 days, and 1.5 minutes at 19 days and older. The panel recommends that inhalant agents not be used alone in animals less than 16 weeks old except to induce loss of consciousness, followed by the use of some other method to kill the animal. (6) Rapid gas flows can produce a noise that frightens animals. If high flows are required, the equipment should be designed to minimize noise. (7) Animals placed together in chambers should be of the same species, and, if needed, should be restrained so that they will not hurt themselves or others. Chambers should not be overloaded and need to be kept clean to minimize odors that might distress animals subsequently euthanatized. (8) Reptiles, amphibians, and diving birds and mammals have a great capacity for holding their breath and anaerobic metabolism. Therefore, induction of anesthesia and time to loss of consciousness when using inhalants may be greatly prolonged. Other techniques may be more appropriate for these species.

Inhalant anesthetics

Inhalant anesthetics (eg, ether, halothane, methoxyflurane, isoflurane, sevoflurane, desflurane, and enflurane) have been used to euthanatize many species.[45] Halothane induces anesthesia rapidly and is the most effective inhalant anesthetic for euthanasia. Enflurane is less soluble in blood than halothane, but, because of its lower vapor pressure and lower potency, induction rates may be similar to those for halothane. At deep anesthetic planes, animals may seizure. It is an effective agent for euthanasia, but the associated seizure activity may be disturbing to personnel. Isoflurane is less soluble than halothane, and it should induce anesthesia more rapidly. However, it has a slightly pungent odor and animals often hold their breath, delaying onset of loss of consciousness. Isoflurane also may require more drug to kill an animal, compared with halothane. Although isoflurane is acceptable as a euthanasia agent, halothane is preferred. Sevoflurane is less soluble than halothane and does not have an objectionable odor. It is less potent than isoflurane or halothane and has a lower vapor pressure. Anesthetic concentrations can be achieved and maintained rapidly. Desflurane is currently the least soluble potent inhalant anesthetic, but the vapor is quite pungent, which may slow induction. This drug is so volatile that it could displace oxygen (O_2) and induce hypoxemia during induction if supplemental O_2 is not provided. Methoxyflurane is highly soluble, and slow anesthetic induction with its use may be accompanied by agitation. It is a conditionally acceptable agent for euthanasia in rodents.[46] Ether has high solubility in blood and induces anesthesia slowly. It is irritating to the eyes and nose, poses serious risks associated with its flammability and explosiveness, and has been used to create a model for stress.[47-50]

With inhalant anesthetics, the animal can be placed in a closed receptacle containing cotton or gauze soaked with an appropriate amount of the anesthetic,[51] or the anesthetic can be introduced from a vaporizer. The latter method may be associated with a longer induction time. Vapors are inhaled until respiration ceases and death ensues. Because the liquid state of most inhalant anesthetics is irritating, animals should be exposed only to vapors. Also, sufficient air or O_2 must be provided during the induction period to prevent hypoxemia.[51] In the case of small rodents placed in a large container, there will be sufficient O_2 in the chamber to prevent hypoxemia. Larger species placed in small containers may need supplemental air or O_2.[51]

Nitrous oxide (N_2O) may be used with other inhalants to speed the onset of anesthesia, but alone it does not induce anesthesia in animals, even at 100% concentration. When used by itself, N_2O produces hypoxemia before respiratory or cardiac arrest. As a result, animals may become distressed prior to loss of consciousness.

Occupational exposure to inhalant anesthetics constitutes a human health hazard. Spontaneous abortion and congenital abnormalities have been associated with exposure of women to trace amounts of inhalation anesthetic agents during early stages of pregnancy.[52] Regarding human exposure to inhalant anesthetics, the concentrations of halothane, enflurane, and isoflurane should be less than 2 ppm, and less than 25 ppm for nitrous oxide.[52] There are no controlled studies proving that such concentrations of anesthetics are safe, but these concentrations were established because they were found to be attainable under hospital conditions. Effective procedures must be used to protect personnel from anesthetic vapors.

Advantages—(1) Inhalant anesthetics are particularly valuable for euthanasia of smaller animals (< 7 kg) or for animals in which venipuncture may be difficult. (2) Halothane, enflurane, isoflurane, sevoflurane, desflurane, methoxyflurane, and N_2O are nonflammable and nonexplosive under ordinary environmental conditions.

Disadvantages—(1) Animals may struggle and become anxious during induction of anesthesia because anesthetic vapors may be irritating and can induce excitement. (2) Ether is flammable and explo-

sive. Explosions have occurred when animals, euthanatized with ether, were placed in an ordinary (not explosion proof) refrigerator or freezer and when bagged animals were placed in an incinerator. (3) Induction with methoxyflurane is unacceptably slow in some species. (4) Nitrous oxide will support combustion. (5) Personnel and animals can be injured by exposure to these agents. (6) There is a potential for human abuse of some of these drugs, especially N_2O.

Recommendations—In order of preference, halothane, enflurane, isoflurane, sevoflurane, methoxyflurane, and desflurane, with or without nitrous oxide, are acceptable for euthanasia of small animals (< 7 kg). Ether should only be used in carefully controlled situations in compliance with state and federal occupational health and safety regulations. It is conditionally acceptable. Nitrous oxide should not be used alone, pending further scientific studies on its suitability for animal euthanasia. Although acceptable, these agents are generally not used in larger animals because of their cost and difficulty of administration.

Carbon dioxide

Room air contains 0.04% carbon dioxide (CO_2), which is heavier than air and nearly odorless. Inhalation of CO_2 at a concentration of 7.5% increases the pain threshold, and higher concentrations of CO_2 have a rapid anesthetic effect.[53-58]

Leake and Waters[56] reported the experimental use of CO_2 as an anesthetic agent for dogs. At concentrations of 30% to 40% CO_2 in O_2, anesthesia was induced within 1 to 2 minutes, usually without struggling, retching, or vomiting. For cats, inhalation of 60% CO_2 results in loss of consciousness within 45 seconds, and respiratory arrest within 5 minutes.[59] Signs of effective CO_2 anesthesia are those associated with deep surgical anesthesia, such as loss of withdrawal and palpebral reflexes.[60] Time to loss of consciousness is decreased by use of higher concentrations of CO_2 with an 80 to 100% concentration providing anesthesia in 12 to 33 seconds in rats and 70% CO_2 in O_2 inducing anesthesia in 40 to 50 seconds.[61,62] Time to loss of consciousness will be longer if the concentration is increased slowly rather than immersing the animal in the full concentration immediately.

Several investigators have suggested that inhalation of high concentrations of CO_2 may be distressing to animals,[63-66] because the gas dissolves in moisture on the nasal mucosa. The resulting product, carbonic acid, may stimulate nociceptors in the nasal mucosa. Some humans exposed to concentrations of around 50% CO_2 report that inhaling the gas is unpleasant and that higher concentrations are noxious.[67,68] A brief study of swine examined the aversive nature of CO_2 exposure[69] and found that 90% CO_2 was aversive to pigs while 30% was not. For rats, exposure to increasing concentrations of CO_2 (33% achieved after 1 minute) in their home cage produced no evident stress as measured by behavior and ACTH, glucose, and corticosterone concentrations in serum.[70]

Carbon dioxide has been used to euthanatize groups of small laboratory animals, including mice, rats, guinea pigs, chickens, and rabbits,[5,71-76] and to render swine unconscious before humane slaughter.[22,63,64] The combination of 40% CO_2 and approximately 3% CO has been used experimentally for euthanasia of dogs.[65] Carbon dioxide has been used in specially designed chambers to euthanatize individual cats[77,78] and other small laboratory animals.[51,72,79]

Studies of 1-day-old chickens have revealed that CO_2 is an effective euthanatizing agent. Inhalation of CO_2 caused little distress to the birds, suppressed nervous activity, and induced death within 5 minutes.[73] Because respiration begins during embryonic development, the unhatched chicken's environment may normally have a CO_2 concentration as high as 14%. Thus, CO_2 concentrations for euthanasia of newly hatched chickens and neonates of other species should be especially high. A CO_2 concentration of 60% to 70% with a 5-minute exposure time appears to be optimal.[73]

In studies of mink, high concentrations of CO_2 would kill them quickly, but a 70% CO_2 concentration induced loss of consciousness without killing them.[80] Some burrowing animals, such as rabbits of the species *Oryctolagus*, also have prolonged survival times when exposed to CO_2.[81] Some burrowing and diving animals have physiologic mechanisms for coping with hypercapnia. Therefore, it is necessary to have a sufficient concentration of CO_2 to kill the animal by hypoxemia following induction of anesthesia with CO_2.

Advantages—(1) The rapid depressant, analgesic, and anesthetic effects of CO_2 are well established. (2) Carbon dioxide is readily available and can be purchased in compressed gas cylinders. (3) Carbon dioxide is inexpensive, nonflammable, nonexplosive, and poses minimal hazard to personnel when used with properly designed equipment. (4) Carbon dioxide does not result in accumulation of tissue residues in food-producing animals. (5) Carbon dioxide euthanasia does not distort murine cholinergic markers[82] or corticosterone concentrations.[83]

Disadvantages—(1) Because CO_2 is heavier than air, incomplete filling of a chamber may permit animals to climb or raise their heads above the higher concentrations and avoid exposure. (2) Some species, such as fish and burrowing and diving mammals, may have extraordinary tolerance for CO_2. (3) Reptiles and amphibians may breathe too slowly for the use of CO_2. (4) Euthanasia by exposure to CO_2 may take longer than euthanasia by other means.[61] (5) Induction of loss of consciousness at lower concentrations (< 80%) may produce pulmonary and upper respiratory tract lesions.[67,84] (6) High concentrations of CO_2 may be distressful to some animals.

Recommendations—Carbon dioxide is acceptable for euthanasia in appropriate species (**Tables 1 and 2**). Compressed CO_2 gas in cylinders is the only recommended source of carbon dioxide because the inflow to the chamber can be regulated precisely. Carbon dioxide generated by other methods such as from dry ice, fire extinguishers, or chemical means (eg, antacids) is unacceptable. Species should be separated and cham-

bers should not be overcrowded. With an animal in the chamber, an optimal flow rate should displace at least 20% of the chamber volume per minute.[85] Loss of consciousness may be induced more rapidly by exposing animals to a CO_2 concentration of 70% or more by prefilling the chamber for species in which this has not been shown to cause distress. Gas flow should be maintained for at least 1 minute after apparent clinical death.[86] It is important to verify that an animal is dead before removing it from the chamber. If an animal is not dead, CO_2 narcosis must be followed with another method of euthanasia. Adding O_2 to the CO_2 may or may not preclude signs of distress.[67,87] Additional O_2 will, however, prolong time to death and may complicate determination of consciousness. There appears to be no advantage to combining O_2 with carbon dioxide for euthanasia.[87]

Nitrogen, argon

Nitrogen (N_2) and argon (Ar) are colorless, odorless gases that are inert, nonflammable, and nonexplosive. Nitrogen comprises 78% of atmospheric air, whereas Ar comprises less than 1%.

Euthanasia is induced by placing the animal in a closed container that has been prefilled with N_2 or Ar or into which the gas is then rapidly introduced. Nitrogen/Ar displaces O_2, thus inducing death by hypoxemia.

In studies by Herin et al,[88] dogs became unconscious within 76 seconds when a N_2 concentration of 98.5% was achieved in 45 to 60 seconds. The electroencephalogram (EEG) became isoelectric (flat) in a mean time of 80 seconds, and arterial blood pressure was undetectable at 204 seconds. Although all dogs hyperventilated prior to loss of consciousness, the investigators concluded that this method induced death without pain. Following loss of consciousness, vocalization, gasping, convulsions, and muscular tremors developed in some dogs. At the end of a 5-minute exposure period, all dogs were dead.[88] These findings were similar to those for rabbits[89] and mink.[80,90]

With N_2 flowing at a rate of 39% of chamber volume per minute, rats collapsed in approximately 3 minutes and stopped breathing in 5 to 6 minutes. Regardless of flow rate, signs of panic and distress were evident before the rats collapsed and died.[85] Insensitivity to pain under such circumstances is questionable.[91]

Tranquilization with acepromazine, in conjunction with N_2 euthanasia of dogs, was investigated by Quine et al.[92] Using ECG and EEG recordings, they found these dogs had much longer survival times than dogs not given acepromazine before administration of N_2. In one dog, ECG activity continued for 51 minutes. Quine also addressed distress associated with exposure to N_2 by removing cats and dogs from the chamber following loss of consciousness and allowing them to recover. When these animals were put back into the chamber, they did not appear afraid or apprehensive.

Investigations into the aversiveness of Ar to swine and poultry have revealed that these animals will tolerate breathing 90% Ar with 2% O_2.[69,71] Swine voluntarily entered a chamber containing this mixture, for a food reward, and only withdrew from the chamber as they became ataxic. They reentered the chamber immediately to continue eating. Poultry also entered a chamber containing this mixture for a food reward and continued eating until they collapsed.[71] When Ar was used to euthanatize chickens, exposure to a chamber prefilled with Ar, with an O_2 concentration of < 2%, led to EEG changes and collapse in 9 to 12 seconds. Birds removed from the chamber at 15 to 17 seconds failed to respond to comb pinching. Continued exposure led to convulsions at 20 to 24 seconds. Somatosensory-evoked potentials were lost at 24 to 34 seconds, and the EEG became isoelectric at 57 to 66 seconds. Convulsion onset was after loss of consciousness (collapse and loss of response to comb pinch), so this would appear to be a humane method of euthanasia for chickens.[93] Despite the availability of some information, there is still much about the use of N_2/Ar that needs to be investigated.

Advantages—(1) Nitrogen and Ar are readily available as compressed gases. (2) Hazards to personnel are minimal.

Disadvantages—(1) Loss of consciousness is preceded by hypoxemia and ventilatory stimulation, which may be distressing to the animal. (2) Reestablishing a low concentration of O_2 (ie, 6% or greater) in the chamber before death will allow immediate recovery.[69]

Recommendations—Nitrogen and Ar can be distressful to some species (eg, rats).[85] Therefore, this technique is conditionally acceptable only if O_2 concentrations < 2% are achieved rapidly, and animals are heavily sedated or anesthetized. With heavy sedation or anesthesia, it should be recognized that death may be delayed. Although N_2 and Ar are effective, other methods of euthanasia are preferable.

Carbon monoxide

Carbon monoxide (CO) is a colorless, odorless gas that is nonflammable and nonexplosive unless concentrations exceed 10%. It combines with hemoglobin to form carboxyhemoglobin and blocks uptake of O_2 by erythrocytes, leading to fatal hypoxemia.

In the past, mass euthanasia has been accomplished by use of 3 methods for generating CO: (1) chemical interaction of sodium formate and sulfuric acid, (2) exhaust fumes from idling gasoline internal combustion engines, and (3) commercially compressed CO in cylinders. The first 2 techniques are associated with problems such as production of other gases, achieving inadequate concentrations of carbon monoxide, inadequate cooling of the gas, and maintenance of equipment. Therefore, the only acceptable source is compressed CO in cylinders.

In a study by Ramsey and Eilmann,[94] 8% CO caused guinea pigs to collapse in 40 seconds to 2 minutes, and death occurred within 6 minutes. Carbon monoxide has been used to euthanatize mink[80,90] and chinchillas. These animals collapsed in 1 minute, breathing ceased in 2 minutes, and the heart stopped beating in 5 to 7 minutes.

In a study evaluating the physiologic and behavioral characteristics of dogs exposed to 6% CO in air, Chalifoux and Dallaire[95] could not determine the precise time of loss of consciousness. Electroencephalographic recordings revealed 20 to 25 seconds of abnormal cortical function prior to loss of consciousness. It was during this period that the dogs became agitated and vocalized. It is not known whether animals experience distress; however, humans in this phase reportedly are not distressed.[96] Subsequent studies have revealed that tranquilization with acepromazine significantly decreases behavioral and physiologic responses of dogs euthanatized with CO.[97]

In a comparative study, CO from gasoline engine exhaust and 70% CO_2 plus 30% O_2 were used to euthanatize cats. Euthanasia was divided into 3 phases. Phase I was the time from initial contact to onset of clinical signs (eg, yawning, staggering, or trembling). Phase II extended from the end of phase I until recumbency, and phase III from the end of phase II until death.[54] The study revealed that signs of agitation before loss of consciousness were greatest with CO_2 plus O_2. Convulsions occurred during phases II and III with both methods. However, when the euthanasia chamber was prefilled with CO (ie, exhaust fumes), convulsions did not occur in phase III. Time to complete immobilization was greater with CO_2 plus O_2 (approximately 90 seconds) than with CO alone (approximately 56 seconds).[54] In neonatal pigs, excitation was more likely to precede loss of consciousness if the pigs were exposed to a rapid rise in CO concentration. This agitation was reduced at lower flow rates, or when CO was combined with nitrogen.[98]

In people, the most common symptoms of early CO toxicosis are headache, dizziness, and weakness. As concentrations of carboxyhemoglobin increase, these signs may be followed by decreased visual acuity, tinnitus, nausea, progressive depression, confusion, and collapse.[99] Because CO stimulates motor centers in the brain, loss of consciousness may be accompanied by convulsions and muscular spasms.

Carbon monoxide is a cumulative poison.[96] Distinct signs of CO toxicosis are not evident until the CO concentration is 0.05% in air, and acute signs do not develop until the CO concentration is approximately 0.2% in air. In humans, exposure to 0.32% CO and 0.45% CO for one hour will induce loss of consciousness and death, respectively.[100] Carbon monoxide is extremely hazardous for personnel because it is highly toxic and difficult to detect. Chronic exposure to low concentrations of carbon monoxide may be a health hazard, especially with regard to cardiovascular disease and teratogenic effects.[101-103] An efficient exhaust or ventilatory system is essential to prevent accidental exposure of humans.

Advantages—(1) Carbon monoxide induces loss of consciousness without pain and with minimal discernible discomfort. (2) Hypoxemia induced by CO is insidious, so that the animal appears to be unaware. (3) Death occurs rapidly if concentrations of 4 to 6% are used.

Disadvantages—(1) Safeguards must be taken to prevent exposure of personnel. (2) Any electrical equipment exposed to CO (eg, lights and fans) must be explosion proof.

Recommendations—Carbon monoxide used for individual animal or mass euthanasia is acceptable for dogs, cats, and other small mammals, provided that commercially compressed CO is used and the following precautions are taken: (1) personnel using CO must be instructed thoroughly in its use and must understand its hazards and limitations; (2) the CO chamber must be of the highest quality construction and should allow for separation of individual animals; (3) the CO source and chamber must be located in a well-ventilated environment, preferably out of doors; (4) the chamber must be well lit and have view ports that allow personnel direct observation of animals; (5) the CO flow rate should be adequate to rapidly achieve a uniform CO concentration of at least 6% after animals are placed in the chamber, although some species (eg, neonatal pigs) are less likely to become agitated with a gradual rise in CO concentration;[98] and (6) if the chamber is inside a room, CO monitors must be placed in the room to warn personnel of hazardous concentrations. It is essential that CO use be in compliance with state and federal occupational health and safety regulations.

NONINHALANT PHARMACEUTICAL AGENTS

The use of injectable euthanasia agents is the most rapid and reliable method of performing euthanasia. It is the most desirable method when it can be performed without causing fear or distress in the animal. When the restraint necessary for giving an animal an intravenous injection would impart added distress to the animal or pose undue risk to the operator, sedation, anesthesia, or an acceptable alternate route of administration should be employed. Aggressive, fearful, wild, or feral animals should be sedated or given a nonparalytic immobilizing agent prior to intravenous administration of the euthanasia agent.

When intravenous administration is considered impractical or impossible, intraperitoneal administration of a nonirritating euthanasia agent is acceptable, provided the drug does not contain neuromuscular blocking agents. Intracardiac injection is acceptable only when performed on heavily sedated, anesthetized, or comatose animals. It is not considered acceptable in awake animals, owing to the difficulty and unpredictability of performing the injection accurately. Intramuscular, subcutaneous, intrathoracic, intrapulmonary, intrahepatic, intrarenal, intrasplenic, intrathecal, and other nonvascular injections are not acceptable methods of administering injectable euthanasia agents.

When injectable euthanasia agents are administered into the peritoneal cavity, animals may be slow to pass through stages I and II of anesthesia. Accordingly, they should be placed in small cages in a quiet area to minimize excitement and trauma.

Barbituric acid derivatives

Barbiturates depress the central nervous system in descending order, beginning with the cerebral cortex,

with loss of consciousness progressing to anesthesia. With an overdose, deep anesthesia progresses to apnea, owing to depression of the respiratory center, which is followed by cardiac arrest.

All barbituric acid derivatives used for anesthesia are acceptable for euthanasia when administered intravenously. There is a rapid onset of action, and loss of consciousness induced by barbiturates results in minimal or transient pain associated with venipuncture. Desirable barbiturates are those that are potent, long-acting, stable in solution, and inexpensive. Sodium pentobarbital best fits these criteria and is most widely used, although others such as secobarbital are also acceptable.

Advantages—(1) A primary advantage of barbiturates is speed of action. This effect depends on the dose, concentration, route, and rate of the injection. (2) Barbiturates induce euthanasia smoothly, with minimal discomfort to the animal. (3) Barbiturates are less expensive than many other euthanasia agents.

Disadvantages—(1) Intravenous injection is necessary for best results and requires trained personnel. (2) Each animal must be restrained. (3) Current federal drug regulations require strict accounting for barbiturates and these must be used under the supervision of personnel registered with the US Drug Enforcement Administration (DEA). (4) An aesthetically objectionable terminal gasp may occur in unconscious animals. (5) These drugs tend to persist in the carcass and may cause sedation or even death of animals that consume the body.

Recommendations—The advantages of using barbiturates for euthanasia in small animals far outweigh the disadvantages. Intravenous injection of a barbituric acid derivative is the preferred method for euthanasia of dogs, cats, other small animals, and horses. Intraperitoneal injection may be used in situations when an intravenous injection would be distressful or even dangerous. Intracardiac injection must only be used if the animal is heavily sedated, unconscious, or anesthetized.

Pentobarbital combinations

Several euthanasia products are formulated to include a barbituric acid derivative (usually sodium pentobarbital), with added local anesthetic agents or agents that metabolize to pentobarbital. Although some of these additives are slowly cardiotoxic, this pharmacologic effect is inconsequential. These combination products are listed by the DEA as Schedule III drugs, making them somewhat simpler to obtain, store, and administer than Schedule II drugs such as sodium pentobarbital. The pharmacologic properties and recommended use of combination products that combine sodium pentobarbital with lidocaine or phenytoin are interchangeable with those of pure barbituric acid derivatives.

A combination of pentobarbital with a neuromuscular blocking agent is not an acceptable euthanasia agent.

Chloral hydrate

Chloral hydrate depresses the cerebrum slowly; therefore, restraint may be a problem for some animals. Death is caused by hypoxemia resulting from progressive depression of the respiratory center, and may be preceded by gasping, muscle spasms, and vocalization.

Recommendations—Chloral hydrate is conditionally acceptable for euthanasia of large animals only when administered intravenously, and only after sedation to decrease the aforementioned undesirable side effects. Chloral hydrate is not acceptable for dogs, cats, and other small animals because the side effects may be severe, reactions can be aesthetically objectionable, and other products are better choices.

T-61

T-61 is an injectable, nonbarbiturate, non-narcotic mixture of 3 drugs used for euthanasia. These drugs provide a combination of general anesthetic, curariform, and local anesthetic actions. T-61 has been withdrawn from the market and is no longer manufactured or commercially available in the United States. It is available in Canada and other countries. T-61 should be used only intravenously and at carefully monitored rates of injection, because there is some question as to the differential absorption and onset of action of the active ingredients when administered by other routes.[1]

Tricaine methane sulfonate (MS 222, TMS)

MS 222 is commercially available as tricaine methane sulfonate (TMS), which can be used for the euthanasia of amphibians and fish. Tricaine is a benzoic acid derivative and, in water of low alkalinity (< 50 mg/L as $CaCo_3$); the solution should be buffered with sodium bicarbonate.[104] A 10 g/L stock solution can be made, and sodium bicarbonate added to saturation, resulting in a pH between 7.0 and 7.5 for the solution. The stock solution should be stored in a dark brown bottle, and refrigerated or frozen if possible. The solution should be replaced monthly and any time a brown color is observed.[105] For euthanasia, a concentration ≥ 250 mg/L is recommended and fish should be left in this solution for at least 10 minutes following cessation of opercular movement.[104] In the United States, there is a 21-day withdrawal time for MS 222; therefore, it is not appropriate for euthanasia of animals intended for food.

Potassium chloride in conjunction with prior general anesthesia

Although unacceptable and condemned when used in unanaesthetized animals, the use of a supersaturated solution of potassium chloride injected intravenously or intracardially in an animal under general anesthesia is an acceptable method to produce cardiac arrest and death. The potassium ion is cardiotoxic, and rapid intravenous or intracardiac administration of 1 to 2 mmol/kg of body weight will cause cardiac arrest. This is a preferred injectable technique for euthanasia of livestock or wildlife species to reduce the risk of toxicosis for predators or scavengers in situations where carcasses of euthanatized animals may be consumed.[106,107]

Advantages—(1) Potassium chloride is not a controlled substance. It is easily acquired, transported, and mixed in the field. (2) Potassium chloride, when used with appropriate methods to render an animal unconscious, results in a carcass that is potentially less toxic for scavengers and predators in cases where carcass disposal is impossible or impractical.

Disadvantage—Rippling of muscle tissue and clonic spasms may occur on or shortly after injection.

Recommendations—It is of utmost importance that personnel performing this technique are trained and knowledgeable in anesthetic techniques, and are competent in assessing anesthetic depth appropriate for administration of potassium chloride intravenously. Administration of potassium chloride intravenously requires animals to be in a surgical plane of anesthesia characterized by loss of consciousness, loss of reflex muscle response, and loss of response to noxious stimuli. Saturated potassium chloride solutions are effective in causing cardiac arrest following rapid intracardiac or intravenous injection. Residual tissue concentrations of general anesthetics after anesthetic induction have not been documented. Whereas no scavenger toxicoses have been reported with potassium chloride in combination with a general anesthetic, proper carcass disposal should always be attempted to prevent possible toxicosis by consumption of a carcass contaminated with general anesthetics.

Unacceptable injectable agents

When used alone, the injectable agents listed in **Appendix 4** (strychnine, nicotine, caffeine, magnesium sulfate, potassium chloride, cleaning agents, solvents, disinfectants and other toxins or salts, and all neuromuscular blocking agents) are unacceptable and are absolutely condemned for use as euthanasia agents.

PHYSICAL METHODS

Physical methods of euthanasia include captive bolt, gunshot, cervical dislocation, decapitation, electrocution, microwave irradiation, kill traps, thoracic compression, exsanguination, stunning, and pithing. When properly used by skilled personnel with well-maintained equipment, physical methods of euthanasia may result in less fear and anxiety and be more rapid, painless, humane, and practical than other forms of euthanasia. Exsanguination, stunning, and pithing are not recommended as a sole means of euthanasia, but should be considered adjuncts to other agents or methods.

Some consider physical methods of euthanasia aesthetically displeasing. There are occasions, however, when what is perceived as aesthetic and what is most humane are in conflict. Physical methods may be the most appropriate method for euthanasia and rapid relief of pain and suffering in certain situations. Personnel performing physical methods of euthanasia must be well trained and monitored for each type of physical technique performed. That person must also be sensitive to the aesthetic implications of the method and inform onlookers about what they should expect when possible.

Since most physical methods involve trauma, there is inherent risk for animals and humans. Extreme care and caution should be used. Skill and experience of personnel is essential. If the method is not performed correctly, animals and personnel may be injured. Inexperienced persons should be trained by experienced persons and should practice on carcasses or anesthetized animals to be euthanatized until they are proficient in performing the method properly and humanely. When done appropriately, the panel considers most physical methods conditionally acceptable for euthanasia.

Penetrating captive bolt

A penetrating captive bolt is used for euthanasia of ruminants, horses, swine, laboratory rabbits, and dogs.[108] Its mode of action is concussion and trauma to the cerebral hemisphere and brainstem.[109,110] Captive bolt guns are powered by gunpowder or compressed air and must provide sufficient energy to penetrate the skull of the species on which they are being used.[109] Adequate restraint is important to ensure proper placement of the captive bolt. A cerebral hemisphere and the brainstem must be sufficiently disrupted by the projectile to induce sudden loss of consciousness and subsequent death. Accurate placement of captive bolts for various species has been described.[109-112] A multiple projectile has been suggested as a more effective technique, especially for large cattle.[109]

A nonpenetrating captive bolt only stuns animals and should not be used as a sole means of euthanasia (see "Stunning" under "Adjunctive Methods").

Advantage—The penetrating captive bolt is an effective method of euthanasia for use in slaughterhouses, in research facilities, and on the farm when use of drugs is inappropriate.

Disadvantages—(1) It is aesthetically displeasing. (2) Death may not occur if equipment is not maintained and used properly.

Recommendations—Use of the penetrating captive bolt is an acceptable and practical method of euthanasia for horses, ruminants, and swine. It is conditionally acceptable in other appropriate species. The nonpenetrating captive bolt must not be used as a sole method of euthanasia.

Euthanasia by a blow to the head

Euthanasia by a blow to the head must be evaluated in terms of the anatomic features of the species on which it is to be performed. A blow to the head can be a humane method of euthanasia for neonatal animals with thin craniums, such as young pigs, if a single sharp blow delivered to the central skull bones with sufficient force can produce immediate depression of the central nervous system and destruction of brain tissue. When properly performed, loss of consciousness is rapid. The anatomic features of neonatal calves, however, make a blow to the head in this species unacceptable. Personnel performing euthanasia by use of a blow to the head must be properly trained and monitored for proficiency with this method of euthanasia, and they must be aware of its aesthetic implications.

Gunshot

A properly placed gunshot can cause immediate insensibility and humane death. In some circumstances, a gunshot may be the only practical method of euthanasia. Shooting should only be performed by highly skilled personnel trained in the use of firearms and only in jurisdictions that allow for legal firearm use. Personnel, public, and nearby animal safety should be considered. The procedure should be performed outdoors and away from public access.

For use of a gunshot to the head as a method of euthanasia in captive animals, the firearm should be aimed so that the projectile enters the brain, causing instant loss of consciousness.[51,112-114] This must take into account differences in brain position and skull conformation between species, as well as the energy requirement for skull bone and sinus penetration.[109,115] Accurate targeting for a gunshot to the head in various species has been described.[114,116-119] For wildlife and other freely roaming animals, the preferred target area should be the head. The appropriate firearm should be selected for the situation, with the goal being penetration and destruction of brain tissue without emergence from the contralateral side of the head.[120] A gunshot to the heart or neck does not immediately render animals unconscious and thus is not considered to meet the panel's definition of euthanasia.[121]

Advantages—(1) Loss of consciousness is instantaneous if the projectile destroys most of the brain. (2) Given the need to minimize stress induced by handling and human contact, gunshot may at times be the most practical and logical method of euthanasia of wild or free-ranging species.

Disadvantages—(1) Gunshot may be dangerous to personnel. (2) It is aesthetically unpleasant. (3) Under field conditions, it may be difficult to hit the vital target area. (4) Brain tissue may not be able to be examined for evidence of rabies infection or chronic wasting disease when the head is targeted.

Recommendations—When other methods cannot be used, an accurately delivered gunshot is a conditionally acceptable method of euthanasia.[114,122-125] When an animal can be appropriately restrained, the penetrating captive bolt is preferred to a gunshot. Prior to shooting, animals accustomed to the presence of humans should be treated in a calm and reassuring manner to minimize anxiety. In the case of wild animals, gunshots should be delivered with the least amount of prior human contact necessary. Gunshot should not be used for routine euthanasia of animals in animal control situations, such as municipal pounds or shelters.

Cervical dislocation

Cervical dislocation is a technique that has been used for many years and, when performed by well-trained individuals, appears to be humane. However, there are few scientific studies to confirm this observation. This technique is used to euthanatize poultry, other small birds, mice, and immature rats and rabbits. For mice and rats, the thumb and index finger are placed on either side of the neck at the base of the skull or, alternatively, a rod is pressed at the base of the skull. With the other hand, the base of the tail or the hind limbs are quickly pulled, causing separation of the cervical vertebrae from the skull. For immature rabbits, the head is held in one hand and the hind limbs in the other. The animal is stretched and the neck is hyperextended and dorsally twisted to separate the first cervical vertebra from the skull.[72,111] For poultry, cervical dislocation by stretching is a common method for mass euthanasia, but loss of consciousness may not be instantaneous.[134]

Data suggest that electrical activity in the brain persists for 13 seconds following cervical dislocation,[127] and unlike decapitation, rapid exsanguination does not contribute to loss of consciousness.[128,129]

Advantages—(1) Cervical dislocation is a technique that may induce rapid loss of consciousness.[84,127] (2) It does not chemically contaminate tissue. (3) It is rapidly accomplished.

Disadvantages—(1) Cervical dislocation may be aesthetically displeasing to personnel. (2) Cervical dislocation requires mastering technical skills to ensure loss of consciousness is rapidly induced. (3) Its use is limited to poultry, other small birds, mice, and immature rats and rabbits.

Recommendations—Manual cervical dislocation is a humane technique for euthanasia of poultry, other small birds, mice, rats weighing < 200 g, and rabbits weighing < 1 kg when performed by individuals with a demonstrated high degree of technical proficiency. In lieu of demonstrated technical competency, animals must be sedated or anesthetized prior to cervical dislocation. The need for technical competency is greater in heavy rats and rabbits, in which the large muscle mass in the cervical region makes manual cervical dislocation physically more difficult.[130] In research settings, this technique should be used only when scientifically justified by the user and approved by the Institutional Animal Care and Use Committee.

Those responsible for the use of this technique must ensure that personnel performing cervical dislocation techniques have been properly trained and consistently apply it humanely and effectively.

Decapitation

Decapitation can be used to euthanatize rodents and small rabbits in research settings. It provides a means to recover tissues and body fluids that are chemically uncontaminated. It also provides a means of obtaining anatomically undamaged brain tissue for study.[131]

Although it has been demonstrated that electrical activity in the brain persists for 13 to 14 seconds following decapitation,[132] more recent studies and reports indicate that this activity does not infer the ability to perceive pain, and in fact conclude that loss of consciousness develops rapidly.[127-129]

Guillotines that are designed to accomplish decapitation in adult rodents and small rabbits in a uniformly instantaneous manner are commercially available.

Guillotines are not commercially available for neonatal rodents, but sharp blades can be used for this purpose.

Advantages—(1) Decapitation is a technique that appears to induce rapid loss of consciousness.[127-129] (2) It does not chemically contaminate tissues. (3) It is rapidly accomplished.

Disadvantages—(1) Handling and restraint required to perform this technique may be distressful to animals.[83] (2) The interpretation of the presence of electrical activity in the brain following decapitation has created controversy and its importance may still be open to debate.[127-129,132] (3) Personnel performing this technique should recognize the inherent danger of the guillotine and take adequate precautions to prevent personal injury. (4) Decapitation may be aesthetically displeasing to personnel performing or observing the technique.

Recommendations—This technique is conditionally acceptable if performed correctly, and it should be used in research settings when its use is required by the experimental design and approved by the Institutional Animal Care and Use Committee. The equipment used to perform decapitation should be maintained in good working order and serviced on a regular basis to ensure sharpness of blades. The use of plastic cones to restrain animals appears to reduce distress from handling, minimizes the chance of injury to personnel, and improves positioning of the animal in the guillotine. Decapitation of amphibians, fish, and reptiles is addressed elsewhere in this report.

Those responsible for the use of this technique must ensure that personnel who perform decapitation techniques have been properly trained to do so.

Electrocution

Electrocution, using alternating current, has been used as a method of euthanasia for species such as dogs, cattle, sheep, swine, foxes, and mink.[113,133-138] Electrocution induces death by cardiac fibrillation, which causes cerebral hypoxia.[135,137,139] However, animals do not lose consciousness for 10 to 30 seconds or more after onset of cardiac fibrillation. It is imperative that animals be unconscious before being electrocuted. This can be accomplished by any acceptable means, including electrical stunning.[25] Although an effective, 1-step stunning and electrocution method has been described for use in sheep and hogs, euthanasia by electrocution in most species remains a 2-step procedure.[25,63,140]

Advantages—(1) Electrocution is humane if the animal is first rendered unconscious. (2) It does not chemically contaminate tissues. (3) It is economical.

Disadvantages—(1) Electrocution may be hazardous to personnel. (2) When conventional single-animal probes are used, it may not a useful method for mass euthanasia because so much time is required per animal. (3) It is not a useful method for dangerous, intractable animals. (4) It is aesthetically objectionable because of violent extension and stiffening of the limbs, head, and neck. (5) It may not result in death in small animals (< 5 kg) because ventricular fibrillation and circulatory collapse do not always persist after cessation of current flow.

Recommendations—Euthanasia by electrocution requires special skills and equipment that will ensure passage of sufficient current through the brain to induce loss of consciousness and cardiac fibrillation in the 1-step method for sheep and hogs, or cardiac fibrillation in the unconscious animal when the 2-step procedure is used. Although the method is conditionally acceptable if the aforementioned requirements are met, its disadvantages far outweigh its advantages in most applications. Techniques that apply electric current from head to tail, head to foot, or head to moistened metal plates on which the animal is standing are unacceptable.

Microwave irradiation

Heating by microwave irradiation is used primarily by neurobiologists to fix brain metabolites *in vivo* while maintaining the anatomic integrity of the brain.[141] Microwave instruments have been specifically designed for use in euthanasia of laboratory mice and rats. The instruments differ in design from kitchen units and may vary in maximal power output from 1.3 to 10 kw. All units direct their microwave energy to the head of the animal. The power required to rapidly halt brain enzyme activity depends on the efficiency of the unit, the ability to tune the resonant cavity and the size of the rodent head.[142] There is considerable variation among instruments in the time required for loss of consciousness and euthanasia. A 10 kw, 2,450 MHz instrument operated at a power of 9 kw will increase the brain temperature of 18 to 28 g mice to 79 C in 330 ms, and the brain temperature of 250 to 420 g rats to 94 C in 800 ms.[143]

Advantages—(1) Loss of consciousness is achieved in less than 100 ms, and death in less than 1 second. (2) This is the most effective method to fix brain tissue *in vivo* for subsequent assay of enzymatically labile chemicals.

Disadvantages—(1) Instruments are expensive. (2) Only animals the size of mice and rats can be euthanatized with commercial instruments that are currently available.

Recommendations—Microwave irradiation is a humane method for euthanatizing small laboratory rodents if instruments that induce rapid loss of consciousness are used. Only instruments that are designed for this use and have appropriate power and microwave distribution can be used. Microwave ovens designed for domestic and institutional kitchens are absolutely unacceptable for euthanasia.

Thoracic (cardiopulmonary, cardiac) compression

Thoracic (cardiopulmonary, cardiac) compression is used to euthanatize small- to medium-sized free-ranging birds when alternate techniques described in this report are not practical.[144]

Advantages—(1) This technique is rapid. (2) It is apparently painless. (3) It maximizes carcass use for analytical/contaminant studies.

Disadvantages—(1) It may be considered aesthetically unpleasant by onlookers. (2) The degree of distress is unknown.

Recommendations—Thoracic (cardiopulmonary, cardiac) compression is a physical technique for avian euthanasia that has applicability in the field when other methods cannot be used. It is accomplished by bringing the thumb and forefinger of one hand under the bird's wing from the posterior and placing them against the ribs.[144] The forefinger of the other hand is placed against the ventral edge of the sternum, just below the furculum. All fingers are brought together forcefully and held under pressure to stop the heart and lungs. Loss of consciousness and death develop quickly. Proper training is needed in the use of this technique to avoid trauma to the bird. Cardiopulmonary compression is not appropriate for laboratory settings, for large or diving birds,[144] or for other species.

Kill traps

Mechanical kill traps are used for the collection and killing of small, free-ranging mammals for commercial purposes (fur, skin, or meat), scientific purposes, to stop property damage, and to protect human safety. Their use remains controversial, and the panel recognizes that kill traps do not always render a rapid or stress-free death consistent with criteria for euthanasia found elsewhere in this document. For this reason, use of live traps followed by other methods of euthanasia is preferred. There are a few situations when that is not possible or when it may actually be more stressful to the animals or dangerous to humans to use live traps. Although newer technologies are improving kill trap performance in achieving loss of consciousness quickly, individual testing is recommended to be sure the trap is working properly.[145] If kill traps must be used, the most humane available must be chosen,[146-148] as evaluated by use of International Organization for Standardization (ISO) testing procedures,[149] or by the methods of Gilbert,[150] Proulx et al,[151,152] or Hiltz and Roy.[153]

To reach the required level of efficiency, traps may need to be modified from manufacturers production standards. In addition, as specified in scientific studies, trap placement (ground versus tree sets), bait type, set location, selectivity apparatus, body placement modifying devices (eg, sidewings, cones), trigger sensitivity, and trigger type, size, and conformation are essential considerations that could affect a kill trap's ability to reach these standards.

Several kill traps, modifications, and set specifics have been scientifically evaluated and found to meet the aforereferenced standards for various species.[151,152,154-167]

Advantage—Free-ranging small mammals may be killed with minimal distress associated with handling and human contact.

Disadvantages—(1) Traps may not afford death within acceptable time periods. (2) Selectivity and efficiency is dependent on the skill and proficiency of the operator.

Recommendations—Kill traps do not always meet the panel's criteria for euthanasia. At the same time, it is recognized that they can be practical and effective for scientific animal collection when used in a manner that ensures selectivity, a swift kill, no damage to body parts needed for field research, and minimal potential for injury of nontarget species.[168,169] Traps need to be checked at least once daily. In those instances when an animal is wounded or captured but not dead, the animal must be killed quickly and humanely. Kill traps should be used only when other acceptable techniques are impossible or have failed. Traps for nocturnal species should not be activated during the day to avoid capture of diurnal species.[168] Trap manufacturers should strive to meet their responsibility of minimizing pain and suffering in target species.

Adjunctive methods

Stunning and pithing, when properly done, induce loss of consciousness but do not ensure death. Therefore, these methods must be used only in conjunction with other procedures,[123] such as pharmacologic agents, exsanguination, or decapitation to euthanatize the animal.

Exsanguination

Exsanguination can be used to ensure death subsequent to stunning, or in otherwise unconscious animals. Because anxiety is associated with extreme hypovolemia, exsanguination must not be used as a sole means of euthanasia.[170] Animals may be exsanguinated to obtain blood products, but only when they are sedated, stunned, or anesthetized.[171]

Stunning

Animals may be stunned by a blow to the head, by use of a nonpenetrating captive bolt, or by use of electric current. Stunning must be followed immediately by a method that ensures death. With stunning, evaluating loss of consciousness is difficult, but it is usually associated with a loss of the menace or blink response, pupillary dilatation, and a loss of coordinated movements. Specific changes in the electroencephalogram and a loss of visually evoked responses are also thought to indicate loss of consciousness.[60,172]

Blow to the head—Stunning by a blow to the head is used primarily in small laboratory animals with thin craniums.[9,173-175] A single sharp blow must be delivered to the central skull bones with sufficient force to produce immediate depression of the central nervous system. When properly done, consciousness is lost rapidly.

Nonpenetrating captive bolt—A nonpenetrating captive bolt may be used to induce loss of consciousness in ruminants, horses, and swine. Signs of effective stunning by captive bolt are immediate collapse and a several second period of tetanic spasm, followed by slow hind limb movements of increasing frequency.[60,176]

Other aspects regarding use of the nonpenetrating captive bolt are similar to the use of a penetrating captive bolt, as previously described.

Electrical stunning—Alternating electrical current has been used for stunning species such as dogs, cattle, sheep, goats, hogs, fish and chickens.[133,134,140,177,178] Experiments with dogs have identified a need to direct the electrical current through the brain to induce rapid loss of consciousness. In dogs, when electricity passes only between fore- and hind limbs or neck and feet, it causes the heart to fibrillate but does not induce sudden loss of consciousness.[139] For electrical stunning of any animal, an apparatus that applies electrodes to opposite sides of the head, or in another way directs electrical current immediately through the brain, is necessary to induce rapid loss of consciousness. Attachment of electrodes and animal restraint can pose problems with this form of stunning. Signs of effective electrical stunning are extension of the limbs, opisthotonos, downward rotation of the eyeballs, and tonic spasm changing to clonic spasm, with eventual muscle flaccidity.

Electrical stunning should be followed promptly by electrically induced cardiac fibrillation, exsanguination, or other appropriate methods to ensure death. Refer to the section on electrocution for additional information.

PITHING

In general, pithing is used as an adjunctive procedure to ensure death in an animal that has been rendered unconscious by other means. For some species, such as frogs, with anatomic features that facilitate easy access to the central nervous system, pithing may be used as a sole means of euthanasia, but an anesthetic overdose is a more suitable method.

SPECIAL CONSIDERATIONS

Equine euthanasia

Pentobarbital or a pentobarbital combination is the best choice for equine euthanasia. Because a large volume of solution must be injected, use of an intravenous catheter placed in the jugular vein will facilitate the procedure. To facilitate catheterization of an excitable or fractious animal, a tranquilizer such as acepromazine, or an alpha-2 adrenergic agonist can be administered, but these drugs may prolong time to loss of consciousness because of their effect on circulation and may result in varying degrees of muscular activity and agonal gasping. Opioid agonists or agonist/antagonists in conjunction with alpha-2 adrenergic agonists may further facilitate restraint.

In certain emergency circumstances, such as euthanasia of a horse with a serious injury at a racetrack, it may be difficult to restrain a dangerous horse or other large animal for intravenous injection. The animal might cause injury to itself or to bystanders before a sedative could take effect. In such cases, the animal can be given a neuromuscular blocking agent such as succinylcholine, but the animal must be euthanatized with an appropriate technique as soon as the animal can be controlled. Succinylcholine alone or without sufficient anesthetic must not be used for euthanasia.

Physical methods, including gunshot, are considered conditionally acceptable techniques for equine euthanasia. The penetrating captive bolt is acceptable with appropriate restraint.

Animals intended for human or animal food

In euthanasia of animals intended for human or animal food, chemical agents that result in tissue residues cannot be used, unless they are approved by the US Food and Drug Administration.[179] Carbon dioxide is the only chemical currently used for euthanasia of food animals (primarily swine) that does not result in tissue residues. Physical techniques are commonly used for this reason. Carcasses of animals euthanatized by barbituric acid derivatives or other chemical agents may contain potentially harmful residues. These carcasses should be disposed of in a manner that will prevent them from being consumed by human beings or animals.

Selection of a proper euthanasia technique for free-ranging wildlife must take into account the possibility of consumption of the carcass of the euthanatized animal by nontarget predatory or scavenger species. Numerous cases of toxicosis and death attributable to ingestion of pharmaceutically contaminated carcasses in predators and scavengers have been reported.[107] Proper carcass disposal must be a part of any euthanasia procedure under free-range conditions where there is potential for consumption toxicity. When carcasses are to be left in the field, a gunshot to the head, penetrating captive bolt, or injectable agents that are nontoxic (potassium chloride in combination with a nontoxic general anesthetic) should be used so that the potential for scavenger or predator toxicity is lessened.

Euthanasia of nonconventional species: zoo, wild, aquatic, and ectothermic animals

Compared with objective information on companion, farm, and laboratory animals, euthanasia of species such as zoo, wild, aquatic, and ectothermic animals has been studied less, and guidelines are more limited. Irrespective of the unique or unusual features of some species, whenever it becomes necessary to euthanatize an animal, death must be induced as painlessly and quickly as possible.

When selecting a means of euthanasia for these species, factors and criteria in addition to those previously discussed must be considered. The means selected will depend on the species, size, safety aspects, location of the animals to be euthanatized, and experience of personnel. Whether the animal to be euthanatized is in the wild, in captivity, or free-roaming are major considerations. Anatomic differences must be considered. For example, amphibians, fish, reptiles, and marine mammals differ anatomically from domestic species. Veins may be difficult to locate. Some species have a carapace or other defensive anatomic adaptations (eg, quills, scales, spines). For physical methods, access to the central nervous system may be difficult because the brain may be small and difficult to locate by inexperienced persons.

Zoo Animals

For captive zoo mammals and birds with related domestic counterparts, many of the means described previously are appropriate. However, to minimize injury to persons or animals, additional precautions such as handling and physical or chemical restraint are important considerations.[16]

Wildlife

For wild and feral animals, many recommended means of euthanasia for captive animals are not feasible. The panel recognizes there are situations involving free-ranging wildlife when euthanasia is not possible from the animal or human safety standpoint, and killing may be necessary. Conditions found in the field, although more challenging than those that are controlled, do not in any way reduce or minimize the ethical obligation of the responsible individual to reduce pain and distress to the greatest extent possible during the taking of an animal's life. Because euthanasia of wildlife is often performed by lay personnel in remote settings, guidelines are needed to assist veterinarians, wildlife biologists, and wildlife health professionals in developing humane protocols for euthanasia of wildlife.

In the case of free-ranging wildlife, personnel may not be trained in the proper use of remote anesthesia, proper delivery equipment may not be available, personnel may be working alone in remote areas where accidental exposure to potent anesthetic medications used in wildlife capture would present a risk to human safety, or approaching the animal within a practical darting distance may not be possible. In these cases, the only practical means of animal collection may be gunshot and kill trapping.[13,180-184] Under these conditions, specific methods chosen must be as age-, species-, or taxonomic/class-specific as possible. The firearm and ammunition should be appropriate for the species and purpose. Personnel should be sufficiently skilled to be accurate, and they should be experienced in the proper and safe use of firearms, complying with laws and regulations governing their possession and use.

Behavioral responses of wildlife or captive nontraditional species (zoo) in close human contact are very different from those of domestic animals. These animals are usually frightened and distressed. Thus, minimizing the amount, degree, and/or cognition of human contact during procedures that require handling is of utmost importance. Handling these animals often requires general anesthesia, which provides loss of consciousness and which relieves distress, anxiety, apprehension, and perception of pain. Even though the animal is under general anesthesia, minimizing auditory, visual, and tactile stimulation will help ensure the most stress-free euthanasia possible. With use of general anesthesia, there are more methods for euthanasia available.

A 2-stage euthanasia process involving general anesthesia, tranquilization, or use of analgesics, followed by intravenous injectable pharmaceuticals, although preferred, is often not practical. Injectable anesthetics are not always legally or readily available to those working in nuisance animal control, and the distress to the animal induced by live capture, transport to a veterinary facility, and confinement in a veterinary hospital prior to euthanasia must be considered in choosing the most humane technique for the situation at hand. Veterinarians providing support to those working with injured or live-trapped, free-ranging animals should take capture, transport, handling distress, and possible carcass consumption into consideration when asked to assist with euthanasia. Alternatives to 2-stage euthanasia using anesthesia include a squeeze cage with intraperitoneal injection of sodium pentobarbital, inhalant agents (CO_2 chamber, CO chamber), and gunshot. In cases where preeuthanasia anesthetics are not available, intraperitoneal injections of sodium pentobarbital, although slower in producing loss of consciousness, should be considered preferable over intravenous injection, if restraint will cause increased distress to the animal or danger to the operator.

Wildlife species may be encountered under a variety of situations. Euthanasia of the same species under different conditions may require different techniques. Even in a controlled setting, an extremely fractious large animal may threaten the safety of the practitioner, bystanders, and itself. When safety is in question and the fractious large animal, whether wild, feral, or domestic, is in close confinement, neuromuscular blocking agents may be used immediately prior to the use of an acceptable form of euthanasia. For this technique to be humane, the operator must ensure they will gain control over the animal and perform euthanasia before distress develops. Succinylcholine is not acceptable as a method of restraint for use in free-ranging wildlife because animals may not be retrieved rapidly enough to prevent neuromuscular blocking agent-induced respiratory distress or arrest.[185]

Diseased, Injured, or Live-Captured Wildlife or Feral Species

Euthanasia of diseased, injured, or live-trapped wildlife should be performed by qualified professionals. Certain cases of wildlife injury (eg, acute, severe trauma from automobiles) may require immediate action, and pain and suffering in the animal may be best relieved most rapidly by physical methods including gunshot or penetrating captive bolt followed by exsanguination.

Birds

Many techniques discussed previously in this report are suitable for euthanasia of captive birds accustomed to human contact. Free-ranging birds may be collected by a number of methods, including nets and live traps, with subsequent euthanasia. For collection by firearm, shotguns are recommended. The bird should be killed outright by use of ammunition loads appropriate for the species to be collected. Wounded birds should be killed quickly by appropriate techniques previously described. Large birds should be anesthetized prior to euthanasia, using general anesthetics.

Amphibians, Fish, and Reptiles

Euthanasia of ectothermic animals must take into account differences in their metabolism, respiration, and tolerance to cerebral hypoxia. In addition, it is often more difficult to ascertain when an animal is dead. Some unique aspects of euthanasia of amphibians, fishes, and reptiles have been described.[13,51,186,187]

Injectable agents—Sodium pentobarbital (60 to 100 mg/kg of body weight) can be administered intravenously, intraabdominally, or intrapleuroperitoneally in most ectothermic animals, depending on anatomic features. Subcutaneous lymph spaces may also be used in frogs and toads. Time to effect may be variable, with death occurring in up to 30 minutes.[1,187,188] Barbiturates other than pentobarbital can cause pain on injection.[189]

Clove oil—Because adequate and appropriate clinical trials have not been performed on fish to evaluate its effects, use of clove oil is not acceptable.

External or topical agents—Tricaine methane sulfonate (TMS, MS-222) may be administered by various routes to euthanatize. For fish and amphibians, this chemical may be placed in water.[190-193] Large fish may be removed from the water, a gill cover lifted, and a concentrated solution from a syringe flushed over the gills. MS 222 is acidic and in concentrations ≥ 500 mg/L should be buffered with sodium bicarbonate to saturation resulting in a solution pH of 7.0 to 7.5.[105] MS 222 may also be injected into lymph spaces and pleuroperitoneal cavities.[194] These are effective but expensive means of euthanasia.

Benzocaine hydrochloride, a compound similar to TMS, may be used as a bath or in a recirculation system for euthanasia of fish[184] or amphibians.[13] Benzocaine is not water soluble and therefore is prepared as a stock solution (100 g/L), using acetone or ethanol, which may be irritating to fish tissues. In contrast, benzocaine hydrochloride is water soluble and can be used directly for anesthesia or euthanasia.[105] A concentration ≥ 250 mg/L can be used for euthanasia. Fish should be left in the solution for at least 10 minutes following cessation of opercular movement.[104]

The anesthetic agent 2-phenoxyethanol is used at concentrations of 0.5 to 0.6 ml/L or 0.3 to 0.4 mg/L for euthanasia of fish. Death is caused by respiratory collapse. As with other agents, fish should be left in solution for 10 minutes following cessation of opercular movement.[195,196]

Inhalant agents—Many reptiles and amphibians, including chelonians, are capable of holding their breath and converting to anaerobic metabolism, and can survive long periods of anoxia (up to 27 hours for some species).[197-202] Because of this ability to tolerate anoxia, induction of anesthesia and time to loss of consciousness may be greatly prolonged when inhalants are used. Death in these species may not occur even after prolonged inhalant exposure.[203] Lizards, snakes, and fish do not hold their breath to the same extent and can be euthanatized by use of inhalant agents.

Carbon dioxide—Amphibians,[1] reptiles,[1] and fish[203-205] may be euthanatized with CO_2. Loss of consciousness develops rapidly, but exposure times required for euthanasia are prolonged. This technique is more effective in active species and those with less tendency to hold their breath.

Physical methods—Line drawings of the head of various amphibians and reptiles, with recommended locations for captive bolt or firearm penetration, are available.[13] Crocodilians and other large reptiles can also be shot through the brain.[51]

Decapitation with heavy shears or a guillotine is effective for some species that have appropriate anatomic features. It has been assumed that stopping blood supply to the brain by decapitation causes rapid loss of consciousness. Because the central nervous system of reptiles, fish, and amphibians is tolerant to hypoxic and hypotensive conditions,[13] decapitation must be followed by pithing.[188]

Two-stage euthanasia procedures—Propofol and ultrashort-acting barbiturates may be used for these species to produce rapid general anesthesia prior to final administration of euthanasia.

In zoos and clinical settings, neuromuscular blocking agents are considered acceptable for restraint of reptiles if given immediately prior to administration of a euthanatizing agent.

Most amphibians, fishes, and reptiles can be euthanatized by cranial concussion (stunning) followed by decapitation, pithing, or some other physical method.

Severing the spinal cord behind the head by pithing is an effective method of killing some ectotherms. Death may not be immediate unless both the brain and spinal cord are pithed. For these animals, pithing of the spinal cord should be followed by decapitation and pithing of the brain or by another appropriate procedure. Pithing requires dexterity and skill and should only be done by trained personnel. The pithing site in frogs is the foramen magnum, and it is identified by a slight midline skin depression posterior to the eyes with the neck flexed.[187]

Cooling—It has been suggested that, when using physical methods of euthanasia in ectothermic species, cooling to 4 C will decrease metabolism and facilitate handling, but there is no evidence that whole body cooling reduces pain or is clinically efficacious.[206] Local cooling in frogs does reduce nociception, and this may be partly opioid mediated.[207] Immobilization of reptiles by cooling is considered inappropriate and inhumane even if combined with other physical or chemical methods of euthanasia. Snakes and turtles, immobilized by cooling, have been killed by subsequent freezing. This method is not recommended.[13] Formation of ice crystals on the skin and in tissues of an animal may cause pain or distress. Quick freezing of deeply anesthetized animals is acceptable.[208]

Marine Mammals

Barbiturates or potent opioids (eg, etorphine hydrochloride [M 99] and carfentanil) are the agents of choice for euthanasia of marine mammals,[209] although it is recognized their use is not always possible and can

be potentially dangerous to personnel. An accurately placed gunshot may also be a conditionally acceptable method of euthanasia for some species and sizes of stranded marine mammals.[51,209,210]

For stranded whales or other large cetaceans or pinnipeds, succinylcholine chloride in conjunction with potassium chloride, administered intravenously or intraperitoneally, has been used.[211] This method, which is not an acceptable method of euthanasia as defined in this report, leads to complete paralysis of the respiratory musculature and eventual death attributable to hypoxemia.[209] This method may be more humane than allowing the stranded animal to suffocate over a period of hours or days if no other options are available.

Euthanasia of animals raised for fur production

Animals raised for fur are usually euthanatized individually at the location where they are raised. Although any handling of these species constitutes a stress, it is possible to minimize this by euthanatizing animals in or near their cages. For the procedures described below, please refer to previous sections for more detailed discussion.

Carbon monoxide—For smaller species, CO appears to be an adequate method for euthanasia. Compressed CO is delivered from a tank into an enclosed cage that can be moved adjacent to holding cages. Using the apparatus outside reduces the risk to humans; however, people using this method should still be made aware of the dangers of CO. Animals introduced into a chamber containing 4% CO lost consciousness in 64 ± 14 seconds and were dead within 215 ± 45 seconds.[80] In a study involving electroencephalography of mink being euthanatized with 3.5% CO, the mink were comatose in 21 ± 7 seconds.[212] Only 1 animal should be introduced into the chamber at a time, and death should be confirmed in each case.

Carbon dioxide—Administration of CO_2 is also a good euthanasia method for smaller species and is less dangerous than CO for personnel operating the system. When exposed to 100% CO_2, mink lost consciousness in 19 ± 4 seconds and were dead within 153 ± 10 seconds. When 70% CO_2 was used with 30% O_2, mink were unconscious in 28 seconds, but they were not dead after a 15-minute exposure.[80] Therefore, if animals are first stunned by 70% CO_2, they should be killed by exposure to 100% CO_2 or by some other means. As with carbon monoxide, only one animal should be introduced into the chamber at a time.

Barbiturates—Barbiturate overdose is an acceptable procedure for euthanasia of many species of animals raised for fur. The drug is injected intraperitoneally and the animal slowly loses consciousness. It is important that the death of each animal be confirmed following barbiturate injection. Barbiturates will contaminate the carcass; therefore the skinned carcass cannot be used for animal food.

Electrocution—Electrocution has been used for killing foxes and mink.[135] The electric current must pass through the brain to induce loss of consciousness before electricity is passed through the rest of the body. Electrical stunning should be followed by euthanasia, using some other technique. Cervical dislocation has been used in mink and other small animals and should be done within 20 seconds of electrical stunning.[213] Use of a nose-to-tail or nose-to-foot method[135] alone may kill the animal by inducing cardiac fibrillation, but the animal may be conscious for a period of time before death. Therefore, these techniques are unacceptable.

Prenatal and neonatal euthanasia

When ovarian hysterectomies are performed, euthanasia of feti should be accomplished as soon as possible after removal from the dam. Neonatal animals are relatively resistant to hypoxia.[44,214]

Mass euthanasia

Under unusual conditions, such as disease eradication and natural disasters, euthanasia options may be limited. In these situations, the most appropriate technique that minimizes human and animal health concerns must be used. These options include, but are not limited to, CO_2 and physical methods such as gunshot, penetrating captive bolt, and cervical dislocation.

POSTFACE

This report summarizes contemporary scientific knowledge on euthanasia in animals and calls attention to the lack of scientific reports assessing pain, discomfort, and distress in animals being euthanatized. Many reports on various methods of euthanasia are either anecdotal, testimonial narratives, or unsubstantiated opinions and are, therefore, not cited in this report. The panel strongly endorses the need for well-designed experiments to more fully determine the extent to which each procedure meets the criteria used for judging methods of euthanasia.

Each means of euthanasia has advantages and disadvantages. It is unlikely that, for each situation, any means will meet all desirable criteria. It is also impractical for this report to address every potential circumstance in which animals are to be euthanatized. Therefore, the use of professional judgment is imperative.

Failure to list or recommend a means of euthanasia in this report does not categorically condemn its use. There may occasionally be special circumstances or situations in which other means may be acceptable. For research animals, these exceptions should be carefully considered by the attending veterinarian and the Institutional Animal Care and Use Committee. In other settings, professional judgment should be used.

The panel discourages the use of unapproved products for euthanasia, unless the product has a clearly understood mechanism of action and pharmacokinetics, and studies published in the literature that scientifically verify and justify its use. Those responsible for euthanasia decisions have a critically important responsibility to carefully assess any new technique, method, or device, using the panel's criteria. In the absence of definitive proof or reasonable expectation, the best interest of the animal should guide the decision process.

References cited in this report do not represent a comprehensive bibliography on all methods of euthanasia. Persons interested in additional information on a particular aspect of animal euthanasia are encouraged to contact the Animal Welfare Information Center, National Agricultural Library, 10301 Baltimore Blvd, Beltsville, MD 20705.

The Panel on Euthanasia is fully committed to the concept that, whenever it becomes necessary to kill any animal for any reason whatsoever, death should be induced as painlessly and quickly as possible. It has been our charge to develop workable guidelines for veterinarians needing to address this problem, and it is our sincere desire that these guidelines be used conscientiously by all animal care providers. We consider this report to be a work in progress with new editions warranted as results of more scientific studies are published.

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Appendix 1

Agents and methods of euthanasia by species (refer to Appendix 4 for unacceptable agents and methods.)

Species	Acceptable* (refer to Appendix 2 and text for details)	Conditionally acceptable† (refer to Appendix 3 and text for details)
Amphibians	Barbiturates, inhalant anesthetics (in appropriate species), CO_2, CO, tricaine methane sulfonate (TMS, MS 222), benzocaine hydrochloride, double pithing	Penetrating captive bolt, gunshot, stunning and decapitation, decapitation and pithing
Birds	Barbiturates, inhalant anesthetics, CO_2, CO, gunshot (free-ranging only)	N_2, Ar, cervical dislocation, decapitation, thoracic compression (small, free-ranging only)
Cats	Barbiturates, inhalant anesthetics, CO_2, CO, potassium chloride in conjunction with general anesthesia	N_2, Ar
Dogs	Barbiturates, inhalant anesthetics, CO_2, CO, potassium chloride in conjunction with general anesthesia	N_2, Ar, penetrating captive bolt, electrocution
Fish	Barbiturates, inhalant anesthetics, CO_2, tricaine methane sulfonate (TMS, MS 222), benzocaine hydrochloride, 2-phenoxyethanol	Decapitation and pithing, stunning and decapitation/pithing
Horses	Barbiturates, potassium chloride in conjunction with general anesthesia, penetrating captive bolt	Chloral hydrate (IV, after sedation), gunshot, electrocution
Marine mammals	Barbiturates, etorphine hydrochloride	Gunshot (cetaceans < 4 meters long)
Mink, fox, and other mammals produced for fur	Barbiturates, inhalant anesthetics, CO_2 (mink require high concentrations for euthanasia without supplemental agents), CO, potassium chloride in conjunction with general anesthesia	N_2, Ar, electrocution followed by cervical dislocation
Nonhuman primates	Barbiturates	Inhalant anesthetics, CO_2, CO, N_2, Ar
Rabbits	Barbiturates, inhalant anesthetics, CO_2, CO, potassium chloride in conjunction with general anesthesia	N_2, Ar, cervical dislocation (< 1 kg), decapitation, penetrating captive bolt
Reptiles	Barbiturates, inhalant anesthetics (in appropriate species), CO_2 (in appropriate species)	Penetrating captive bolt, gunshot, decapitation and pithing, stunning and decapitation
Rodents and other small mammals	Barbiturates, inhalant anesthetics, CO_2, CO, potassium chloride in conjunction with general anesthesia, microwave irradiation	Methoxyflurane, ether, N_2, Ar, cervical dislocation (rats < 200 g), decapitation
Ruminants	Barbiturates, potassium chloride in conjunction with general anesthesia, penetrating captive bolt	Chloral hydrate (IV, after sedation), gunshot, electrocution
Swine	Barbiturates, CO_2, potassium chloride in conjunction with general anesthesia, penetrating captive bolt	Inhalant anesthetics, CO, chloral hydrate (IV, after sedation), gunshot, electrocution, blow to the head (< 3 weeks of age)
Zoo animals	Barbiturates, inhalant anesthetics, CO_2, CO, potassium chloride in conjunction with general anesthesia	N_2, Ar, penetrating captive bolt, gunshot
Free-ranging wildlife	Barbiturates IV or IP, inhalant anesthetics, potassium chloride in conjunction with general anesthesia	CO_2, CO, N_2, Ar, penetrating captive bolt, gunshot, kill traps (scientifically tested)

*Acceptable methods are those that consistently produce a humane death when used as the sole means of euthanasia. †Conditionally acceptable methods are those that by the nature of the technique or because of greater potential for operator error or safety hazards might not consistently produce humane death or are methods not well documented in the scientific literature.

Continued on next page.

Appendix 2

Acceptable agents and methods of euthanasia—characteristics and modes of action (refer to text for details)

Agent	Classification	Mode of action	Rapidity	Ease of performance	Safety for personnel	Species suitability	Efficacy and comments
Barbiturates	Hypoxia attributable to depression of vital centers	Direct depression of cerebral cortex, subcortical structures, and vital centers; direct depression of heart muscle	Rapid onset of anesthesia	Animal must be restrained; personnel must be skilled to perform IV injection	Safe except human abuse potential; DEA-controlled substance	Most species	Highly effective when appropriately administered; acceptable IP in small animals and IV
Benzocaine hydrochloride	Hypoxia attributable to depression of vital centers	Depression of CNS	Very rapid, depending on dose	Easily used	Safe	Fish, amphibians	Effective but expensive
Carbon dioxide (bottled gas only)	Hypoxia attributable to depression of vital centers	Direct depression of cerebral cortex, subcortical structures, and vital centers; direct depression of heart muscle	Moderately rapid	Used in closed container	Minimal hazard	Small laboratory animals, birds, cats, small dogs, rabbits, mink (high concentrations required), zoo animals, amphibians, fish, some reptiles, swine	Effective, but time required may be prolonged in immature and neonatal animals
Carbon monoxide (bottled gas only)	Hypoxia	Combines with hemoglobin, preventing its combination with oxygen	Moderate onset time, but insidious so animal is unaware of onset	Requires appropriately maintained equipment	Extremely hazardous, toxic, and difficult to detect	Most small species including dogs, cats, rodents, mink, chinchillas, birds, reptiles, amphibians, zoo animals, rabbits	Effective; acceptable only when equipment is properly designed and operated
Inhalant anesthetics	Hypoxia attributable to depression of vital centers	Direct depression of cerebral cortex, subcortical structures, and vital centers	Moderately rapid onset of anesthesia, excitation may develop during induction	Easily performed with closed container; can be administered to large animals by means of a mask	Must be properly scavenged or vented to minimize exposure to personnel	Some amphibians, birds, cats, dogs, furbearing animals, rabbits, some reptiles, rodents and other small mammals, zoo animals, fish, free-ranging wildlife	Highly effective provided that subject is sufficiently exposed; either is conditionally acceptable
Microwave irradiation	Brain enzyme inactivation	Direct inactivation of brain enzymes by rapid heating of brain	Very rapid	Requires training and highly specialized equipment	Safe	Mice, rats	Highly effective for special needs
Penetrating captive bolt	Physical damage to brain	Direct concussion of brain tissue	Rapid	Requires skill, adequate restraint, and proper placement of captive bolt	Safe	Horses, ruminants, swine	Instant loss of consciousness, but motor activity may continue
2-Phenoxyethanol	Hypoxia attributable to depression of vital centers	Depression of CNS	Very rapid, depending on dose	Easily used	Safe	Fish	Effective but expensive
Potassium chloride (intracardially or intravenously in conjunction with general anesthesia only)	Hypoxia	Direct depression of cerebral cortex, subcortical structures, and vital centers secondary to cardiac arrest.	Rapid	Requires training and specialized equipment for remote injection anesthesia, and ability to give IV injection of potassium chloride	Anesthetics may be hazardous with accidental human exposure	Most species	Highly effective, some clonic muscle spasms may be observed
Tricaine methane sulfonate (TMS, MS 222)	Hypoxia attributable to depression of vital centers	Depression of CNS	Very rapid, depending on dose	Easily used	Safe	Fish, amphibians	Effective but expensive

Appendix 4

Some unacceptable agents and methods of euthanasia (refer to text for details)

Agent or method	Comments
Air embolism	Air embolism may be accompanied by convulsions, opisthotonos, and vocalization. If used, it should be done only in anesthetized animals.
Blow to the head	Unacceptable for most species.
Burning	Chemical or thermal burning of an animal is not an acceptable method of euthanasia.
Chloral hydrate	Unacceptable in dogs, cats, and small mammals.
Chloroform	Chloroform is a known hepatotoxin and suspected carcinogen and, therefore, is extremely hazardous to personnel.
Cyanide	Cyanide poses an extreme danger to personnel and the manner of death is aesthetically objectionable.
Decompression	Decompression is unacceptable for euthanasia because of numerous disadvantages. (1) Many chambers are designed to produce decompression at a rate 15 to 60 times faster than that recommended as optimum for animals, resulting in pain and distress attributable to expanding gases trapped in body cavities. (2) Immature animals are tolerant of hypoxia, and longer periods of decompression are required before respiration ceases. (3) Accidental recompression, with recovery of injured animals, can occur. (4) Bleeding, vomiting, convulsions, urination, and defecation, which are aesthetically unpleasant, may develop in unconscious animals.
Drowning	Drowning is not a means of euthanasia and is inhumane.
Exsanguination	Because of the anxiety associated with extreme hypovolemia, exsanguination should be done only in sedated, stunned, or anesthetized animals.
Formalin	Direct immersion of an animal into formalin, as a means of euthanasia, is inhumane.
Household products and solvents	Acetone, quaternary compounds (including CCl_4), laxatives, clove oil, dimethylketone, quaternary ammonium products*, antacids, and other commercial and household products or solvents are not acceptable agents for euthanasia.
Hypothermia	Hypothermia is not an appropriate method of euthanasia.
Neuromuscular blocking agents (nicotine, magnesium sulafte, potassiumchloride, all curariform agents)	When used alone, these drugs all cause respiratory arrest before loss of consciousness, so the animal may perceive pain and distress after it is immobilized.
Rapid freezing	Rapid freezing as a sole means of euthanasia is not considered to be humane. If used, animals should be anesthetized prior to freezing.
Strychnine	Strychnine causes violent convulsions and painful muscle contractions.
Stunning	Stunning may render an animal unconscious, but it is not a method of euthanasia (except for neonatal animals with thin craniums). If used, it must be immediately followed by a method that ensures death.
Tricaine methane sulfonate (TMS, MS 222)	Should not be used for euthanasia of animals intended as food.

*Roccal D Plus, Pharmacia & Upjohn, Kalamazoo, Mich.

Appendix 3

Conditionally acceptable agents and methods of euthanasia—characteristics and modes of action (refer to text for details)

Agent	Classification	Mode of action	Rapidity	Ease of performance	Safety	Species suitability	Efficacy and comments
Blow to the head	Physical damage to brain	Direct concussion of brain tissue	Rapid	Requires skill, adequate restraint, and appropriate force	Safe	Young pigs < 3 weeks old	Must be properly applied to be humane and effective
Carbon dioxide (bottled gas only)	Hypoxia due to depression of vital centers	Direct depression of cerebral cortex, subcortical structures and vital centers; direct depression of heart muscle	Moderately rapid	Used in closed container	Minimal hazard	Nonhuman primates, free-ranging wildlife	Effective, but time required may be prolonged in immature and neonatal animals
Carbon monoxide (bottled gas only)	Hypoxia	Combines with hemoglobin, preventing its combination with oxygen	Moderate onset time, but insidious so animal is unaware of onset	Requires appropriately maintained equipment	Extremely hazardous, toxic, and difficult to detect	Nonhuman primates, free-ranging wildlife	Effective; acceptable only when equipment is properly designed and operated
Cervical dislocation	Hypoxia due to disruption of vital centers	Direct depression of brain	Moderately rapid	Requires training and skill	Safe	Poultry, birds, laboratory mice, rats (< 200 g), rabbits (< 1 kg)	Irreversible; violent muscle contractions can occur after cervical dislocation
Chloral hydrate	Hypoxia from depression of respiratory center	Direct depression of brain	Rapid	Personnel must be skilled to perform IV injection	Safe	Horses, ruminants, swine	Animals should be sedated prior to administration
Decapitation	Hypoxia due to disruption of vital centers	Direct depression of brain	Rapid	Requires training and skill	Guillotine poses potential employee injury hazard	Laboratory rodents; small rabbits; birds; some fish, amphibians, and reptiles (latter 3 with pithing)	Irreversible; violent muscle contraction can occur after decapitation
Electrocution	Hypoxia	Direct depression of brain and cardiac fibrillation	Can be rapid	Not easily performed in all instances	Hazardous to personnel	Used primarily in sheep, swine, foxes, mink (with cervical dislocation), ruminants, animals > 5 kg	Violent muscle contractions occur at same time as loss of consciousness
Gunshot	Hypoxia due to disruption of vital centers	Direct concussion of brain tissue	Rapid	Requires skill and appropriate firearm	May be dangerous	Large domestic and zoo animals, reptiles, amphibians, wildlife, cetaceans (< 4 meters long)	Instant loss of consciousness, but motor activity may continue
Inhalant anesthetics	Hypoxia due to depression of vital centers	Direct depression of cerebral cortex, subcortical structures, and vital centers	Moderately rapid onset of anesthesia; excitation may develop during induction	Easily performed with closed container; can be administered to large animals by means of a mask	Must be properly scavenged or vented to minimize exposure to personnel; ether has explosive potential and exposure to ether may be stressful	Nonhuman primates, swine; ether is conditionally acceptable for rodents and small mamals; methoxyflurane is conditionally acceptable for rodents and small mammals.	Highly effective provided that subject is sufficiently exposed
Nitrogen, argon	Hypoxia	Reduces partial pressure of oxygen available to blood	Rapid	Used in closed chamber with rapid filling	Safe if used with ventilation	Cats, small dogs, birds, rodents, rabbits, other small species, mink, zoo animals, nonhuman primates, free-ranging wildlife	Effective except in young and neonates; an effective agent, but other methods are preferable
Penetrating captive bolt	Physical damage to brain	Direct concussion of brain tissue	Rapid	Requires skill, adequate restraint and proper placement of captive bolt	Safe	Dogs, rabbits, zoo animals, reptiles, amphibians, free-ranging wildlife	Instant loss of consciousness but motor activity may continue
Pithing	Hypoxia due to disrution of vital centers, physical damage to brain	Trauma of brain and spinal cord tissue	Rapid	Easily performed but requires skill	Safe	Some ectotherms	Effective, but death not immediate unless brain and spinal cord are pithed
Thoracic compresion	Hypoxia and cardiac arrest	Physical interference with cardiac and respiratory function	Moderately rapid	Requires training	Safe	Small- to medium-sized free-ranging birds	Apparently effective

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Part II

Department of Agriculture

Animal and Plant Health Inspection Service

9 CFR Parts 70 and 88

Commercial Transportation of Equines to Slaughter; Final Rule

63588 Federal Register / Vol. 66, No. 236 / Friday, December 7, 2001 / Rules and Regulations

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

9 CFR Parts 70 and 88

[Docket No. 98–074–2]

RIN 0579–AB06

Commercial Transportation of Equines to Slaughter

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Final rule.

SUMMARY: We are establishing regulations pertaining to the commercial transportation of equines to slaughtering facilities. These regulations fulfill our responsibility under the 1996 Farm Bill to regulate the commercial transportation of equines for slaughter by persons regularly engaged in that activity within the United States. The purpose of the regulations is to establish minimum standards to ensure the humane movement of equines to slaughtering facilities via commercial transportation. As directed by Congress, the regulations cover, among other things, the food, water, and rest provided to such equines. The regulations also require the owner/shipper of the equines to take certain actions in loading and transporting the equines and require that the owner/shipper of the equines certify that the commercial transportation meets certain requirements. In addition, the regulations prohibit the commercial transportation to slaughtering facilities of equines considered to be unfit for travel, the use of electric prods on equines in commercial transportation to slaughter, and, after 5 years, the use of double-deck trailers for commercial transportation of equines to slaughtering facilities.

EFFECTIVE DATE: February 5, 2002.

FOR FURTHER INFORMATION CONTACT: Dr. Timothy Cordes, Senior Staff Veterinarian, National Animal Health Programs, VS, APHIS, 4700 River Road Unit 43, Riverdale, MD 20737–1231; (301) 734–3279.

SUPPLEMENTARY INFORMATION:

Background

We are establishing regulations pertaining to the commercial transportation of equines to slaughtering facilities. We are taking this action to fulfill a responsibility given by Congress to the Secretary of Agriculture in the Federal Agriculture Improvement and Reform Act of 1996 (commonly referred to as "the 1996 Farm Bill"). Congress added language to the 1996 Farm Bill concerning the commercial transportation of equines to slaughtering facilities after having determined that equines being transported to slaughter have unique and special needs.

Sections 901–905 of the 1996 Farm Bill (7 U.S.C. 1901 note, referred to below as "the statute") authorize the Secretary of Agriculture, subject to the availability of appropriations, to issue guidelines for the regulation of the commercial transportation of equines for slaughter by persons regularly engaged in that activity within the United States. The Secretary is authorized to regulate the food, water, and rest provided to such equines in transit, to require the segregation of stallions from other equines during transit, and to review other related issues the Secretary considers appropriate. The Secretary is further authorized to require any person to maintain such records and reports as the Secretary considers necessary. The Secretary is also authorized to conduct such investigations and inspections as the Secretary considers necessary and to establish and enforce appropriate and effective civil penalties. In a final rule published in the **Federal Register** on December 30, 1996 (61 FR 68541–68542, Docket No. 96–058–1), the authority to carry out the statute was delegated from the Secretary of Agriculture to the Assistant Secretary for Marketing and Regulatory Programs (now the Under Secretary for Marketing and Regulatory Programs), and from that official to the Administrator of the Animal and Plant Health Inspection Service (APHIS), and from the APHIS Administrator to the Deputy Administrator for Veterinary Services.

To clarify its intentions, Congress set forth definitions in the statute. For purposes of interpreting the statute, "commercial transportation" is defined as "the regular operation for profit of a transport business that uses trucks, tractors, trailers, or semitrailers, or any combination thereof, propelled or drawn by mechanical power on any highway or public road." "Equine for slaughter" means "any member of the *Equidae* family being transferred to a slaughter facility, including an assembly point, feedlot, or stockyard." "Person" means "any individual, partnership, corporation, or cooperative association that regularly engages in the commercial transportation of equine for slaughter" but does not include any individual or other entity who "occasionally transports equine for slaughter incidental to the principal activity of the individual or other entity in production agriculture."

Congress further clarified its intentions with regard to the statute through a conference report. The conference report states that the object of any prospective regulation would be the individuals and companies that regularly engage in the commercial transport of equines to slaughter and not the individuals or others who periodically transport equines to slaughter outside of their regular activity. The conference report also states that the Secretary has not been given the authority to regulate the routine or regular transportation of equines to other than a slaughtering facility or to regulate the transportation of any other livestock, including poultry, to any destination. In addition, the conference report states that, to the extent possible, the Secretary is to employ performance-based standards rather than engineering-based standards when establishing regulations to carry out the statute and that the Secretary is not to inhibit the commercially viable transport of equines to slaughtering facilities.

On May 19, 1999, we published in the **Federal Register** (64 FR 27210–27221, Docket No. 98–074–1) a proposal to establish regulations pertaining to the commercial transportation of equines to slaughtering facilities in a new part of title 9 of the Code of Federal Regulations (CFR). The new regulations would be found at 9 CFR part 88. We proposed to divide part 88 into six sections: § 88.1—Definitions, § 88.2—General information, § 88.3—Standards for conveyances, § 88.4–Requirements for transport, § 88.5—Requirements at a slaughtering facility, and § 88.6—Violations and penalties. The proposed regulations pertained only to the actual transport of a shipment of equines from the point of being loaded on the conveyance to arrival at the slaughtering facility.

We solicited comments concerning our proposal for 60 days ending July 19, 1999. During the comment period, we received 276 comments. They were from animal humane associations, academia, slaughter plants, horse industry organizations, veterinary practitioners, a State government and a foreign government, the U.S. Congress, livestock industry organizations, livestock transporters, an organization representing veterinarians, and private citizens, among others.

The commenters expressed a variety of concerns that are discussed below by topic. Many commenters referred to "horses" rather than "equines"; for consistency with the rule portion of this document, we will use the term

"equines," as appropriate, in discussing those comments.

Summary of Changes Made in Response to Comments

We are making the following changes in response to the comments we received.

1. *Definitions.* We have removed the separate definitions of *owner* and *shipper* and applied the definition of *shipper* to *owner/shipper.* As a result, all references to "owner" and "shipper" have been changed to "owner/shipper."

2. *General information.* Proposed § 88.2(b) provided that, to determine whether an individual or other entity transporting equines to a slaughtering facility is subject to the regulations, a USDA representative may request "from any individual or other entity" information regarding the business of the individual or other entity who transported the equines. We have amended that language in this final rule to clarify that a USDA representative may request that information "from the individual or other entity who transported the equines." Also, proposed § 88.2(b) stated that, when such information is requested, the individual or other entity who transported the equines "will" provide the information within 30 days and in the format specified by the USDA representative. We have amended this provision to clarify that the individual or other entity "must" provide the information within 30 days and in the format specified.

3. *Requirements for transport.* Proposed § 88.4(a)(1) specified that, for a period of not less than 6 hours prior to the equines being loaded onto the conveyance, the owner or shipper must provide each equine appropriate food, potable water, and the opportunity to rest. This final rule clarifies that the 6 hours must be *immediately* prior to the equines being loaded. Proposed § 88.4(a)(3) listed information that must be included on the owner-shipper certificate for each equine being transported. This final rule adds the following information to that list: (1) The owner/shipper's telephone number; (2) the receiver's (destination) name, address, and telephone number; (3) if applicable, the name of the auction/market where the equine is loaded; (4) the breed of the equine; and (5) a description of any tattoos on the equine. This final rule also requires at § 88.4(a)(3) that information provided on the owner-shipper certificate be typed or legibly completed in ink. Proposed § 88.4(a)(3) required the owner-shipper certificate to contain a statement of the equine's fitness to travel. This final rule clarifies that we mean fitness to travel at the time of loading. Proposed § 88.4(a)(3) required a statement on the owner-shipper certificate about any unusual physical conditions and any special handling needs. We have reworded this provision to clarify that we mean any unusual physical conditions that may cause the equine to have special handling needs. Proposed § 88.4(b)(2) stated that "veterinary assistance must be provided as soon as possible for any equines in obvious physical distress." This final rule adds that veterinary assistance must be provided by an equine veterinarian. In addition, § 88.4(b)(2) of this final rule adds that if an equine becomes nonambulatory en route, an owner/shipper must have the equine euthanized by an equine veterinarian. Further, § 88.4(b)(2) of this final rule specifies that, if an equine dies en route, the owner/shipper must contact the nearest APHIS office as soon as possible to allow an APHIS veterinarian to examine the equine, and if an APHIS veterinarian is not available, the owner/shipper must contact an equine veterinarian. Proposed § 88.4(e) required the shipper to secure the services of a veterinary professional to treat an equine, including performing euthanasia, if deemed necessary by the USDA representative. This final rule will require the veterinary professional to be an equine veterinarian.

4. *Requirements at a slaughtering facility.* Proposed § 88.5(b) stated that the shipper who transported the equines to the slaughtering facility must not leave the premises of the slaughtering facility until the equines have been examined by a USDA representative. Under this final rule, if an owner/shipper arrives at a slaughtering facility outside of the facility's normal business hours, the owner/shipper may leave the premises but must return to the premises of the slaughtering facility to meet the USDA representative upon his or her arrival.

Section 88.1—Definitions

Shipper and Owner

A number of commenters expressed concerns about the proposed definitions of *shipper* and *owner.*

We proposed to define *shipper* as "Any individual, partnership, corporation, or cooperative association that engages in the commercial transportation of equines to slaughtering facilities more often than once a year, except any individual or other entity that transports equines to slaughtering facilities incidental to the principal activity of production agriculture." We proposed to define *owner* as "Any individual, partnership, corporation, or cooperative association that purchases equines for the purpose of sale to a slaughtering facility." We stated that both owners and shippers would be subject to the regulations.

One commenter stated that exempting only those who ship equines once a year is too limiting and suggested allowing three shipments per year, which the commenter believed would allow the occasional transport of equines to slaughtering facilities by equine owners. One commenter stated that the definition of *shipper* should reflect both the frequency and number of equines transported. One commenter stated that an entity should have to adhere to the regulations if he or she transported more than 24 equines to slaughter per year.

Based on these comments and our experience with the equine industry, we have decided to apply the regulations to any individual, partnership, corporation, or cooperative association that engages in the commercial transportation of more than 20 equines per year to slaughtering facilities, except any individual or other entity who transports equines to slaughtering facilities incidental to his or her principal activity of production agriculture. We believe that those entities who transport more than 20 equines per year to slaughtering facilities, except those entities who transport equines to slaughtering facilities incidental to their principal activity of production agriculture, should be considered as regularly engaged in the commercial transportation of equines to slaughter.

Many commenters stated that replacing the term "person" in the statute with the terms "owner" and "shipper" exempts from the regulations horse owners who do not fit the definition of *owner*; and horse transporters who do not fit the definition of *shipper* and distorts Congress' intent. These commenters stated that Congress included in the definition of "person" any individual or entity that regularly engages in the transportation of equines for slaughter, exempting only those who occasionally transport equines to slaughter incidental to the principal activity of the same individual or other entity in production agriculture; however, the proposed definition of *owner* includes only an individual or entity that purchases equines for the purpose of sale to a slaughtering facility.

We agree that the definition of *owner* may be confusing and could be interpreted to mean that certain entities that did not purchase equines for the

purpose of sale to a slaughtering facility could be excluded from the requirements. Therefore, in this rule, we have removed the definition of *owner*. Instead, we will use the term *owner/shipper*, which we have defined as "Any individual, partnership, corporation, or cooperative association that engages in the commercial transportation of more than 20 equines per year to slaughtering facilities, except any individual or other entity who transports equines to slaughtering facilities incidental to his or her principal activity of production agriculture." We believe that the definition of *owner/shipper* meets the intent of the definition of *person* in the statute.

Many commenters objected that our proposed definitions for *shipper* and *owner* narrowed the scope of the statute and would provide more exemptions from the regulations than intended by Congress. The issue that was mentioned most frequently was that our proposal would exclude persons in the premarin mare urine (PMU) industry. They said these persons would not be "shippers" because their principal activity would be considered production agriculture. Others stated that the premarin farmer would not be an "owner" because the farmer did not purchase the foals or any other equines for the purpose of sale to a slaughtering facility. For the purposes of these regulations, we consider "production agriculture" to mean food or fiber production. The principal activity of the PMU industry is the collection of urine from pregnant mares for use by the pharmaceutical industry, which is not production agriculture. Therefore, individuals or other entities in the PMU industry who transport equines to slaughter incidental to this business would be covered by our regulations unless they ship 20 or fewer equines per year. To clarify that we consider production agriculture to mean food or fiber production, the definition of *owner/shipper* in this final rule specifies that production agriculture means production of food or fiber.

In addition, we believe that the new definition of *owner/shipper*, as previously explained, provides clarification as to the entities that must comply with the regulations.

Some commenters appeared to believe that the term "production agriculture" includes professional horse breeders, those who sell riding or work horses, and persons who have riding stables or board horses. They expressed concern that these individuals or other entities would be exempt from the regulations if they transported unwanted foals or other equines to slaughter. Some commenters assumed that trucking companies would be exempt from the regulations if they moved equines to slaughter for a farmer whose principal activity was production agriculture. As explained above, we consider production agriculture to mean food or fiber production. None of the entities listed above are engaged in food or fiber production. Therefore, they would not be exempt from the regulations unless they ship 20 or fewer equines per year.

Some commenters objected to our exempting entities who transport equines to slaughtering facilities incidental to their principal activity of production agriculture. One commenter suggested that the definition of *shipper* exempt only those who transport fewer than 10 equines per year, and another commenter stated that we should exempt those who transport 50 or fewer equines per year instead of providing an exemption for those entities involved in production agriculture. One commenter objected that the proposed definition of *shipper* would allow a farmer or other entity that engages in production agriculture to ship any number of equines a year to slaughtering facilities without complying with the regulations. Another commenter stated that there is no legitimate reason for persons or entities who derive income from production agriculture to be excluded from the regulations, and that anyone who engages in commercial transportation should have to comply with the regulations.

As stated previously, this final rule uses the term *owner/shipper* and exempts only those entities who transport 20 or fewer equines to slaughtering facilities per year and entities who transport equines to slaughtering facilities incidental to their principal activity of production agriculture (food or fiber production). As noted earlier, Congress clarified its intentions concerning who should be covered by the regulations in its conference report. The conference report states, among other things, that the object of any prospective regulation would be the individuals and companies that regularly engage in the commercial transport of equines to slaughter and not the individuals or others who periodically transport equines for slaughter outside of their regular activity. In the definition of *person* in the statute, Congress specifically exempted any individual or entity that occasionally transports equines for slaughter incidental to the principal activity of the individual or other entity in production agriculture.

One commenter stated that the definitions of *owner* and *shipper* should be amended to exclude slaughtering facilities. We disagree. If a slaughtering facility possesses equines that will be transported to a slaughtering facility, including its own, from its own feedlot or other premises and the facility transports more than 20 equines a year, that slaughtering facility is an owner/shipper and must comply with the regulations.

Slaughtering Facility

We proposed to define *slaughtering facility* as "A commercial establishment that slaughters equines for any purpose."

Many commenters objected that the definition of *slaughtering facility* excludes facilities that were specifically intended by Congress to be covered by the regulations (i.e., assembly points, feedlots, and stockyards). Several commenters stated that auctions and sales should be added to the definition of *slaughtering facility*. One commenter stated that tracing a stolen equine would be easier if all locations intended by Congress were regulated by APHIS.

The statute gives the Secretary authority to regulate the commercial transportation of equines to slaughtering facilities, which the statute indicates include assembly points, feedlots, or stockyards. The Secretary may use his or her discretion within this authority. At this time, we are defining slaughtering facility to mean only those establishments where equines are slaughtered because (1) we believe that equines moved to these facilities are most at risk of being transported under inhumane conditions, and (2) USDA representatives are available at these facilities to help enforce the regulations. Equines moved to assembly points and stockyards are more likely to be taken better care of because the purpose of the movement is for sale. Also, equines may not be moved from these points to slaughter. Equines sent to feedlots are going there for the express purpose of gaining weight. Plus, we have no way currently to monitor movements from all points to these intermediate destinations.

Regarding lost or stolen equines, we believe that the use of the owner-shipper certificate will help ensure that there is documented identification for each equine that is transported to a slaughtering facility. To improve its usefulness for tracebacks, the owner-shipper certificate will provide for the identification of any auction/market where an equine is loaded. In addition, we plan to develop a database of the information provided on the owner-shipper certificates.

One commenter stated that the definition of *slaughtering facility* should exclude assembly points, feedlots, and stockyards to which the equines are transported for feeding or holding if the time at such a location is intended to exceed 14 days.

The definition of slaughtering facility in this rule excludes assembly points, feedlots, and stockyards regardless of the amount of time an equine spends there. However, equines moved *from* an assembly point, feedlot, or stockyard to a slaughtering facility must be transported in accordance with the regulations.

Commercial Transportation

We defined *commercial transportation* as "The movement for profit via conveyance on any highway or public road."

One commenter stated that the definition of *commercial transportation* should exempt transport by conveyances that are owned or leased by slaughtering facilities that deliver equines to their own slaughtering facilities.

As stated previously, if a slaughtering facility transports equines to a slaughtering facility, including its own, the equines must be transported in accordance with the regulations.

Euthanasia

We proposed to define *euthanasia* as "The humane destruction of an animal by the use of an anesthetic agent or other means that causes painless loss of consciousness and subsequent death."

One commenter stated that we should provide a list of acceptable anesthetic agents, such as pentobarbital, choral hydrate, pentobarbital combinations, and gunshot, and require them to be administered by a trained person. This commenter added that succinylcholine curariform drugs or other paralytic agents, cyanide, strychnine, ether, and carbon monoxide should be prohibited.

We do not believe that listing anesthetic agents (pharmaceuticals that provide a loss of sensation with or without loss of consciousness) or requiring them to be administered by a trained person is necessary. As explained later in this document, § 88.4(b)(2) of this final rule requires veterinary assistance to be provided by an equine veterinarian. In addition, as explained later in this document, § 88.4(b)(2) of this final rule provides that, if an equine becomes nonambulatory en route, the equine must be euthanized by an equine veterinarian. Also, § 88.4(e) of this final rule provides that, if deemed necessary at any time during transportation to a slaughtering facility, a USDA representative may direct an owner/shipper to take actions to alleviate the suffering of an equine and this could include obtaining the services of an equine veterinarian to treat an equine, including performing euthanasia if necessary. An equine veterinarian will be aware of and will use appropriate and humane anesthetic agents for equines.

As mentioned in the proposed rule, we will allocate funds for public information efforts and are developing educational materials about the humane transport of equines.[1] These materials will include a list of equine veterinarians within the United States and their telephone numbers.

Section 88.2 General information

Federal Preemption

Proposed § 88.2(a) stated that State governments may enact and enforce regulations that are consistent with or that are more stringent than the regulations.

Many commenters expressed concerns that the regulations could preempt State laws that may be more stringent. Some pointed out that in the preamble, under the heading "Executive Order 12988," we stated that the regulations would preempt all State and local laws and regulations that are in conflict with the rule. Many commenters stated that the Federal regulations should not preempt State regulations unless compliance with the State regulations would make compliance with the Federal regulations impossible. In particular, many commenters expressed concern that the regulations would preempt existing State bans on transporting equines in double-deck trailers.

States may promulgate and enforce similar or even more stringent regulations to ensure the humane transport of equines to slaughtering facilities. State or local laws that are more stringent than the regulations will not necessarily conflict with the regulations. For example, the regulations would not preempt existing States' bans on transporting equines in double-deck trailers because double-deck trailers are not required by our regulations. The drivers of conveyances will be responsible for complying with any State laws that prohibit the use in a State of double-deck trailers for the transportation of equines to slaughter. State and local laws and regulations would be "in conflict" with the regulations established by this rule only if they made compliance with this rule impossible, just as some commenters suggested.

Collection of Information

Proposed § 88.2(b) stated that a USDA representative may request of any individual or other entity information regarding the business of the individual or other entity that transported the equines to determine whether that individual or other entity is subject to the regulations. The proposal further stated that the individual or other entity will provide the information within 30 days and in a format as specified by the USDA representative.

Several commenters stated that we should say "must" request information regarding the business of the individual or other entity that transported the equines and that we should state that the individual or other entity "must provide" in place of "will provide."

We believe that "may" is more appropriate in the first instance because the USDA representative may not need to request information at all times to make a determination of whether an individual or other entity that is transporting the equines to a slaughtering facility is subject to the regulations. However, as to using "must provide," we agree with the commenters and have amended the rule accordingly.

One commenter stated that we should clarify in § 88.2(b) that a USDA representative may request information from the entity that actually transported the load of equines.

We agree. We have amended § 88.2(b) to read as follows: "To determine whether an individual or other entity found to transport equines to a slaughtering facility is subject to the regulations in this part, a USDA representative may request from that individual or other entity information regarding the business of that individual or other entity. When such information is requested, the individual or other entity who transported the equines must provide the information within 30 days and in a format as may be specified by the USDA representative."

Section 88.3 Standards for Conveyances

Cargo Space

Proposed § 88.3(a)(1) stated that the animal cargo space of conveyances used for the commercial transportation of equines to slaughtering facilities must be designed, constructed, and maintained in a manner that at all times protects the health and well-being of the equines being transported (e.g., provides

[1] To obtain information about these educational materials, contact the person listed under **FOR FURTHER INFORMATION CONTACT.**

adequate ventilation, contains no sharp protrusions, etc.).

Many commenters stated that we should explain adequate ventilation, and some of these commenters stated that adequate ventilation cannot be provided in certain conveyances. Several commenters stated that the requirements should address protection from the elements and extremes of weather. One commenter suggested that trailers be modified to use air scoops to control air flow and stated that trailers that cannot be appropriately modified for operation in extreme weather conditions should not be used when adverse conditions are likely to exist. This commenter stated that a rating system could be used to rate trailers for their suitability for summer or winter conditions and could encourage transporters to invest in better-designed trailers.

As stated previously, the regulations are performance-based standards. If a conveyance does not provide adequate ventilation or other measures to protect the health and well-being of the equines in transit, it must not be used.

The educational materials we are developing about humane transport of equines will include information on ventilation and transport under various weather conditions.

Several commenters stated that our proposal did not address proper flooring in conveyances. Many commenters stated that the rule should require flooring within a conveyance to be of such material (rubber, neoprene, etc.) as to afford the animal secure footing at all times under all conditions. One commenter stated that welding ⅜-inch rods at 12-inch intervals to the deck could prevent slipping. Many commenters stated that ramps should also have nonslip (nonmetal, nonskid) flooring. Several commenters stated that wood shavings, sawdust, or sand could be used to provide secure footing.

There are many ways of providing secure footing and otherwise protecting the health and well-being of equines in transit. We do not believe it is necessary to specify how this must be done. Many of the shippers or owners who transport equines safely and correctly already use flooring that provides equines with secure footing. In addition, the regulations will require the use of an owner-shipper certificate that must describe any preexisting injury the equine has at loading. If an equine arrives at a slaughter facility with an injury that was not identified on the certificate, such as an injury from a fall due to insecure footing, the owner/shipper may be found in violation of the regulations and could be fined in accordance with § 88.6. Also, the educational program previously mentioned in this document will provide owners, shippers, and other stakeholders in the equine slaughtering industry with information regarding the safe transport of equines, including information on flooring.

One commenter objected that our proposal did not require conveyances to be cleaned of manure and urine. This commenter also stated that § 88.3(a)(1) should prohibit use of ropes, wires, or chains in animal cargo space because an equine could become entangled in or injured by them. This commenter further added that a conveyance that transports equines should not have openings in the walls or sides of the vehicle lower than 2 feet from the floor of the conveyance.

Under § 88.3(a)(1), the conveyance used for the commercial transportation of equines to slaughtering facilities must be maintained in a manner that at all times protects the health and well-being of the equines being transported. Maintenance of the conveyance would include the removal of manure and urine, when appropriate. Similarly, owners/shippers must ensure that the cargo space is free of any articles that may injure the equines. If a conveyance has openings in the walls or sides that cause harm to the equines, the conveyance must either be altered or not used for the transport of equines to slaughter. We do not believe that a comprehensive list of all articles or configurations that could injure an equine is necessary or appropriate.

Segregation of Aggressive Equines

Proposed § 88.3(a)(2) stated that the animal cargo space of conveyances used for the commercial transportation of equines to slaughtering facilities must include means of completely segregating each stallion and each aggressive equine on the conveyance so that no stallion or aggressive equine can come into contact with any of the other equines on the conveyance.

Many commenters stated that partitions or individual stalls should be required to segregate stallions and other aggressive equines, and one of these commenters stated that the partitions should be at least 6 feet high. Several commenters stated that partitions should be required for "high strung" equines. Several commenters stated that equines should be transported in trailers with separate individual compartments or haltered, and several commenters stated that equines could be tied to prevent injuries due to fighting if not partitioned. One commenter stated that tying equines will prevent rearing. One commenter stated that stallions can be muzzled and tied.

Under § 88.4(a)(4)(ii), stallions and aggressive equines are required to be completely segregated from other equines during transit. We do not believe that it is necessary to require owner/shippers to separate equines into individual compartments. However, because this is a performance-based standard, an owner/shipper could use a partition to separate aggressive equines from other equines. As to tying equines, we agree that tying an equine, in some cases, could prevent it from rearing; however, the equines could still kick. Also, haltering and tying an equine could pose a danger to the equine if it attempted to rear and lost its balance and fell. The equine could be stepped on by other equines or injure itself. As to the comment regarding muzzling the equines, we assume that this commenter recommended muzzling and tying stallions instead of segregating them. Tying up or muzzling an equine is not practical for all equines going to slaughter because some are not halter-broken. We believe the owner/shipper should have some discretion in determining how to achieve segregation of stallions and aggressive equines.

Interior Height

Proposed § 88.3(a)(3) stated that the animal cargo space of conveyances used for the commercial transportation of equines to slaughtering facilities must have sufficient interior height to allow each equine on the conveyance to stand with its head extended to the fullest normal postural height.

Several commenters stated that the performance specifications were too vague and could be subject to interpretation. One commenter suggested that § 88.3(a)(3) state, "Have sufficient height to allow each equine on the conveyance to stand in a normal relaxed posture with its feet on the floor, without its head or any part of its body contacting the ceiling of the conveyance. There must be sufficient clearance to prevent injury or abrasions to the withers and the top of the rump. Horses which arrive at their destination with reddened abrasions or fresh injuries on the withers or the top of the rump would be in violation." One commenter suggested "* * * extended up to the highest normal postural height so that its withers and top of its rump will not come into contact with the ceiling, but in any case the ceiling must be no less than 7 feet from the floor." Many commenters stated that the hauling area of vehicles used to transport equines should be a minimum of 7 feet high from the highest point

used by the animals for footing, to the lowest point in the ceiling, not having a strut or brace, and no less than 6 feet 6 inches from the highest point used by the animals for footing to the lowest point having a strut or brace. Some commenters provided ranges of 6 feet 6 inches to 7 feet for the minimum heights in the hauling area of conveyances, and several commenters stated that the height should be adequate for equines to stand upright and provide for safe loading and unloading. Many commenters stated that the intent of the statute was to require a conveyance to have a ceiling height of no less than 6 feet 6 inches. One commenter stated that § 88.4(a)(3) should state that, if equines arrive at their destination with injuries indicative of transport, the owner/shipper could be found in violation of the regulations.

We believe that the performance-based standards in this rule fulfill the intent of Congress under the statute to help ensure the humane movement of equines in commercial transit to slaughtering facilities. We have left the owner/shipper with the responsibility of ensuring that the design, construction, and maintenance of the conveyance used are adequate to ensure that the conveyance can safely and humanely transport equines. If an equine arrives at its destination with an injury, and the injury was caused by a violation of the regulations, the owner/shipper may be assessed civil penalties of up to $5,000 per violation for each equine injured. Accountability for injuries that occur during transport due to violations is the reason the owner-shipper certificate requires the documentation of any preexisting injuries that are present prior to loading.

Doors and Ramps

Proposed § 88.3(a)(4) stated that the animal cargo space of conveyances used for the commercial transportation of equines to slaughtering facilities must be equipped with doors and ramps of sufficient size and location to provide for safe loading and unloading.

Many commenters stated that we should provide engineering-based standards for doors and ramps. One commenter stated that ramps should have sides, and another commenter stated that rails should be required. One commenter stated that we could require commercial semi-trailers to travel with their own external ramps. One commenter stated that conveyances should be equipped with doorways and ramps of sufficient height and width and location to provide for safe loading and unloading, including in an emergency. One commenter suggested that conveyances be equipped with ramps and floors which provide nonslip footing and doors of sufficient width and height so that a horse that is walking off the conveyance will not sustain visible external injuries such as abrasions and lacerations. Another commenter stated that we should require ramps, rails, and flooring to be maintained in a good state of repair; fittings to be designed for quick and easy operation and maintained in good working order; ramps and floors to be covered with a nonmetal, nonskid surface; and flooring to be free of rust and rot and designed to allow for appropriate drainage. This commenter further stated that vehicles should be fitted with a ramp not to exceed 25 degrees in slope and be of sufficient width and equipped with solid sides of sufficient strength and height to prevent equines from falling off, and that all portable or adjustable ramps should be equipped with anchoring devices. This commenter also stated that vehicles must be equipped with an additional exit ramp suitable for use in emergencies and that conveyances should be equipped to provide for the safest and least stressful loading and unloading. One commenter stated that equines should be loaded in as quiet a situation as possible and that the area surrounding the ramp should also be nonslip.

We believe the performance-based standards in this rule provide clear guidance on what we mean by humane transport. Owner/shippers will have to ensure the safe loading and offloading of equines because, if equines sustain injuries while loading, in transit, or while offloading, due to violations of the regulations, the owner/shipper may be assessed civil penalties as set forth in § 88.6.

Double-Deck Trailers

Proposed § 88.3(b) stated that equines in commercial transportation to slaughtering facilities must not be transported in any conveyance that has the animal cargo space divided into two or more stacked levels, except that conveyances lacking the capability to convert from two or more stacked levels to one level may be used until a date 5 years from the date of publication of the final rule. The proposal also stated that conveyances with collapsible floors (also known as "floating decks") must be configured to transport equines on one level only.

Many commenters opposed the continued use of double-deck trailers. Many of them stated that the original intent of the statute was to ban the use of double-deck trailers for the transport of equines.

The statute does not prohibit the use of double-deck trailers or any other conveyance; however, it requires the commercial transport of equines to slaughter by humane methods.

Many commenters stated that continued use of double-deck trailers is inconsistent with providing for the safe and humane transport of equines to slaughter. Many commenters stated that our rule is inconsistent with the State of New York's ban on the use of double-deck trailers for the transport of horses. Several commenters stated that APHIS should provide a shorter grace period for the use of double-deck trailers, and some of these commenters suggested grace periods ranging from 30 days to 2 years. One commenter suggested that, rather than allow an across-the-board 5-year "grandfather clause," APHIS should require entities to show that they cannot practicably comply with an immediate ban. This commenter stated that this requirement would require the shipper to demonstrate how soon he or she could switch to a single-deck trailer. Many commenters expressed concern that, with the 5-year exception, a shipper could begin to use a new double-deck trailer or a double-deck trailer previously used to transport nonequine livestock at any time during the 5-year period. Several commenters stated that vehicles designed for horses should be required.

We believe that the grace period of 5 years is fair and reasonable. As stated in the proposal, we arrived at a time period of 5 years after discussions with interested parties, including representatives of the trucking and equine industries, at two meetings hosted by humane organizations. We believe that many of the double-deck trailers currently used to transport equines will need to be replaced in approximately 5 to 7 years.

We acknowledge that some double-deck trailers are likely to cause injuries and trauma to equines; however, we are allowing their continued use for the next 5 years in order to minimize economic losses to those dependent on the use of double-deck trailers. Nevertheless, we will hold owners and shippers responsible for any injuries that occur during transport. If equines are injured during transport to slaughtering facilities, even if that transport is in double-deck trailers still allowed under the regulations, the owner/shipper could be in violation of the regulations for each equine that is injured and be assessed civil penalties as set forth in § 88.6. Furthermore, although our rule may not mirror

regulations that were promulgated by certain States, this rule will not preempt State regulations that have bans on the use of double-deck trailers.

One commenter stated that the regulations are not clear as to whether the 5-year grace period means that no violations can be written for transporting tall equines in a double-deck trailer for 5 years. As stated above, we will hold owners and shippers responsible for any injuries that occur during transport if the injuries are due to violations of the regulations.

One commenter stated that the use of double-deck trailers will lead to a violation of § 88.4 regarding the observation of equines every 6 hours and offloading every 28 hours because shippers will have little incentive to comply with unloading requirements given the intrinsic hazards to handlers and equines.

In the proposal, we stated that equines frequently sustain injuries from being forced up or down the steep inclines of double-deck loading ramps. However, if an owner/shipper continues to use a double-deck trailer, he or she must take proper precautions to protect equines from injury during loading and offloading while using ramps. In addition, the owner/shipper must adhere to the prescribed observation period and offloading times provided in § 88.4(b)(2) and 88.4(b)(3), respectively. The grace period for double-deck trailers is strictly a phase-out period for the use of double-deck trailers and does not provide protection from the regulations for owners or shippers for injuries incurred by equines due to their transport in double-deck trailers. Therefore, if equines are injured during transport to slaughtering facilities, the owner/shipper may be found in violation of the regulations for each equine that is injured and may be assessed civil penalties as set forth in § 88.6 even if the transport was performed using a double-deck trailer.

One commenter stated that the regulations are not clear as to whether double-deck trailers will be banned as of the date of the final rule.

As of the effective date of this rule, conveyances with collapsible floors (also known as "floating decks") must be configured to transport equines on one level only and will not be prohibited. In addition, if a conveyance is converted from two or more stacked levels to one level, the conveyance will not be prohibited. Conveyances that lack the capability to convert from two or more stacked levels to one level may be used until 5 years from the date of publication of this rule.

Many commenters stated that double-deck trailers can jeopardize public safety and, therefore, should not be allowed.

We agree that if drivers operate double-deck trailers in an unsafe manner, the trailers can pose a danger to humans, just as any vehicle that is operated in an unsafe manner. In § 88.4, paragraph (b) states that during transit to the slaughtering facility, the owner/shipper must drive in a manner to avoid causing injury to the equines. This is a performance-based standard that is meant to protect the equines from injury caused by poor driving habits and should help ensure that double-deck trailers are driven in a safe manner. Our educational program regarding the humane transport of equines will include safe driving procedures.

Several commenters stated double-deck trailers should not be prohibited after 5 years if they can be altered to accommodate equines or converted to single level.

Double-deck trailers do not provide adequate headroom for equines, with the possible exception of foals and yearlings. We do not believe that trailers that have two or more permanent levels that are not collapsible can be adequately altered to accommodate adult equines, especially tall equines. A tall equine can be 8 feet tall to the top of its head when standing on all four legs and close to 12 feet tall when rearing. As stated in the proposal, the overpasses on most U.S. interstate highways are between 14- and 16-feet high. We are not prohibiting, either immediately or after 5 years, the use of double-deck trailers that can be converted to a single level.

Several commenters said that if equines are sorted by size, double-deck trailers could continue to be used. Other commenters stated that we should require only that ceilings be of adequate height, which one commenter maintained would prohibit only unusually tall equines from the double-deck portion of the trailers. One commenter stated that § 88.3(b) should require only that conveyances be of sufficient interior height to allow each equine to stand with its head extended to the fullest normal postural height.

Again, we do not believe that double-deck trailers provide sufficient headroom for horses other than foals and yearlings.

Two commenters stated that research has shown that stress levels and physiological factors are improved on double-deck trailers versus single-deck trailers.

Upon completion of the USDA research, we determined that rubber padding used in the single-deck trailers may have caused physiological differences between horses transported in double-deck trailers and horses transported in single-deck trailers. The rubber padding lined the interior walls of the single-deck trailer and limited the ventilation capacity within the conveyance. However, this discovery may support the use of rubber padding to decrease the exposure of equines to extremely low temperatures during their transport in the winter.

Several commenters opposed the prohibition on double-deck trailers because single deck, or "straight-floor," trailers do not hold as many horses. Several commenters stated that they now use the double-deck trailers for horses and other livestock and that going to a single deck, or "straight-floor," trailer would not be economical for them because they hold fewer animals. Thus, our rule would cause them economic hardship. One commenter stated that, since it will still be legal to transport livestock other than equines in double-deck trailers, and to transport equines to destinations other than slaughtering facilities in double-deck trailers, shippers will have no economic incentive to trade in double-deck trailers for single-deck trailers. The commenter maintained that the rule will, therefore, impede the transport of equines to slaughter by reducing the number of vehicles available for this transport and increasing the costs of transporting equines to slaughter.

We acknowledge that double-deck trailers can carry more equines and other livestock than single-deck trailers. We are allowing the continued use of double-deck trailers for the next 5 years in order to minimize economic losses to those dependent on the use of double-deck trailers. We do not believe that equines can be safely and humanely transported on a conveyance that has an animal cargo space divided into two or more stacked levels. As stated in the proposal, double-deck trailers can continue to be used to transport other commodities, including produce and livestock other than equines. Also, owners can sell their serviceable trailers at fair market value to transporters of commodities other than equines.

Section 88.4 Requirements for Transport

Food and Water Prior to Transport

Proposed § 88.4(a)(1) stated that, prior to the commercial transportation of equines to a slaughtering facility, the shipper or owner must, for a period of not less than 6 consecutive hours prior to the equines being loaded on the

conveyance, provide each equine appropriate food (*i.e.*, hay, grass, or other food that would allow an equine in transit to maintain well-being), potable water, and the opportunity to rest.

Several commenters expressed concern that the proposed rule would not require the 6-hour period of feed, water, and rest to occur immediately preceding loading for transport. One commenter suggested saying "not more than 6 consecutive hours prior to the equines being loaded." One commenter suggested inserting the words "for a period of at least 6 consecutive hours immediately. * * *"

It was our intent in § 88.4(a)(1) to require a 6-hour time period immediately preceding the loading of the equines. To make that clearer, we have added the word "immediately" before the word "prior" in the rule portion of this document.

Several commenters stated that the proposed provisions for access to food and water were too vague. One commenter objected to the lack of specific information regarding the quality or quantity of food and water to be provided. Two commenters stated that equines should be grouped appropriately to ensure that all of them have uninhibited access to food and water, and that water should be *ad libitum*, and one other commenter stated that the equines should have unimpeded access. One commenter suggested that we require "free access to potable water *ad libitum*."

The rule requires that each equine be provided appropriate food and potable water. This means that each equine must have access to the food and water. Also, the rule requires "appropriate" food. We do not believe that it is necessary to prescribe the quality or quantity of food that must be provided or to require grouping of animals. We believe that the owner/shipper can determine the quality and quantity of food and water that should be provided to equines and the best methods to ensure that all equines have access to food and water.

One commenter stated that requiring owners or shippers to provide equines with access to feed within 6 hours of transport could be a potential problem due to the possibility of impaction. This commenter stated that there are anecdotal accounts linking impaction to feed and dehydration and that requiring feed may need more study.

We are aware that impaction can occur under certain circumstances; however, impaction has been associated with inadequate intake of water. (Impaction is the blockage of a portion of the digestive system formed by digested material.) However, we believe that allowing equines access to appropriate food and potable water for 6 hours immediately prior to loading is unlikely to result in impaction and is essential to ensure that the equines do not undergo serious physiological distress during transit.

One commenter stated that the minimum rest period prior to loading should be 16 hours with unlimited access to water, good quality hay, and shelter, and another commenter stated that water should be provided within 12 hours of transport.

Based on one of the USDA-commissioned research studies, we found that equines that were provided water for 6 hours immediately before transport did better than those that were provided water for more than 6 hours.

One commenter stated that feedlots practice dry lotting, which means that equines are not fed immediately prior to slaughter, and the regulations are not clear as to whether the practice will be prohibited when the rule is finalized. One commenter stated that providing food and water is not necessary if equines are going directly to processing from the truck.

The regulations at § 88.4(a)(1) require that equines be provided food and water prior to loading for transport to slaughter, and § 88.5 requires that equines be given access to food and water after being unloaded at the slaughtering facility. As a consequence, dry lotting will be prohibited.

One commenter stated that equines purchased at sale barns may have already been deprived of water for quite some time. This commenter stated that the regulations are not clear as to how USDA representatives will verify that each equine has received the required 6-hour access to food and water and whether USDA representatives will examine equines for evidence that they received preloading services upon arrival at the slaughtering facility. One commenter stated that we should not trust the owner-shipper statement that claims an equine was provided access to appropriate food, potable water, and rest prior to loading.

Owners/shippers are responsible for ensuring that equines have access to food, water, and rest for 6 hours immediately prior to loading on a conveyance for transport to a slaughtering facility. In accordance with § 88.4(a)(3), the owner/shipper must certify on the owner-shipper certificate for each equine being transported that the equine had access to food, water, and rest for the 6 hours immediately prior to loading into the conveyance. In addition, in accordance with § 88.5(a)(3), a USDA representative must be given access to the equines upon arrival at the slaughtering facility. If the USDA representative suspects that the equines are suffering from the effects of a lack of food, water, or rest, he or she can question the owner/shipper regarding the care the equines received prior to and during transport. If we determine that an owner/shipper did not comply with any requirement, the owner/shipper may be subject to civil penalties of up to $5,000 per violation per equine as set forth in § 88.6. In addition, if we determine that the owner/shipper falsified the form, the owner/shipper could be subject to a fine of not more than $10,000 or imprisonment for not more than 5 years or both. (The penalty for falsification of the owner-shipper certificate is stated on the owner-shipper certificate (18 U.S.C. 1001).)

USDA Backtag

Proposed § 88.4(a)(2) stated that, prior to the commercial transportation of equines to a slaughtering facility, the shipper or owner must apply a USDA backtag to each equine in the shipment.

One commenter stated that we should remove the requirement for a backtag and require each equine to be marked in a manner that provides a unique identification of the animal.

Backtags provide a unique identification for each animal. They are easy to apply and easy to read. We believe that requiring their use will facilitate identification of equines during loading, unloading, and in spaces where they are congregated. If an equine has a unique identifying mark such as a brand or tattoo, the owner-shipper must record the identifying mark on the owner-shipper certificate along with the USDA backtag number.

One commenter stated that an identification tag should be attached to each equine and that the tag should provide the identification of the owner/shipper and the license plate number of the conveyance.

A USDA backtag will be applied to each equine and the number will be recorded on the owner-shipper certificate for each equine. The owner-shipper certificate will contain the name, address, and telephone number of the owner/shipper. In addition, the vehicle license number or registration number of the conveyance will be recorded on the owner-shipper certificate. Because the USDA backtag provides a unique identification for each animal, the backtag will allow us to determine the identification of the

owner/shipper should that become necessary.

Owner-Shipper Certificate

Proposed § 88.4(a)(3) stated that, prior to the commercial transportation of equines to a slaughtering facility, the shipper or owner must complete and sign an owner-shipper certificate for each equine being transported. The proposal also stated that the owner-shipper certificate for each equine must accompany the equine throughout transit to the slaughtering facility and must include specified information, including, under § 88.4(a)(3)(v) (redesignated as § 88.4(a)(3)(vii) in this final rule), a statement of the equine's fitness to travel (a statement that the equine is able to bear weight on all four limbs, is able to walk unassisted, is not blind in both eyes, is older than 6 months of age, and is not likely to give birth during the trip).

One commenter maintained that an owner-shipper certificate is unnecessary paperwork, because, upon arrival at the slaughtering facility, the USDA representative can check the equines and conveyance and address any problems noted with the owner of the equines.

As explained in our proposal, we have several reasons for requiring the owner-shipper certificate. They make the owner/shipper responsible for ensuring that the equines are fit to travel and have had adequate food, water, and rest prior to transport; provide a way for the USDA representative at slaughtering facilities to determine whether an injury occurred en route; assist in the prosecution of persons found to be in violation of the regulations; and facilitate the traceback of any stolen equines.

Owner-Shipper Certificate; Who Signs

Many commenters expressed concern about an owner or shipper preparing the certificate for movement. In particular, with respect to the statement of fitness for travel, they stated that the owner or shipper may have an economic incentive to certify the equines fit to travel. Many commenters stated that a professional should certify an equine's fitness to travel prior to the transport to ensure the equine is in a reasonable state of health at the beginning of the trip. (Some of these commenters listed people such as a licensed veterinarian, accredited veterinarian, USDA representative, or licensed veterinary technician. One commenter added certified humane officers and brand inspectors.) Many commenters stated that the fitness to travel should be certified by a veterinarian because an owner/shipper could ship a lame equine without identifying the injury on the certificate and state that injury occurred en route if lameness is noted as the equine is unloaded at the slaughtering facility. Several commenters stated that a lack of veterinary certification could mean that the USDA representative at the slaughtering facility would be unable to determine whether the injuries were preexisting or a result of transportation. One commenter stated that without medical or veterinary knowledge or training, there may be mistakes or inaccurate entries on the owner-shipper certificate. One commenter stated that the owner-shipper certificate requires subjective determinations that cannot be made by nonveterinary personnel. Many commenters stated that the original intent of the statute was to ban the shipment of sick and injured horses by having a veterinarian inspect the horses, rather than the owner, who stands to lose money if the horse is not shipped.

We considered requiring a veterinarian to certify each equine's fitness to travel. However, in most cases, because of the lack of a client-patient relationship, the veterinarian would not have liability coverage. We also determined that use of accredited veterinarians would be inappropriate because, as provided in 9 CFR part 161, they perform functions required by cooperative State-Federal disease control and eradication programs. We also decided, however, that a veterinarian was not needed to provide the information we require on the owner-shipper certificate. This information could be provided by any person who makes careful observation of an equine. However, if an owner/shipper wishes to have a veterinarian examine an equine prior to loading the equine for slaughter, the owner/shipper may make those arrangements.

If an equine arrives at a slaughtering facility with an injury that should have prevented the equine from being transported (e.g., if the equine cannot walk unassisted), the owner/shipper may be found in violation of the regulations and could be subject to civil penalties as set forth in § 88.6. In addition, if an equine arrives at a slaughtering facility with an injury that was not identified on the owner-shipper certificate, the USDA representative, who in most cases will be a veterinarian, will make a professional judgment as to the length of time an equine suffered the lameness or the age of a wound and its possible cause. If the USDA representative determines that the injury occurred en route or was present prior to loading the equine on the conveyance, the owner/shipper may be found in violation of the regulations and subject to civil penalties as set forth in § 88.6. Any owner/shipper found to have falsified a certificate could also be subject to a fine of not more than $10,000 or imprisonment for not more than 5 years or both, in accordance with 18 U.S.C. 1001.

A few commenters stated that allowing owners or shippers to complete the owner-shipper certificate is inconsistent with other regulations that require an accredited veterinarian to sign a certificate or that require a health certificate for the interstate movement of equines.

Other Federal regulations regarding the interstate movement of equines, for example, those for equine infectious anemia (9 CFR part 75), are intended to prevent the interstate spread of communicable diseases of equines. This rule does not pertain to a disease control or eradication program, and veterinary medical training is not required to complete the owner-shipper certificate.

One commenter asked if there would be a penalty for the owner or shipper if he or she is mistaken about an equine's fitness to travel. One commenter stated that an owner or shipper should not be found in violation of the regulations if he or she makes a mistake on the owner-shipper certificate or neglects to mark a box, such as the sex of the equine.

If an owner/shipper is unsure about an equine's fitness to travel, he or she should seek the proper guidance from a veterinarian or other qualified individual. If an owner/shipper makes a mistake on the owner-shipper certificate or fails to accurately complete the certificate, APHIS will attempt to determine whether the mistake or failure to accurately complete the certificate was inadvertent or an attempt to circumvent the regulations. We understand that, at times, someone who fills out a certificate may make a minor error, and we do not intend to bring a case against someone solely because he or she made a minor clerical error. However, falsification of the owner-shipper certificate is a criminal offense that may result in a fine of not more than $10,000 or imprisonment for not more than 5 years or both because the owner-shipper certificate is a Federal document.

In the proposal, § 88.4(a)(3)(iii) (redesignated as § 88.4(a)(3)(v) in this final rule) required that the owner-shipper certificate provide a description of the equine's physical characteristics, including such information as sex, coloring, distinguishing markings, permanent brands, and electronic means of identification.

Several commenters stated that, at the point of loading, a USDA representative should inspect the equines to verify the description of the equine on each owner-shipper certificate.

Shippers and owners are responsible for the accuracy of the information on the owner-shipper certificate for each equine being transported. We believe that shippers and owners are capable of providing an accurate description of an equine's physical characteristics. If we find that an owner/shipper has provided false information on an owner-shipper certificate, the owner/shipper may be found in violation of the regulations and be assessed civil penalties for each equine as provided in § 88.6. In addition, if an owner/shipper provides false information, the owner/shipper could be subject to criminal charges that may result in a fine of not more than $10,000 or imprisonment for not more than 5 years or both, under 18 U.S.C. 1001.

Owner-Shipper Certificate; When Signed

One commenter stated that fitness to travel should not be determined more than 48 hours prior to loading.

We agree that if an equine's fitness to travel is assessed too far in advance, there is a chance that an equine that becomes ill or injured would not be noted. The fitness to travel should be determined during the period prior to the loading of equines into the conveyance. Ideally, this determination should be made when equines are provided appropriate food, potable water, and rest in accordance with § 88.4(a)(1). In this final rule, we have reworded the provision concerning an equine's "fitness to travel" to clarify that we mean at the time of loading (see § 88.4(a)(3)(vii)).

Owner-Shipper Certificate; Identification of Owner, Shipper, Consignee, Vehicle

Under proposed § 88.4(a)(3), the shipper's name and address, and, if the shipper is not the owner of the equines, the owner's name and address, and a description of the conveyance, including the license plate number, must be included on the owner-shipper certificate.

One commenter stated that we should require the owner-shipper certificate to state the ultimate destination (city, State, and name of business) as well as any anticipated intermediate stopping points to allow USDA and law enforcement personnel to intercept a conveyance en route to a slaughtering facility. This commenter also suggested that the expected driving route should be filed with a copy of the owner-shipper certificate at the point of sale and departure.

We agree that the destination of each equine should be required on the owner-shipper certificate and our certificate includes fields for that information. We have added a requirement to § 88.4(a)(3) that the owner-shipper certificate provide the name, address (street address, city, and State), and telephone number of the receiver (destination). We do not believe that listing intermediate stopping points on the owner-shipper certificate is necessary, however. There are only a few slaughtering establishments for equines. Most drivers follow a set route to the slaughtering facility to which they transport equines and, as a result, USDA representatives or other law enforcement officials will be able to locate the conveyance.

Several commenters stated that it is unnecessary to require a separate owner-shipper certificate for each equine in a shipment or to require a new owner-shipper certificate for each segment of the trip. They stated that, in the case of equines that are unloaded en route, information about the equines' fitness to travel and other required information could be added to the original certificate if the certificate was designed to accommodate more than one trip segment.

We do not believe that there would be circumstances that an owner/shipper certificate would unload equines except in an emergency or as required in § 88.4(b)(3) for equines that have been on a conveyance for 28 hours. Under these circumstances, we would want the owner/shipper to reassess each equine's fitness to travel prior to reloading onto the conveyance.

We require an owner-shipper certificate for each equine on the conveyance because the certificate provides a description of the equine. These descriptions can help us trace lost or stolen equines.

One commenter stated that the owner-shipper certificate should include the telephone number of the consignor (shipper) and consignee's (receiver/destination) businesses.

We agree. There is a field for this information on the certificate, and we have added that requirement to § 88.4(a)(3).

Owner-Shipper Certificate; Description of the Equine

As noted earlier, proposed § 88.4(a)(3)(ii) required the owner-shipper certificate to include a description of the equine's physical characteristics, including such information as sex, coloring, distinguishing markings, permanent brands, and electronic devices that could be used to identify the equines.

One commenter stated that the owner-shipper certificate should include additional identifying information, including the breed or type of equine, color combinations, and the location and relative size of any markings, brands, tattoos, or scars, as well as the approximate age of the equine. The commenter stated that this information could assist individuals who are tracing missing or stolen animals. One commenter stated that a description of any physical preconditions should be included on the owner-shipper certificate. One commenter stated that we should require tattoos, especially lip tattoos, to be identified on the certificate.

The owner-shipper certificate contains fields for the owner/shipper to indicate the breed and color of the equine. If a specific breed or color is not indicated on the certificate, there is a field marked "Other" that should be completed. Also, on the owner-shipper certificate, the field for identifying marks specifies "brands, tattoos, and scars." In this final rule, § 88.4(a)(3) specifies that the owner-shipper certificate should include the breed of the equine and any tattoos that are present. We believe that most people who are familiar with handling equines will also add any facial or leg markings, as appropriate; however, we have added "facial or leg markings" to the field for "Identifying Marks" on the owner-shipper certificate. The certificate also provides space for recording any preconditions. We are not requiring an age to be indicated because an owner/shipper may have to guess the age of the equine. People use the teeth of an equine to determine its age, but, in most cases, there are many variables such as teeth grinding and diet that can affect the accuracy of the assessment.

Who Determines Fitness To Travel

One commenter stated that studies have shown that the majority of injuries to equines do not occur during transport or marketing but occur at the point of origin, prior to transport, due to either neglect or abuse. Several commenters provided examples of injuries that equines exhibited upon their arrival at a slaughtering facility that were determined to have occurred at the point of origin. These examples included equines that were emaciated, had severe founder, broken legs, deformities, etc. Several commenters provided examples of injuries, such as illness and broken limbs, that equines

exhibited at sales or auctions and that were caused by owners. The commenters stated that the equines were shipped even though they were unfit to travel. One commenter provided examples of people who have a history of transporting injured equines, transporting equines without water, or transporting equines in conveyances that are unsafe. A number of commenters suggested that APHIS should regulate the care of equines prior to loading.

This rule prohibits the commercial transport to slaughter of equines that are not found fit to travel under § 88.4(a)(3)(vii). This rule also requires that the equines be provided food, water, and rest for the 6 hours immediately prior to transport under § 88.4(a)(1). We believe that these regulations will prevent most animals with point-of-origin injuries from being moved to slaughtering facilities via commercial transportation.

Criteria for Fitness To Travel

As noted above, we proposed to require a statement of the equine's fitness to travel on the owner-shipper certificate for each equine. Proposed § 88.4(a)(3)(v) (redesignated as paragraph (a)(3)(vii) in this final rule) stated that equines must be able to bear weight on all four limbs, be able to walk unassisted, have sight in at least one eye, be older than 6 months of age, and not be likely to give birth during the trip.

One commenter suggested that we remove the reference to a "statement of fitness to travel" because that language implies that we are requiring untrained people to make a subjective determination.

We agree that, by itself, that phrase is subjective. However, the criteria for making that determination are objective. The phrase simply states the purpose of the criteria that the owner/shipper must consider prior to loading equines on a conveyance.

Several commenters objected to, or suggested changes to, the criteria. Some stated that the proposed regulations would allow the shipment of blind animals that are unable to defend themselves, board a conveyance, or travel without injury, as well as allow the transport of equines that are extremely ill, diseased, injured, incapacitated, or not physically fit. One commenter stated that equines that exhibit obvious disease, injuries, or similar indications of ill health should not be transported unless they are being removed from a facility for humane destruction due to the disease or injury as determined by a certified veterinarian. One commenter stated that we should prohibit the transport of any equine with a known physical problem likely to cause collapse and that animals that are in immediate and severe distress and determined unfit to travel by an accredited veterinarian should be immediately and humanely euthanized. One commenter stated that, at minimum, the regulations should require that an equine bear weight evenly on all four limbs as determined by a veterinarian.

In § 88.4, paragraph (a)(3)(vii) prohibits the transport of equines that are blind in both eyes. However, equines that are blind in one eye can be transported safely and humanely when correctly loaded and placed on the conveyance. In addition, paragraph (a)(3)(vii) requires that equines be able to bear weight on all four limbs, be able to walk unassisted, be older than 6 months of age, and not be likely to give birth during the trip. These requirements will, in most cases, prohibit the transport of equines that are extremely ill or diseased, injured, or incapacitated.

Two commenters stated that, to ensure that equines are fit for travel, the owner-shipper certificate should be modified to state, "Horse is able to walk unassisted without physical prodding or marked difficulty." The commenters stated that equines are often forced to walk onto vehicles through the use of whips, hard slaps, kicks, or other devices and that "unassisted" is not defined and could be interpreted to allow the use of whips, hard slaps, etc. One commenter stated that an equine that cannot enter a conveyance under its own power should not be loaded.

In § 88.4, paragraph (a)(3)(vii) states that the equine must be able to bear weight on all four limbs and be able to walk unassisted. Unassisted means that the equine must be capable of climbing a ramp or entering a conveyance with ease and under its own power. In addition, § 88.4(c) states that the equines must be handled in a manner that does not cause unnecessary discomfort, stress, physical harm, or trauma.

One commenter stated that the owner-shipper certificate should use language similar to performance-based standards, i.e., require that the equine arrive in a condition that meets the requirements of animal cruelty laws.

We believe that a reference to animal cruelty laws would not specifically address the needs of equines being transported to slaughter. We believe that our requirements are clear.

Many commenters stated that pregnant mares, late-term pregnant mares, foals of varying ages (up to 1 year), and foals less than 600 pounds should not be transported to slaughtering facilities.

Equines that are likely to give birth during transport can develop serious complications if they foal during transport. In addition, the mare's and the foal's well-being could be in danger. Among other things, § 88.4(a)(3)(vii) states that an equine cannot be transported if it is likely to give birth during the trip. If an owner/shipper thinks it's possible that a mare is close to delivering, the owner/shipper should not put the mare on the conveyance. If an owner/shipper transports a late-term pregnant mare that gives birth during transport, the owner/shipper may be found in violation of the regulations. In addition, the owner/shipper could be found to have falsified the owner-shipper certificate. We believe that, as long as the mare is not likely to give birth during transport, it can be safely transported.

As to the transport of foals to slaughtering facilities, § 88.4(a)(3)(vii) prohibits, among other things, the transport of equines less than 6 months of age to a slaughter facility. We believe that foals older than 6 months of age, including those that weigh less than 600 pounds, can be transported safely and humanely if the foals are loaded in a proper manner.

One commenter stated that mares should not be taken from their foals and shipped to slaughter if their foals are under 4 months of age.

We do not believe that it is necessary to prohibit the shipment of mares that will leave 4-month-old foals on the premises of origin. Foals are weaned from 1 to 9 months of age, depending on the standard practice of the premises of operation. Weaning is extremely traumatic at any age and could be in direct proportion to the time the mare and foal spend together. From this standpoint, separating a mare from its foal at 4 months may be less stressful for the mare and the foal than when the foal is older.

Several commenters expressed concern that shoed equines, especially equines with shoes on their hind feet, could injure other equines and said they should not be transported.

We are aware that equines can be injured when kicked by other equines that are wearing shoes. In addition, shoes can be slippery in a conveyance if the proper flooring is not provided. As stated previously, these regulations are performance-based standards. We believe that shoed equines may be transported safely if the owner/shipper takes proper precautions and, therefore,

will not prohibit the transport of shoed equines. However, the owner/shipper must ensure that equines are not injured during transport. Any injuries that an equine incurs during transport may result in the owner/shipper being found in violation of the regulations and subject to civil penalties as provided in § 88.6.

One commenter stated that the regulations will require owners to keep lame and debilitated equines or pay for euthanasia rather than sell the equines to slaughter to salvage some value.

The regulations pertain to those individuals who meet the definition of *owner/shipper*. An individual or entity is exempt from these regulations if the individual or entity transports 20 or fewer equines to slaughtering facilities or transports equines to slaughtering facilities incidental to his or her principal activity of production agriculture.

Owner-Shipper Certificate; Identification of Special Handling Needs

Proposed § 88.4(a)(3)(vi) (redesignated as § 88.4(a)(3)(viii) in this final rule) stated that the owner-shipper certificate should include a description of anything unusual with regard to the physical condition of the equine, such as a wound or blindness in one eye, and any special handling needs.

One commenter stated that special handling needs means taping and wiring horses mouths for the entire journey, which are practices that should be prohibited. Many commenters stated that taping shut the mouths and/or eyes of aggressive horses is inhumane and should be prohibited. One added that taping the nostrils of equines should be banned. One commenter stated that the meaning of special handling is not clear and that we should remove those words from § 88.4(a)(3)(vi). This commenter questioned whether a determination by APHIS that an equine required special handling would override a different opinion expressed on an owner-shipper certificate.

By special handling needs, we meant that an owner/shipper should provide any information that should be taken into account to ensure the safe and humane transport of the equine. For example, an owner/shipper could use this space to indicate that an equine is blind in one eye, which would alert those handling the equine to be cautious when handling the horse. We have slightly reworded the provision concerning special handling needs in this final rule to clarify what we mean. Special handling needs should in no way be interpreted to mean instructions for taping or wiring the mouths or taping the eyes or nostrils of equines. We do not condone such practices. In fact, § 88.4(c) of the regulations requires the handling of equines in a manner that does not cause unnecessary discomfort, stress, physical harm, or trauma to the equines. The educational program that we are developing will explain appropriate techniques for the humane transport of equines to slaughtering facilities.

Owner-Shipper Certificate; Date, Time, and Place of Loading

Proposed § 88.4(a)(3)(vii) (redesignated as § 88.4(a)(3)(ix) in this final rule) stated that the shipper or owner must indicate on the certificate the date, time, and place the equines were loaded.

Two commenters stated that the departure time should be noted and one commenter stated that a third party should verify the exact time and location of loading.

We believe that the time each equine was loaded onto the conveyance is more essential than the time of departure because, based on § 88.4 (b)(2), any equine that has been on the conveyance for 28 consecutive hours, whether the conveyance was in motion or not, must be offloaded and provided appropriate food, potable water, and the opportunity to rest for 6 consecutive hours.

We do not believe that a third party should be required to verify the time and location of loading. If an owner/shipper falsifies the owner-shipper certificate, the falsification may be a criminal offense that could result in a fine of not more than $10,000 or imprisonment for not more than 5 years or both.

Owner-Shipper Certificate; Other Comments

One commenter stated that APHIS should require the owner-shipper certificate to be legibly filled out in ink or typed and should prohibit script writing other than for the signature. One commenter stated that the departure time should be written in ink.

We agree that the owner-shipper certificate must be legibly completed. We are amending § 88.4(a)(3) to require the owner/shipper to type or legibly provide in ink the information required on the owner-shipper certificate. If the owner-shipper certificate is not legibly completed, the owner/shipper may be assessed a civil penalty.

One commenter wanted the certificate to state that the equine was loaded under the supervision of the owner/shipper. The commenter also requested that the certificate include a statement that the horse's condition, gender, and size were taken into account in positioning it in the vehicle.

We do not believe it is necessary to require a statement that the equine was loaded under the supervision of the owner/shipper. The owner/shipper must complete and sign the owner-shipper certificate, so he or she must be present. We do not believe that adding a qualifying statement that the equine's condition, gender, and size were taken into account when loading is necessary. However, our educational program will include instruction on the proper loading and offloading of equines, as well as how to position animals so that smaller or thin equines or ponies are not harmed by larger equines.

Another commenter also stated that the owner-shipper certificate should include the name and address of the shipper and the owner if the owner is not the shipper.

We do not believe that the owner has to be identified on the certificate if he or she is not the shipper. In most cases where the owner is not the shipper, the shipper will have purchased the equines from an auction/market. The records maintained at most auction/markets include the identification and address of the owner of the equines should it become necessary to trace the owner.

One commenter stated that funds should be set aside for a pamphlet with clear instructions on the proper handling of equines and completion of the owner-shipper certificate.

The educational program we are developing in conjunction with this rule will provide guidelines for the humane transport of equines to slaughtering facilities, including instructions for completion of an owner-shipper certificate.

Segregation of Stallions and Aggressive Equines

Proposed § 88.4(a)(4)(ii) required that each stallion and any aggressive equines be segregated on the conveyance to prevent them from having contact with any other equine on the conveyance.

Many commenters expressed concern that our requirement for the segregation of stallions would encourage point-of-sale castration. They recommended that our rule be amended in some way to discourage point-of-sale castration. One commenter stated that the regulations should not allow a stallion to be gelded within 2 weeks preceding transport unless it is segregated and accompanied by a signed and dated veterinary certificate.

We do not believe that the regulations need to address point-of-sale castration. A recovery period of 21 days or more is

necessary for the site of castration to heal. If an equine arrives at slaughter with a fresh and open wound, the equine's value will decline, and the owner/shipper will lose money. The healthier an equine is upon arrival at the slaughtering facility, the more that equine is worth. In addition, stallions retain their aggressive behavior for a period of at least 30 days after castration. Therefore, an owner/shipper could not circumvent the requirement for segregating a stallion by performing a point-of-sale castration because the equine would still be aggressive, and aggressive equines must be segregated from other equines in the conveyance.

Many commenters stated that equines should be segregated by size and/or sex, several commenters added age, and one commenter added height and weight. One commenter stated that all equines 14.2 hands or less should be shipped on separate conveyances from larger equines. One commenter stated that thin, weak, and old horses should be separated.

As stated previously, we designed performance-based standards to ensure that equines have sufficient space and are protected from injury during transport. We do not believe it is necessary to spell out in the regulations exactly how this must be accomplished. However, the educational program we are developing will show appropriate ways to transport equines and will address loading by size. It is worth noting that, if an equine is extremely thin, weak, or old, the equine may not be fit to travel as required by § 88.4(a)(3)(vii).

Some commenters stated that we should not require segregation of aggressive equines. One commenter stated that we may have gone beyond our authority under the statute to require the segregation of aggressive equines, along with stallions. Several comments stated that it was unclear what we meant by "aggressive" or how aggressiveness would be determined. One commenter stated that it was not clear who would be responsible for determining whether an equine is aggressive. Two commenters expressed concern that an equine may not be aggressive during observation prior to transport but may become aggressive during transport. One commenter suggested that we require segregation of any equine "that has been observed to display aggressiveness toward other horses," to give the shipper some direction and protection if an equine that did not show aggressive behavior becomes aggressive when transport begins.

The statute directs the Secretary to review, among other things, the segregation of stallions from other equines and such other issues as the Secretary considers appropriate. The main purpose for separating stallions (uncastrated male equines that are 1 year of age or older) is that stallions are known to be aggressive animals that are easily provoked into attacking other equines. In line with protecting equines from aggressive behavior by stallions, we believe that any aggressive equine should be separated from the other equines as set forth in § 88.3(a)(2). In fact, one of the USDA-commissioned studies observed that the segregation of stallions did not solve the entire aggression problem. The study determined that aggressive geldings and mares had to be separated in the same manner as stallions.

The use of "aggressive" in the regulations is in accordance with the definition of the term "aggressive" found in various dictionaries. If an equine attacks another equine for no apparent reason or kicks or bites another equine without provocation, for example, we believe that equine should be considered aggressive. The educational program we are developing will provide guidance concerning aggressive equines. However, USDA representatives will be aware that some equines that have not exhibited aggressive behavior on previous occasions may do so under certain conditions, and they will take into consideration that the owner/shipper may not have had prior knowledge of the equines' aggressive tendencies.

Some commenters stated that mares with foals should be segregated from other equines during transport. We believe that mares with foals may be transported safely with other equines if the owner/shipper takes proper precautions and, therefore, we will not require the segregation of mares with foal. The educational program that we are developing will show owners, shippers, and other stakeholders in the equine slaughtering industry appropriate loading procedures and placement of equines in the conveyance.

Several commenters stated that equines with shoes on their hind feet should be segregated.

As stated previously, these regulations are performance-based standards. We believe that shoed equines may be transported safely with other equines if the owner/shipper takes proper precautions and, therefore, we will not require the segregation of shoed equines. However, the owner/shipper must ensure that equines are not injured during transport. Any injuries that an equine incurs during transport may result in the owner/shipper being found in violation of the regulations and subject to civil penalties as provided in § 88.6.

Floor Space

Proposed § 88.4(a)(4)(i) stated that equines on the conveyance must be loaded so that each equine has enough floor space to ensure that no equine is crowded in a way likely to cause injury or discomfort.

Several commenters stated that this requirement is vague and that specifications for floor space should be included in the regulations. One commenter stated that the number of equines carried should be equal to the length of the compartment in feet divided by 4. One commenter suggested a standard of 1.75m²/equine or approximately 18 square feet per equine. Some commenters provided further suggestions based on transit time, and/or the number, ages, and size of the equines. One commenter stated that a numerical density specification should be provided and should be based on scientific studies and practical experience. One commenter stated that we should determine an average numerical figure that is safe and acceptable for each vehicle type based on research and require each vehicle to have a permanent tag affixed that specifies the range or the number of equines/ponies that are acceptable to be transported in the vehicle at one time. One commenter stated that we should determine the appropriate density of equines for each vehicle-type, based on studies conducted by Texas A&M and Colorado State University. Several commenters stated that horse industry standard for trailers is 8 to 15 horses and not the 40 to 45 that would be permitted for slaughter transport. One commenter suggested a system in which equines may be transported at higher densities during shorter trips, but at lower densities for longer trips. This commenter stated that his studies and experience indicate that slaughter-type horses that are transported for 28 hours should be transported at a much lower density than the industry average (13 to 14 square feet per horse).

We were directed by Congress to draft performance-based regulations wherever possible. Owner/shippers will have to load equines in a manner that will avoid injury to the equines. Overcrowding in a conveyance can cause animals to bruise and sustain other injuries. This could result in the owner/shipper being found in violation of the regulations and being assessed a civil penalty. Owner/shippers also have some market-based

incentive to prevent injury to equines during transport because bruised carcasses command lower market values. Our educational program will help owner/shippers comply with the performance-based standards. The educational program will address many issues, including loading density and floor space. The educational program will be directed towards owners, shippers, and other stakeholders in the equine slaughtering industry.

Observation of Equines During Transport

Proposed § 88.4(b)(2) stated that, during transit to the slaughtering facility, the shipper must observe the equines as frequently as circumstances allow, but not less than once every 6 hours, to check the physical condition of the equines and ensure that the regulations are being followed. Proposed § 88.4(b)(2) also stated that veterinary assistance must be provided as soon as possible for any equines in obvious physical distress.

Many commenters stated that observation of the equines every 6 hours is insufficient. Some of these commenters provided observation ranges of every 2, 3, and 4 hours. One commenter stated that equines should be observed the first hour and every 6 hours after. One commenter stated that equines should be observed each time the conveyance stops for a break or refueling, but not less than once every 6 hours, and that the equines must be allowed to rest for no less than 30 minutes while the vehicle remains stopped. One commenter stated that the phrase "not less than once every 6 hours" is misleading and that we should replace it with the phrase "at least once every 6 hours."

We believe that the requirement conveys the meaning that the equines are to be observed once every 6 hours or more often. We provided a maximum time of every 6 hours because we believe that this is the maximum amount of time that equines should go without observation to ensure that none have fallen or have become otherwise physically distressed en route. However, § 88.4(b)(2) requires shippers or owners to observe the equines as frequently as circumstances allow during transport, which would include during breaks from driving and refueling.

One commenter stated that we should clarify whether adequate observation includes stopping the truck and climbing on the trailer in any weather and lighting conditions to examine the equines.

Observation of the equines by the owner/shipper means that the owner/shipper must stop the conveyance and observe each equine at least once every 6 hours. The owner/shipper has the responsibility of locating an area where observation of the equines can be performed safely and completely.

One commenter stated that § 88.4(b)(2) should require veterinary assistance as soon as "reasonably" possible.

We believe that § 88.4(b)(2), as worded, conveys an appropriate sense of urgency and does not require an owner/shipper to do anything unreasonable. Veterinary assistance must be provided as soon as possible to ensure the safe and humane transport of equines in the conveyance. Also, in this final rule, § 88.4(b)(2) requires owner/shippers to obtain the services of an *equine veterinarian* for veterinary assistance. We believe that an equine veterinarian will be better equipped than most other veterinarians to handle equines. The educational program we are developing in conjunction with this regulation will provide participants with a list of equine veterinarians within the United States and their telephone numbers.

One commenter stated that the regulations should specify how equines that die in transit should be handled.

Our regulations are intended to ensure that equines transported to slaughtering facilities are fit to travel and, therefore, not likely to die in transit. However, in this final rule, § 88.4(b)(2) states that if an equine dies in transit, the driver of the conveyance must contact the nearest APHIS office as soon as possible and allow an APHIS veterinarian to examine the equine, and, if an APHIS veterinarian is not available, the owner/shipper must contact an equine veterinarian.

Offloading of Equines After 28 Hours

Proposed § 88.4(b)(3) stated that during transit to the slaughtering facility, the shipper must offload from the conveyance any equine that has been on the conveyance for 28 consecutive hours and provide the equine appropriate food, potable water, and the opportunity to rest for at least 6 consecutive hours. In addition, proposed § 88.4(b)(3) stated that, if such offloading is required en route to the slaughtering facility, the shipper must prepare another owner-shipper certificate and record the date, time, and location where the offloading occurred. Both owner-shipper certificates would then need to accompany the equine to the slaughtering facility. In this final rule, the requirement for completing a new certificate if equines are unloaded is at § 88.4(a)(4).

Many commenters opposed allowing 28 hours without water, and many opposed allowing the transport of horses for 28 hours without food, water, or rest. Most of these commenters stated that equines must be provided water, food, and/or rest, and unloaded at times ranging from every 4 to 24 hours or reasonable intervals, and some added that the time for water, food, and rest should be whether the vehicle is in transit or stationary. Many commenters stated that equines should not be without water, and some added food, for time periods ranging 3 to 12 hours, and some added that water could be provided during the observation period. Several commenters stated that studies have shown that equines suffer serious and traumatic health problems from travel for periods under 28 hours, and several commenters referenced 24 hours. One commenter stated that the amount of time that equines are deprived of water, food, and rest should be reviewed by a qualified veterinarian to establish that fewer hours should be specified. Several commenters stated that the standard of 28 hours was determined primarily using young, healthy horses, and that equines going to slaughter are not young or healthy. Several commenters stated that the USDA-commissioned studies did not take into account such variables as the age and condition of the equines, the density of equines on the truck, and temperature or other conditions. Some commenters, apparently thinking the 6-hour period of food, water, and rest prior to loading could occur at *any* time prior to loading, expressed concern that equines could be without water for more than 28 hours if transport took 28 hours. Several commenters stated that we should recommend a rest period of 8 hours that is not included in the transit length.

In accordance with § 88.4(a)(1), an owner/shipper must provide equines appropriate food, potable water, and an opportunity to rest for a period of not less than 6 consecutive hours immediately prior to the equines being loaded on the conveyance. Therefore, 28 hours would be the longest an equine could go without being offered food and water during transport to a slaughtering facility in the United States.

We based the requirements in § 88.4(b)(3) on the conclusions of the USDA-commissioned research, which was performed by veterinarians. In addition, various times that horses could be without water were reviewed by a panel of qualified veterinarians who established that the research was valid. At least half of the USDA-commissioned research involved

slaughter horses for comparison. In fact, one of the studies involved 306 horses that ranged from 1 to 30 years of age, and 33 percent of the horses were 16 years of age or older.

Further, some of the research simulated transport to slaughter under varying situations. For instance, straight-deck trucks were divided into compartments with four levels of density, and the equines were transported during the hottest part of the day during the summer. The research also showed that frequent loading and unloading caused more distress to equines than allowing the equines to remain on the conveyance.

One commenter stated that the USDA-commissioned research performed in 1998 by Drs. Carolyn Stull, Ted Friend, and Temple Grandin was developed to deny that water, food, and rest are basic needs. Several commenters stated that the research was biased and flawed and that some of the researchers contradicted their findings in previously published studies and findings. One commenter cited a study by Dr. Stull that recommended water every 6 to 8 hours, if possible. Many commenters stated that the USDA-commissioned study performed by Dr. Stull concluded that trips longer than 27 hours showed effects in equines that were considered to be reliable stress indices and that injuries increased with travel times over 27 hours. These commenters added that Dr. Stull performed a study that concluded that transportation in hot, humid conditions should attempt to minimize thermal stress by frequently offering (every 4 to 6 hours) water to horses and limiting the duration of the trip. These commenters and several others stated that Dr. Friend performed a study that concluded that tame horses in good condition could be transported for up to 24 hours before dehydration and fatigue became severe; however, they stated that the study was terminated after 24 hours because 3 of the 30 horses were deemed unable to continue and concluded that if horses must be transported more than 24 hours, the truck must be equipped with a watering device. One commenter stated that the study performed by Dr. Stull was biased because she used horses in the study that were identified by cooperating brokers and transport drivers who had an interest in the outcome of the study. Another commenter also stated that people associated with the auction facility and slaughtering facility used for Dr. Grandin's study were made aware of the study ahead of time.

We commissioned the performance of research to identify appropriate timeframes in which food, water, and rest should be provided to ensure that the last trip for equines being transported to slaughter was a tolerable one. The research was performed to address the transport of equines to slaughtering facilities. Our results were based on the most recent research, which may have shown different results than previous research by the same researchers. We based the requirements for food, water, and rest on the conclusions of the research. The study performed by Dr. Stull that was cited by the commenters regarding the transportation of equines in hot and humid conditions was performed to determine the optimal conditions for the transport of performance horses.

It is true that Dr. Stull's USDA-commissioned research study concluded that trips longer than 27 hours could cause distress to equines; however, as stated in the proposal, we believe that 28 hours will allow for realistic travel times from most points of the United States to equine slaughtering facilities without the equines undergoing serious physiological distress. In most cases, we believe equines will be transported from the point of loading to the slaughtering facility within 24 hours.

It is true that the equines used in Dr. Stull's study were identified by cooperating brokers and transport drivers. Dr. Stull's study required a large number of equines that were destined for transport to slaughtering facilities. We believe that the identification of equines by brokers and drivers did not have a significant impact on the results of the study.

The nature of the research performed by Dr. Grandin required her to have access to the equines for examination. The premises were privately-owned and, as a consequence, there had to be a certain level of cooperation with the owners or management of the premises. However, we do not believe that the level of cooperation affected the results of the study.

Several commenters suggested that providing water to equines en route, via an onboard watering system, might be preferable to unloading equines after 28 hours because unloading and loading equines from a conveyance causes stress. One commenter suggested that loading equines at a reduced density and watering enroute should be an alternative to unloading. One commenter stated that each conveyance should contain at least 10 gallons of water for every 20 equines for emergencies, in addition to the equine's regular water supply.

We believe that unloading after 28 hours to provided food, water, and rest is appropriate based on the findings of the USDA-commissioned research.

Several commenters stated that APHIS is not following the findings of the USDA-commissioned research because APHIS indicated that equines do not experience serious physiological distress for 30 hours without water if they have had access to water during the 6-hour period prior to deprivation.

It is true that we stated in the proposed rule that the USDA-commissioned studies showed that equines that had access to water in the 6-hour period before deprivation occurred did not experience serious physiological distress for up to 30 hours without further access to water. However, we believe that a 28-hour maximum allowable timeframe for deprivation of food, water, and rest during transport to slaughter will allow for realistic travel times from most points of the United States to the equine slaughtering facilities and ensure that the equines will not undergo serious physiological distress.

One commenter stated that adequate water, ventilation, and feed must be provided because equines are often sold by the pound, and loss of weight during transport reduces revenue for the seller.

In accordance with § 88.4(b)(3), the owner/shipper must offload from the conveyance any equine that has been on the conveyance for 28 consecutive hours and provide the equine appropriate food, potable water, and the opportunity to rest for at least 6 consecutive hours. However, the owner/shipper may provide appropriate food, potable water, and rest to equines at any point during transit that it is safe to do so.

One commenter stated that we should recommend the offloading of equines every 10 hours when drivers are required to stop and rest because drivers are not allowed to drive for 28 hours straight. One commenter stated that equines should be provided water, food, and rest at each rest stop.

It is not clear whether the commenter was referring to each rest area long the interstate or each time the driver stops for a rest. In some areas, rest stops can be with 30 to 60 minutes of each other, which could be an unnecessary burden on the owner/shipper. Further, we do not believe that it is necessary to require the owner/shipper to provide the equines with food, potable water, and rest at every rest stop for the driver. Drivers must stop periodically for personal and safety reasons. The timing of these stops has nothing to do with the well-being of the equines.

One commenter stated that equines should be offloaded at weigh and check stations when crossing a State or Federal boundary so that the equines can be inspected for injuries because visibility is better compared to observing the equines while they are in the conveyance.

Offloading equines at weigh and check stations could be a safety hazard for the equines due to the presence of other commercial vehicles that are not involved with the transport of equines. In addition, weigh and check stations would have to be equipped with facilities that could provide food, water, and containment of equines.

One commenter stated that the regulations are not clear whether the 28-hour rule includes the amount of time an APHIS official may spend examining the equines. One commenter stated that § 88.4(b)(3) should exempt time required for inspection by USDA, State or Federal law enforcement officials, or any other delay in the direct transport of the equines due to governmental or law enforcement interference with movement of the conveyance.

Section 88.4, paragraph (b)(3), requires any equine that has been on a conveyance for 28 consecutive hours to be offloaded and provided appropriate food, potable water, and the opportunity to rest for at least 6 consecutive hours. We do not believe that amending § 88.4(b)(3) to address delays due to law enforcement officials is appropriate. Equines that have been on a conveyance for 28 hours need to be offloaded and provided food, rest, and, most importantly, potable water, regardless of the reason that they were on the conveyance for 28 hours.

Handling of Equines

Proposed § 88.4(c) required the handling of all equines in commercial transportation to a slaughtering facility to be done as expeditiously and carefully as possible in a manner that does not cause unnecessary discomfort, stress, physical harm, or trauma. Proposed § 88.4(c) also prohibited use of electric prods on equines in commercial transportation to a slaughtering facility for any purpose, including loading or offloading on the conveyance, except when human safety is threatened.

Many commenters stated that any use of electric prods should be banned or prohibited, and some of these commenters stated that other equipment is readily available if human safety is threatened. One commenter stated that we should provide clarification as to who determines when human safety is threatened. One commenter stated that use of an electric prod can elicit unpredictable movement in horses. One commenter stated that the loading of equines should be monitored to ensure that prods are not used.

One of the purposes of the regulations is to ensure that equines are transported without unnecessary discomfort, stress, physical harm, or trauma. Therefore, the regulations prohibit the use of electric prods, except in cases when human safety is threatened. We limited the use of electric prods to situations in which human safety is threatened to decrease the potential that prods could be used in abusive situations. We agree that there may be other equipment that can be used; however, they may not elicit a response quickly enough in a life or death situation. The owner/shipper is the entity who must make the determination of whether human safety is threatened. A USDA representative cannot be present in all areas that equines may be loaded for transport to slaughtering facilities; however, if an owner/shipper uses an electric prod when human safety is not threatened and evidence of that abuse is found, that person may be found in violation of the regulations.

Many commenters stated that metal pipes and sharp or pointed objects capable of piercing the skin should be banned. Many commenters stated that no implement, device, contrivance, mechanism, apparatus, appliance, contraption, instrument, tool, or utensil should be allowed to be used, including for the control or restraint of the equines, that was not expressly and specifically designed for use on equines and generally recognized as such. In addition, several commenters stated that only restraints considered humane should be used. Two commenters stated that, in addition to electric prods, whips or any other object that could cause injury or pain should be prohibited except when human safety is directly threatened by an equine.

We cannot provide a list of all implements that have been or could be used on equines because of the number of possibilities; however, the use of any implement that does not provide equines with the care described in § 88.4(c) should not be used and could be a violation of the regulations.

Examination of Equines at Any Point

Proposed § 88.4(d) stated that at any point during the commercial transportation of equines to a slaughtering facility, a USDA representative may examine the equines, inspect the conveyance, or review the owner-shipper certificates required by § 88.4(a)(3).

Several commenters stated that § 88.4(d) should state "must" rather than "may."

We use "may" in § 88.4(d) because a USDA representative may not be able to examine all equines, inspect all conveyances, or review all of the owner-shipper certificates. However, USDA representatives are authorized by § 88.4(d) to inspect the equines and conveyances as the need arises, and USDA representatives will collect all of the owner-shipper certificates at slaughtering facilities.

One commenter stated that § 88.4(d) should require a USDA representative, his or her designee, a weigh station or agricultural check point employee, or other law enforcement personnel to enforce the requirements of the regulations during transit as well as upon arrival at the slaughter facility. One commenter stated that we should clarify whether law enforcement officials can perform duties such as inspect vehicles, conduct investigations, examine the animals and seize and impound the animals, if necessary. Some commenters stated that there should be a provision that allows law enforcement officials, State or Federal employees, or inspectors to ensure an owner or shipper's compliance with the regulations.

In a State that has its own regulations regarding the transport of equines to slaughter, that State's police or law enforcement personnel can enforce the State's regulations. The statute does not provide for Federal enforcement actions by State and local law enforcement personnel in State and local courts.

One commenter stated that equines should be shipped directly and expeditiously from the point of loading to the slaughtering facility without stopping between the points for USDA representatives to conduct examinations, which the commenter stated could be potentially harmful and cause stress to the animals. This commenter stated that the manner at which the equines arrive at the slaughtering facility should be sufficient.

We believe that we need to be able to check conveyances, equines, and paperwork if we have any concerns that equines may be being transported in violation of the regulations. Every transport will not be subject to such an examination; however, if an examination has to be conducted, the USDA representative will consider the welfare of the equines in the conveyance and will not take more time than necessary to perform his or her duties.

Direction to the Owner/Shipper To Take Action

Proposed § 88.4(e) stated that, at any time during the commercial transportation of equines to a slaughtering facility, a USDA representative may direct the shipper to take appropriate actions to alleviate the suffering of any equine. Proposed § 88.4(e) also stated that, if deemed necessary by the USDA representative, such actions could include securing the services of a veterinary professional to treat an equine, including performing euthanasia if necessary.

Several commenters stated that § 88.4(e) should state that a USDA representative "must," "shall," or "should" direct the shipper to take appropriate actions, and that such actions "must" include securing the services of a veterinary professional.

We use "may" in § 88.4(e) because this provision authorizes a USDA representative to direct the owner/shipper to take appropriate actions to alleviate the suffering of any equine based on the representative's assessment of the equine's condition. "Must" would imply that such direction will be necessary in all cases. Similarly, we say that such action "could" include securing the services of a veterinary professional because those services will not always be necessary.

One commenter stated that § 88.4(e) should state that the services of a veterinary professional will be secured if "reasonably" available.

We believe that if a USDA representative directs the owner/shipper, as provided in § 88.4(e), to secure the services of a veterinary professional to treat an equine, the veterinary professional should be secured as soon as possible.

One commenter stated that § 88.4(e) should refer to a USDA representative "or his or her designee." In addition, this commenter stated that the veterinary professional should be an equine veterinary professional.

We do not believe that § 88.4(e) needs to indicate "his or her designee" because we define *USDA representative* as any USDA employee authorized by the Deputy Administrator, Veterinary Services, APHIS, to enforce the regulations. However, we agree with the commenter that § 88.4(e) should specify that the veterinary professional must be an equine veterinarian. We have amended § 88.4(e) to require the veterinary professional to be an equine veterinarian.

Retention of the Owner-Shipper Certificate for 1 Year

Proposed § 88.4(f) stated that the individual or other entity who signs the owner-shipper certificate must maintain a copy of the owner-shipper certificate for 1 year following the date of signature.

Several commenters stated that the owner or shipper should retain a copy of the owner-shipper certificate for a minimum of 2 years, and some of these commenters stated that we should retain a copy so that information is readily accessible to those who are attempting to trace lost or stolen equines. One commenter stated that there should be provisions for law enforcement and State agencies to have access to the owner-shipper certificates for identifying and locating stolen or missing horses.

We believe that requiring a 1-year retention of the owner-shipper certificates is adequate. If someone is attempting to trace a lost or stolen equine, the investigation will more than likely take place within a few months of the disappearance of the equine. However, to improve the capability of tracing lost or stolen equines, APHIS plans to develop a database of the information provided on the owner-shipper certificates. If necessary, information from the database could be supplied to law enforcement or State agencies, when requested.

Section 88.5 Requirements at a Slaughtering Facility

Access to Food and Water After Unloading

Proposed § 88.5(a)(1) stated that, upon arrival at a slaughtering facility, the shipper must ensure that each equine has access to appropriate food and potable water after being offloaded.

Two commenters stated that the shipper should not be responsible for providing food and water to equines at the slaughtering facility. Both commenters stated that the slaughtering facility should be the responsible party. One of these commenters stated that the shipper would not know the conditions at destination and, in most cases, would not be the owner of the equines.

We believe that the requirement in § 88.5(a)(1) will ensure that the owner/shipper notifies the proper officials of his or her arrival at the slaughtering facility, and that the equines are offloaded into an area where the slaughtering facility can provide food and potable water.

One commenter stated that § 88.5(a)(1) should state that the management of the slaughtering facility must provide consent to the shipper to provide each equine access to appropriate potable water after being offloaded, but not food.

We believe that equines should be allowed access to both food and potable water to maintain their well-being after being transported without access to food and water, sometimes over great distances. The requirement in § 88.5(a)(1) is to ensure that the owner/shipper notifies the proper officials of his or her arrival at the slaughtering facility. We believe that most shippers and owners will appropriately communicate with the proper personnel at the slaughtering facility without the inclusion of the word "consent" in the regulation.

One commenter stated that equines should be provided water every 4–6 hours where they are housed before slaughter.

The statute only allows us to regulate the transport of equines to a slaughtering facility. Once the equines arrive at the slaughtering facility and are provided food, potable water after being offloaded in accordance with § 88.5(a)(1), the equines are subject to the facility's feed and water schedule.

One commenter stated that § 88.5(a) should require the arrival of a conveyance during regular business hours of the slaughtering facility and to require the shipper to "immediately" abide by the requirements set forth in § 88.5(a).

We do not believe that requiring shipments of equines to arrive at slaughtering facilities during normal business hours would always be in the best interests of the equines. It could, for instance, result in the equines being kept on the conveyance for a longer time than might otherwise be necessary.

We do not believe that adding "immediately" is necessary because, in most cases, the owner/shipper will offload the equines and discharge his or her responsibilities as soon as possible after arrival.

Access to the Equines

Proposed § 88.5(a)(3) stated that, upon arrival at a slaughtering facility, the shipper must allow a USDA representative access to the equines for the purpose of examination.

Several commenters pointed out that USDA representatives are not available at slaughtering facilities on all days of the week or at all hours. One commenter stated that § 88.5(a)(3) should state that management of the slaughtering facility must provide consent to a USDA representative to have access to the equines for the purpose of examination. The commenter also stated that

§ 88.5(a)(3) should state that the absence or delay in arrival of the USDA representative will not prohibit the slaughtering facility from proceeding with the slaughter of the equines during its normal course of business. One commenter stated that if a USDA representative is not available prior to slaughter, an examination of carcasses for bruising or abrasions during inspection could be used to assess injuries incurred during transport to the slaughtering facility. One commenter asked who a USDA representative is. One commenter asked if full-time veterinarians would be assigned to the slaughtering facilities to enforce the regulations.

A USDA representative will be available during normal business hours of the slaughtering facility to examine the equines. This requirement, therefore, should not cause any significant delays in slaughter operations. Also, most equines are delivered during the hours of operation of the slaughtering facility. Regardless of when the equines arrive, we believe a USDA representative must be given access to the equines prior to slaughter for the purpose of examination.

A USDA representative may be any employee of the USDA who is authorized by the Deputy Administrator, Veterinary Services, APHIS, to enforce the regulations. The employee could be an APHIS veterinarian, a Food Safety and Inspection Service (FSIS) employee, or any other USDA employee so authorized.

One commenter stated that § 88.5(a)(3) should require equines to be inspected when they reach their destination.

In accordance with § 88.5(a)(3), a USDA representative must be given access to the equines for the purpose of examination; however, the USDA representative will use his or her discretion in determining which equines to inspect and the extent of any examination.

Access to the Animal Cargo Area

Proposed § 88.5(a)(4) stated that, upon arrival at a slaughtering facility, the shipper must allow a USDA representative access to the animal cargo area of the conveyance for the purpose of inspection.

One commenter stated that § 88.5(a)(4) should require inspection of the animal cargo area.

Inspection of the animal cargo area may not be necessary in all cases. This requirement in § 88.5(a)(4) alerts owner/shippers that the animal cargo area of their conveyances may be inspected by a USDA representative.

Owner/Shipper Remaining on Premises

Proposed § 88.5(b) stated that the shipper must not leave the premises of a slaughtering facility until the equines have been examined by a USDA representative.

One commenter stated that equine slaughtering facilities should not have their slaughter schedules dictated by APHIS. This commenter stated that § 88.5(b) should allow the shipper to leave the premises of the slaughtering facility if a USDA representative does not appear to examine the equines within 3 hours after they are offloaded from the conveyance. One commenter stated that drivers should not have to wait for the USDA representative and should be allowed to leave the premises if an employee of the slaughtering facility is there to allow the USDA representative access to the equines.

A USDA representative will be available for the examination of the equines and conveyances during normal business hours, and we believe it is important for the owner/shipper to be present during these activities. However, we agree that a driver who arrives at a slaughtering facility outside of normal business hours should be able to leave the premises to eat or rest. Therefore, § 88.5(b) of this final rule states that the owner/shipper must not leave the premises of a slaughtering facility until the equines have been examined by a USDA representative if the owner/shipper arrives during normal business hours; however, if the owner/shipper arrives outside of normal business hours, the owner/shipper may leave the premises but must return to the premises of the slaughtering facility to meet the USDA representative upon his or her arrival.

One commenter stated that § 88.5(a) should provide that all equines that are nonambulatory upon arrival should be euthanized on the vehicle after all other equines have been unloaded and that euthanasia should be performed by a licensed and accredited veterinarian in an approved manner. The commenter stated further that if arrival of a veterinarian would cause time delays and suffering to the equine, the regulations should provide that euthanasia could be performed by a trained individual using approved methods. In addition, the commenter maintained that the regulations should provide that seriously injured or downed animals may not be dragged, hoisted, thrown, or left alone without medical intervention.

Any equine that is seriously injured or nonambulatory upon arrival must be provided veterinary assistance and may not be mistreated or left unattended. A USDA representative will be available to examine the equines upon their arrival at the slaughtering facility during normal business hours. In most cases, the USDA representative will be a veterinarian; therefore, the USDA representative will be able to perform euthanasia, if necessary. If an equine is nonambulatory, is seriously injured, or is otherwise in obvious physical distress upon arrival and a USDA representative is not available (i.e., because of arrival of the equines at the slaughtering facility outside of normal business hours), § 88.4(b)(2) requires the owner/shipper to obtain veterinary assistance as soon as possible. We agree that equines that become nonambulatory should be euthanized. In this final rule, § 88.4(b)(2) provides that equines that become nonambulatory en route to a slaughtering facility must be euthanized by an equine veterinarian. Since we are requiring that euthanasia be performed by an equine veterinarian, we do not believe that it is necessary to add that euthanasia be performed in an approved manner.

Transport of Equines Outside the United States

Proposed § 88.5(c) stated that any shipper transporting equines to slaughtering facilities outside the United States must present the owner-shipper certificate to USDA representatives at the border.

One commenter stated that § 88.5(c) does not state that a USDA inspector will inspect the equines to determine whether they are fit to travel or whether the description on the owner-shipper certificate matches the equines in the conveyance.

A USDA representative at the border will inspect conveyances carrying equines destined for slaughter outside the United States when he or she deems it necessary.

Section 88.6 Violations and Penalties

Proposed § 88.6(a) stated that the Secretary is authorized to assess civil penalties of up to $5.000 per violation of any of the regulations in part 88, and proposed § 88.6(b) stated that each equine transported in violation of the regulations would be considered a separate violation.

Many commenters stated that penalties for violation of the regulations should be criminal instead of civil; otherwise, law enforcement personnel will not be able to enforce them. Some commenters stated that laws must be

enforced at auctions and feedlots, prior to loading. One commenter stated that § 88.6 should provide that a person who knowingly violates the regulations shall, upon conviction, be subject to imprisonment for not more than 1 year or a fine of $5,000, or both, and on conviction of a second or subsequent offense, the person shall be subject to imprisonment for not more than 3 years or to a fine of $8,000, or both.

The statute does not allow the Secretary to establish criminal penalties for violations of the regulations. The statute allows the Secretary to establish and enforce appropriate and effective civil penalties only. As previously explained, the regulations pertain to equines transported to slaughter from any point of loading, including auctions/markets and feedlots.

One commenter stated that shippers should be subject to penalties as prescribed by county, State, or Federal statutes or regulations.

The regulations do not prohibit counties or States from applying penalties in accordance with their regulations if an owner/shipper violates their regulations even if the amount of the penalty is more than that provided in § 88.6(a).

One commenter stated that civil penalties of up to $10,000 rather than $5,000 should be assessed. One commenter stated that if a conveyance carrying a load of equines is found to have a sharp protrusion, a fine of $5,000 per equine in the conveyance seems excessive, especially if an equine that is being transported caused the protrusion by kicking the walls of the conveyance. This commenter stated that a sliding scale should be used that increases the amount of the fine proportional to the seriousness of the violation. This commenter further stated that a sliding scale would help the shipper know exactly what is expected of him/her, ensure that USDA representatives levy the same fines for the same offense, and provide credibility to the USDA during any appeals process. One commenter stated that § 88.6 should provide that civil penalties will be progressive, with the first offense receiving a written warning; the second offense a fine up to $500 per violation; the third offense a fine up to $2,500 per violation; and the fourth or subsequent offense a fine up to the jurisdictional limit. One commenter suggested that we provide for a minimum fine of $500. One commenter suggested that each day a violation occurs should be considered a separate violation.

In § 88.6(a), we state that the Secretary is authorized to assess civil penalties of up to $5,000 per violation. We proposed assessing civil penalties of up to $5,000 per violation based on the legislative history of the statute and our experience as a Federal regulatory agency. We believe that a civil penalty of up to $5,000 per violation is appropriate and will be effective in deterring noncompliance with the regulations. Among other things, this belief is based on our experience in enforcing the Animal Welfare Act as amended (7 U.S.C. 2131 *et seq.*) and the Horse Protection Act, as amended (15 U.S.C. 1821–1831), two other statutes whose purpose is ensuring the humane treatment of animals. The statement concerning each equine transported in violation of the regulations being a separate violation also derives from the statute's legislative history and our experience as a regulatory agency.

We do not believe that we need to include a sliding scale or a minimum fine. The amount of the civil penalty will be determined based on the severity of the violation and the history of the owner/shipper's compliance with the regulations. Procedures will be in place to ensure consistent application of civil penalties. We also do not believe that we need to consider each day that a violation occurs as a separate violation. We believe that considering each equine transported in violation of the regulations as a separate violation is sufficient.

One commenter stated that § 88.6 should provide that a person who assaults, resists, opposes, impedes, intimidates, or interferes with any USDA representative or his/her agent in performing an official duty pursuant to the regulations should be assessed a fine of no less than $1,000 and up to $5,000.

There is a statute that provides protection to all Federal employees (18 U.S.C. 111). The statute prohibits the assault on any Federal employee.

One commenter stated that APHIS should provide that, for any person who fails to pay a civil penalty, the Secretary shall request the Attorney General to institute a civil action in a district court of the United States or other court of the United States for any district in which the person is found, resides, or transacts business, to collect the penalty, and to provide that the court shall have jurisdiction to hear and decide the actions.

If an owner/shipper is unable to pay a civil penalty, we can pursue payment through a payment plan or adjustment of the amount. However, if the case is not settled, a formal complaint may be filed. If a complaint is issued, the case may go to a hearing. If a hearing is held, the matter will be heard and decided by an administrative law judge.

One commenter stated that, to a certain extent, injuries during transport are unavoidable and assessing civil penalties to commercial transporters may not be appropriate. This commenter stated that civil penalties should be designed to ensure compliance with the regulations and not punish an industry for occurrences that are beyond its control.

We understand that some injuries may not be avoidable; however, the purpose of the regulations is to ensure the humane transport of equines to slaughtering facilities. If shippers and owners adhere to this rule, we believe that many of the injuries that equines have suffered in the past will be avoided.

One commenter stated that the regulations do not allow truck drivers to provide grounds for their defense as to how the equines were injured.

USDA will consider a trucker's explanation in determining whether a violation has occurred. However, as stated in the proposal, if adjudication is necessary, it will be conducted pursuant to the USDA's "Uniform Rules of Practice Governing Formal Adjudicatory Proceedings Instituted by the Secretary Under Various Statutes," found at 7 CFR part 1, subpart H(7 CFR 1.130–1.151), and the Supplemental Rules of Practice found at 9 CFR, part 70, subpart B (9 CFR 70.10). The Rules of Practice establish, among other things, the procedures for filing a complaint and a response, settling a case, and holding a hearing. Based on this information, any one who is cited for violating the regulations will be provided an opportunity to present his or her case.

Many commenters stated that enforcement of the regulations may be difficult because we use performance-based standards rather than engineering-based standards. Some of these commenters stated that Congress directed the Secretary of Agriculture to employ "to the extent possible" performance-based standards. One of these commenters stated that USDA tried performance-based standards with § 3.81 of the Animal Welfare regulations regarding primate psychological well-being, which led to confusion among entities that were affected by the regulations.

The conference report states that, to the extent possible, the Secretary is to employ performance-based standards rather than engineering-based standards when establishing regulations to carry out the intent of the statute and that the Secretary is not to inhibit the commercially viable transport of equines to slaughtering facilities. We used performance-based standards

rather than engineering-based standard because they are the least intrusive method of regulating entities and are potentially less burdensome on regulated entities. We will review and evaluate these standards once they are in place. If we determine that changes are necessary, we will publish another document in the **Federal Register** for public comment.

One commenter stated that we will not be able to adequately enforce the regulations because we do not require persons transporting equines to slaughter to register with or apply for a USDA license. This commenter stated that individuals who are not in compliance could be threatened with suspension of their licenses rather than assessment of fines, which could be viewed as the cost of doing business.

We do not believe that registration with or a license issued by APHIS is necessary. We believe that the civil penalties set forth in § 88.6 are sufficient to ensure compliance with the regulations.

One commenter stated that the regulations should provide for suspension of a hauler's carrier certificate, the operator's commercial driver's license (CDL), and the registration of the vehicle involved for not less than 90 calendar days from the date of adjudication upon violations of the regulations. This commenter further stated that the hauler and consignor should be jointly responsible for the maintenance of the animals that were in the vehicle at the time of the seizure at the seizing authority's choice until a proper vehicle is provided for their continued shipment. The commenter also maintained that failure to post a satisfactory bond or to pay the costs involved should result in forfeiture of the vehicle and load to the seizing authority as partial payment for costs incurred by the seizing authority, which should retain all other remedies including civil suits and criminal prosecutions. The commenter also stated that a second violation of the regulations or violation of any other jurisdiction's animal transportation regulations should result in penalties applied per animal in the vehicle, without limit, and that a third violation should result in a minimum 1-year suspension of certificates and CDL per animal in the vehicle.

The statute does not provide the Secretary with the authority to suspend a hauler's carrier certificate, the operator's commercial driver's license, or registration of the vehicle if the operator violates these regulations. In addition, the statute does not give the Secretary authority to seize vehicles. The statute provides the Secretary with the authority to assess only civil penalties for violation of the regulations.

One commenter stated that the regulations do not address how we will determine, other than by checking for a signed, properly timed and dated owner-shipper certificate, that the intentions of the regulations are being met and a violation of the regulations has not occurred. One commenter stated that the proposed regulations were unclear as to what APHIS would do when an owner-shipper certificate appears to be in order but the equines arrive in poor condition or with injuries. Several commenters stated that the regulations should state that any equine arriving in a condition that is noncompliant with the regulations will be considered a violation, regardless of the information on the owner-shipper certificate.

The USDA representative at the slaughtering facility will have access to both the equines and the paperwork accompanying them. If an equine arrives at a slaughtering facility with an injury that was not recorded on the owner-shipper certificate or in a condition that is evidence that the equine was not fit to travel, the owner/shipper may be found in violation of the regulations and may be assessed civil penalties as set forth in § 88.6.

Paperwork Burden

One commenter stated that electronic transmission of the owner-shipper certificate may not decrease the burden because the format must be standardized, and a "hard-copy" must be made to accompany each equine. The commenter stated that the owner-shipper certificate could be in book form that is bound and supplied with a duplicate-style copy so the owner/shipper would have a copy of the certificate that was given to APHIS.

The owner-shipper certificate will consist of a multipart set that will eliminate the need for the owner/shipper to make copies of the form.

One commenter stated that completion of the owner-shipper certificate would take 2 to 3 minutes. Several commenters stated that completion of the owner-shipper certificate will take more than 5 minutes per equine. One of these commenters stated that each equine must be examined thoroughly, in addition to completing the certificate.

The estimated burden was based on discussions with owners and shippers of slaughter horses and the owner/operators of slaughtering facilities. The estimated burden of 5 minutes was only an estimate. We are aware that some individuals may take a little less or a little more time than others to inspect each equine and complete the owner-shipper certificate.

Miscellaneous

One commenter stated that the proposal does not cover equines that belong to slaughtering facilities and that are transferred from a feeding facility owned by the facility to the plant grounds. This commenter stated that the regulations are not clear as to whether owner-shipper certificates are required to ship equines to a feedlot when the equines will be eventually transported for slaughter, and they are not clear as to whether a slaughtering facility has to complete owner-shipper certificates for equines owned by the facility to transport them from its own facilities or ranches to the slaughtering facility.

The regulations pertain to any individual or other entity that fits the definition of the term *owner/shipper*. Therefore, a slaughtering facility would have to complete an owner-shipper certificate and otherwise adhere to the regulations if it moves equines from its own premises, such as a ranch or feedlot, to the slaughtering facility. However, if equines arrive at a slaughtering facility (defined as a commercial establishment that slaughters equines for any purpose) and the facility moves all or some of the equines to its own feedlot or other premises, the slaughtering facility will not have to complete an owner-shipper certificate or otherwise comply with the regulations for that movement. The slaughtering facility must, however, complete an owner-shipper certificate and otherwise comply with the regulations when it transports the equines back to the slaughtering facility.

One commenter stated that mileage calculations that we provided under the "Executive Order 12866 and Regulatory Flexibility Analysis" section of the proposal were based on the assumption that shippers deliver to the closest available plant, which is not always the case. This commenter stated that shippers deliver to the plant where they have their contract or to the plant that is paying the most money. This commenter also stated that the proposal contended that shippers would have to share driving responsibilities with another driver to meet the requirements, but the regulations do not require it.

We believe that barring unusual circumstances, the overwhelming majority of equines arrive at slaughtering facilities in 28 hours or less. As to the use of two different drivers, we stated that drivers of equines that originate at east or west coast

locations could reduce the time equines spent on conveyances considerably by using two different drivers on long trips. However, this scenario was only an example for those drivers who can share driving responsibilities with another driver. If the driver of a conveyance will require more than 28 hours to reach his or her destination, whether alone or with a partner, he or she must abide by § 88.4(b)(3) and offload the equines from the conveyance to provide them with appropriate food, potable water, and the opportunity to rest for at least 6 consecutive hours before reloading them.

One commenter stated that we should require drivers to be certified by APHIS as knowledgeable in equine handling and humane treatment.

We do not believe this is necessary. We believe that the regulations will help ensure the humane movement of equines that are transported to slaughtering facilities. If the equines are not handled or transported as required by the regulations, or if the equines are injured during transport, the owner/shipper may be found in violation of the regulations and assessed a civil penalty. To assist drivers and others in meeting the requirements of the regulations, we are preparing an educational program.

One commenter stated that the regulations should extend to agents of owners and shippers. This commenter suggested, "The act, omission, or failure of an individual acting for or employed by the owner or shipper, within the scope of employment, shall be considered the act, omission, or failure of the owner or shipper as well as that of the individual."

We do not believe that we need to address agents. We believe that we have defined owner/shipper broadly enough to cover anyone transporting equines to slaughtering facilities (except as specifically exempted by the regulations).

One commenter stated that the regulations will result in increased transit time and more frequent loading and unloading of equines, which will increase the possibility of exacerbating existing injuries or creating new ones.

We do not believe that the regulations will result in an increase in transit time or loading and unloading in most cases. As stated in the discussion under "Executive Order 12866 and Regulatory Flexibility Act," officials at two of the U.S. equine slaughtering facilities, including the largest facility, indicated that, barring unusual circumstances, the overwhelming majority of equines already arrive at the slaughtering facilities in 28 hours or less. In cases where transport would take more than 28 hours, we believe the benefits of unloading the equines for rest, food, and water outweigh the disadvantages of unloading and reloading. Also, owners or shippers could locate, in advance, appropriate facilities close to their routes for unloading the equines. In addition, the educational program that we are developing will provide owners and shippers with information on the proper methods for loading and unloading equines from a conveyance to help ensure that injuries to equines do not occur.

One commenter stated that the regulations should apply as minimum standards for all commercial haulers, regardless of the origin or destination of the load. One commenter stated that the regulations seem to state that if an equine is transported to a slaughtering facility, the transportation is given protection by Federal regulations; however, if the animal is transported to some other destination, the transportation can be performed without protection of these regulations.

We are unable to expand the scope of these regulations to include the transportation of equines to any destination other than a slaughtering facility. Congress authorized the Secretary to issue guidelines for the regulation of the commercial transportation of equines for slaughter by persons regularly engaged in that activity. In addition, Congress clarified its intentions with regard to the statute through a conference report. The conference report states, among other things, that the Secretary has not been given the authority to regulate the routine or regular transportation of equines to other than a slaughtering facility.

One commenter stated that conveyances that enter the United States from Canada are sealed by authorities in Canada, and that to meet the requirement that equines must be fed, watered, and offloaded every 28 hours, the seals would have to be broken during transport in the United States to comply with the regulations.

Few equines are transported from Canada into the United States for slaughter purposes. However, if equines are transported from Canada into the United States and must be offloaded in the United States to meet the requirements of part 88, the seals may only be broken by a USDA representative at an approved site for offloading the equines. The owner/shipper must make arrangements with the APHIS office that is nearest to the location where the equines must be offloaded. After the equines have had the prescribed rest, food, and water, the truck will be sealed by the USDA representative and allowed to resume transport to the slaughtering facility.

One commenter stated that we should obtain written agreements from Canada and Mexico to ensure compliance with the regulations for equines moving into those countries for slaughter. One commenter stated that the regulations would allow travel time of 28 hours within the United States and additional travel time after entering Canada. This commenter stated that the regulations should include travel time to the final destination in Canada because the locations of plants in Canada are established.

For equines transported by conveyance from a point inside the United States to a slaughtering facility outside the United States, the regulations end at the border, where the owner/shipper must present the owner-shipper certificates. We do not have jurisdiction over movement of equines outside the United States. Although, we currently do not have an arrangement with Mexico, we have revised the owner-shipper certificate to include a field for a stamp to be administered by Canadian officials at slaughtering facilities in Canada. The stamp will include the time and date of arrival and slaughtering facility. We can use this information to verify the amount of time that equines have been on a conveyance prior to leaving the United States.

One commenter stated that we must provide the public with the findings from USDA-commissioned research so the public can offer comment. Another commenter stated that she could not obtain copies of the research.

Copies of the USDA-commissioned research were and are available from the person listed under **FOR FURTHER INFORMATION CONTACT.**

One commenter stated that an equine first aid kit that includes, among other things, fly spray, rubbing alcohol, and a hoof pick should be on the conveyance. In addition, this commenter stated that at least one fire extinguisher should be on the conveyance and that the driver's ability to use the fire extinguisher should be established by an APHIS inspector.

We do not believe that it is necessary to require an equine first aid kit. If an equine is in physical distress, the owner/shipper is required, in accordance with § 88.4(b)(2), to have an equine veterinarian provide veterinary assistance as soon as possible. Until such assistance is available, the owner/shipper may be the only person in a conveyance, and attempts by the owner/shipper to apply first aid, without assistance, to an injured equine could be

dangerous for the person and the equine. As to a fire extinguisher, the Federal Motor Carrier Safety Administration within the Department of Transportation requires commercial motor vehicles used on a highway in interstate commerce to be equipped with a fire extinguisher when, in short, the gross vehicle has a weight rating or gross combination weight rating, or gross vehicle weight, or gross combination weight, of 4,537 kg (10,001 lb) or more; whichever is greater. We believe that most conveyances used for the commercial transportation of equines to slaughtering facilities meet this weight threshold.

Several commenters stated that a $400 disposal fee should be levied against an owner or shipper for every equine that arrives dead or in an unusable condition to discourage owners from sending downed or dying horses to slaughter. One of these commenters stated that the disposal fee could be used to subsidize long distance shipments of equines that are made at reduced loading density. Two commenters stated that the regulations should establish a per equine fee of $5 to be levied upon an owner who sells an equine to slaughter. One commenter stated that the $5 per equine fee could be used to cover the costs of administering and enforcing the regulations, and another commenter stated that the fee could be used to provide rewards for information leading to documentation of violations of the regulations.

We believe that the regulations will help ensure that equines that are shipped to slaughtering facilities are fit to travel. However, we do not have authority to assess a disposal fee and/or a $5 fee per equine.

One commenter stated that we should not allow dogs to be used to herd equines for breeding.

If someone wishes to use dogs to herd equines into a conveyance, the equines must be handled in a manner that does not violate the regulations, including those in § 88.4(c). In § 88.4, paragraph (c) states that handling of all equines in commercial transportation to a slaughtering facility shall be done in a manner that does not cause unnecessary discomfort, stress, physical harm, or trauma.

One commenter stated that all conveyances that contain live animals should be so labeled and that a toll-free USDA/APHIS telephone number should be displayed for the public to call if a vehicle is operating in an unsafe manner or a dangerous or inhumane treatment is witnessed.

We do not believe that we should require a conveyance to be labeled as containing live equines or to display a toll free USDA/APHIS telephone number. Many conveyances transport equines for purposes other than to slaughtering facilities, and the Secretary has not been given the authority to regulate the routine or regular transportation of equines to other than a slaughtering facility. However, if someone witnesses inhumane treatment, we encourage the person to contact the nearest APHIS office or the proper local authorities. In addition, if a vehicle is operating in an unsafe manner, especially if human safety is threatened, the proper local law enforcement authorities should be contacted.

One commenter stated that individuals who transport equines to veterinary facilities for treatment should be exempt from the regulations that pertain to the health of the equines that are hauled.

The regulations do not pertain to the transport of equines to veterinary facilities, only to the transport of equines to slaughtering facilities.

One commenter stated that USDA does not have a program to identify stolen equines that arrive at slaughtering facilities.

APHIS will require an owner-shipper certificate for each equine that is transported to a slaughtering facility. The USDA representative at the slaughtering facility will collect the certificates. In addition, the owner/shipper must maintain a copy of the certificate for 1 year. We will maintain information from the completed certificates in a database that can help us trace lost or stolen equines.

One commenter stated that proficiency testing (written and skills) for those engaged in the commercial transport of equines should be required because it is impossible to determine whether the persons targeted (e.g., drivers of the conveyances) are reading and understanding the educational materials. One commenter stated that an educational component should be included in the regulations to ensure that all affected parties are informed of the new regulations. One commenter stated that APHIS must put effort toward educating inspectors at feedlots, assembly points, or stockyards because shippers and owners already know how to properly transport equines.

We do not think that a proficiency test is necessary. We are developing an educational program that will include a video, guidebook, and workshops. The program will be directed towards owners, shippers, and others in the equine slaughtering industry. We will also provide opportunities for individuals who work at feedlots, assembly points, and stockyards to participate in the educational program.

Several commenters expressed concern that burdensome regulations in the United States may lead to an increase in the shipment of livestock to countries where animal welfare is not a consideration. One of these commenters and others stated that the regulations are not necessary and that effective enforcement of existing laws is necessary. One of these commenters stated that safeguards already exist for the humane treatment of equines prior to slaughter. One commenter stated that imposing additional humane shipping conditions on the industry will decrease profits by increasing transportation costs.

Until this final rule becomes effective, no specific standards exist that address the needs of equines transported to slaughtering facilities. We believe that the regulations are the minimum standards to ensure the humane movement of equines to slaughtering facilities via commercial transportation. If equines are transported by conveyance from a point inside the United States to a slaughtering facility outside the United States, the owner/shipper will be required to meet the requirements of the regulations until the conveyance reaches the U.S. border. In addition, this rule allows us to assess civil penalties for those individuals who are not in compliance.

Under the heading, "Executive Order 12866 and Regulatory Flexibility Act," we estimate that this rule will increase operating costs for owners and commercial shippers who transport equines to slaughtering facilities by an amount somewhere between $300 and several thousand dollars annually for an entity that transports 500 equines per year. However, we added that the data suggested that the economic consequences for most entities would fall somewhere near the minimum point on the impact scale because many entities are already in compliance with at least some of the rule's provisions.

One commenter stated that the USDA does nothing to prevent the shipment of diseased animals for human consumption.

FSIS has regulations that provide for the antemortem and postmortem examination of equines to ensure that equines with certain diseases are not slaughtered or used for the purposes of human consumption.

One commenter stated that all horses shipped for slaughter should have a negative Coggins test performed within 6 months of transport due to possible zoonosis and also because horses are transported near highways and pass

horses on private farms and could pose a disease risk. One commenter stated that Coggins tests are required for horses that enter or exit Pennsylvania.

A Coggins test is the common name for the agar gel immunodiffusion test used for the diagnosis of equine infectious anemia (EIA). The purpose of this rule is to provide for the humane transport of equines to slaughtering facilities. Other regulations are concerned with the potential transmission of disease, including 9 CFR part 75, which restricts the interstate movement of horses that are positive to a test for EIA. Also, all States require a Coggins test for equines entering the State. At this time, there is no evidence that EIA can be contracted by humans through the consumption of meat from an equine infected with EIA. However, equines infected with EIA are not allowed to be used for human consumption. The transmission of EIA infection from equines on a conveyance to equines on farms that are passed by the conveyance is a low risk and highly unlikely because a number of factors have to be present, such as presence of tabanidaes (horse flies) and high viremia in the infected equine.

Several commenters stated that all meetings regarding the statute were not open to all interested parties. One commenter stated that, contrary to the statements in the proposal, consensus was not reached on the proposed regulations, and certain humane organizations opposed the regulations.

We did not state in the proposed rule that the proposal was a consensus-based document. We stated that, prior to drafting the proposed rule, APHIS representatives established a working group that included participants from other parts of the USDA, including FSIS and the Agricultural Marketing Service. In addition, APHIS attended two meetings regarding the statute that were hosted by humane organizations and attended by representatives of the equine, auction, slaughter, and trucking industries and the research and veterinary communities. At these meetings, we had an opportunity to listen to diverse opinions. We have relied on the proposed rule and public comment period to obtain comments from all interested persons.

One commenter stated that APHIS should remove "minimum" in the summary in reference to the standards to ensure the humane movement of equines to slaughtering facilities. This commenter also added that the summary should be revised to state "humane movement and treatment of equines to slaughtering facilities via commercial transportation."

The summary only serves as a brief description of the document and is not intended to prove a point or argue a case.

Two commenters stated that proposed rules should be made available to everyone, and one commenter stated that APHIS should disclose them to the media, especially the press.

All proposed rules are published in the **Federal Register**, which satisfies the legal requirements to notify the public. In addition, APHIS makes all of its proposed rules available on the Internet at *http://www.aphis.usda.gov/ppd/rad/webrepor.html* and advises various media through distribution of press releases.

Two commenters stated that they must pay taxes on transactions that involve horses, but entities involved in the transportation of horses to slaughter, including slaughtering facilities, do not. Many commenters stated that they were opposed to the slaughter of equines. One commenter stated that, rather than slaughter horses, zoos should be established or States zoned to hold the horses. These comments are outside the scope of this rulemaking.

Therefore, for the reasons given in the proposed rule and in this document, we are adopting the proposed rule as a final rule, with the changes discussed in this document. In addition, we are making minor, nonsubstantive, editorial changes in the rule for clarity.

Executive Order 12866 and Regulatory Flexibility Act

This rule has been reviewed under Executive Order 12866. The rule has been determined to be significant for the purposes of Executive Order 12866 and, therefore, has been reviewed by the Office of Management and Budget.

In accordance with 5 U.S.C. 604, we have performed a final regulatory flexibility analysis for this rule, which is set out below. Our discussion of the anticipated economic effects of this rule on small entities also serves as our cost-benefit analysis under Executive Order 12866.

This rule is intended to fulfill a responsibility given to the Secretary of Agriculture in the 1996 Farm Bill. Sections 901–905 of the 1996 Farm Bill (7 U.S.C. 1901 note) authorize the Secretary of Agriculture, subject to the availability of appropriations, to issue guidelines for the regulation of the commercial transportation of equines for slaughter by persons regularly engaged in that activity within the United States. In both fiscal years 1998 and 1999, $400,000 was made available to administer this law. The regulations, which appear as a new part in title 9 of the CFR, are designed to help ensure the humane transport of equines to slaughtering facilities. The regulations cover, among other things, food, water, and opportunity for rest; space on the conveyance; segregation of stallions and other aggressive equines; completion of an owner-shipper certificate; and prohibitions on the movement of certain types of equines as well as on the use of electric prods and conveyances with animal cargo spaces divided into more than one stacked level.

This rule pertains almost exclusively to the commercial transportation of slaughter horses because horses account for almost all equines slaughtered in the United States. Equines are generally slaughtered for their meat, which is sold for human consumption, primarily outside the United States. From 1995 through 1997, an average of 100,467 equines were slaughtered annually in federally inspected U.S. slaughtering facilities. At the current time, there are three slaughtering facilities that accept equines in the continental United States: Two are located in Texas (Ft. Worth and Kaufman), and one is in Illinois (DeKalb). In 1996, the United States exported 38 million pounds of horse, ass, and mule meat, with a value of $64 million. Of the total volume exported in 1996, 29 million pounds, or 76 percent, was exported to Belgium and France. Slaughter equines represent a variety of types, and they come from a variety of sources, including working ranches, thoroughbred racing farms, and pet owners. Equines are usually slaughtered when they are unfit or unsuitable for riding or other purposes.

Economic Effects of the Rule on Owners and Commercial Shippers

The "path" from source supplier (farmer, rancher, pet owner, etc.) to slaughtering facility can vary. However, the most common scenario and the one used for the purpose of this analysis is as follows: The source suppliers transport their equines to local auction markets, where the equines are sold to persons who purchase the equines for the specific purpose of selling them to a slaughtering facility. (Hereafter, for the purposes of this final regulatory flexibility analysis, we will refer to persons who sell equines for slaughter as "owners"; however, in some cases, the owners use agents to conduct some aspect of the business of purchasing the equines and transporting and selling them to slaughtering facilities. We will use the term "owners" to refer to either the actual owners or their agents.) The owners consider price lists published by the slaughtering facilities for equines (the price varies in relation to the

weight of the equine and the quality of the meat), transportation costs, and profit requirements to establish the maximum prices that they will pay for equines at local auctions. Because the owners cannot usually purchase enough slaughter-quality equines at any one auction to make it economically feasible to ship the equines directly from the auction site to the slaughtering facility, the owners transport the equines back to their own farms or feedlots, usually nearby, where the equines are stored until such time as the owners can accumulate more equines from other auctions. Double-deck livestock trailers, which are the types most often used for transporting equines to slaughtering facilities, can carry up to about 45 equines each; single-deck trailers can carry up to about 38 equines each.

When enough equines have been accumulated to comprise a shipment, the owners transport the equines to the slaughtering facility. Although owners who ship 2,000 or more equines to slaughter per year are not uncommon, most owners ship far fewer than that number. In an estimated 75 percent of the cases, owners hire commercial shippers to move the equines to the slaughtering facilities; in the remaining estimated 25 percent of the cases, owners transport the equines to slaughter in their own conveyances. Therefore, the regulations will apply both to owners of equines destined for slaughter and to commercial shippers who transport such equines to slaughtering facilities. We estimate that approximately 200 owners and commercial shippers will be affected by this rule. Based on the average number of equines slaughtered in the United States per year (approximately 100,000) and on the estimated number of potentially affected owners and commercial shippers (approximately 200), the average number of equines transported annually to slaughter per affected entity would be 500.

This rule will require that, for a period of not less than 6 consecutive hours immediately prior to the equines being loaded on the conveyance, each equine be provided access to food and water and the opportunity to rest. As indicated above, the owners generally have possession of the equines immediately prior to their being loaded onto conveyances for transport to slaughtering facilities. In those cases where the owners hire commercial shippers, the latter do not take possession of the equines until they are loaded onto the conveyance. Furthermore, when commercial shippers are hired, they are normally not in the presence of the equines for the full 6-hour period prior to loading. For these reasons, it can be assumed that the owners, not commercial shippers, would be responsible for fulfilling the preloading requirements of this rule. In addition, the owners are more likely than commercial shippers to have the facilities necessary to meet the preloading requirements.

This requirement is unlikely to impose a hardship on affected entities. While in the possession of the owners, equines are usually housed on farms or in feedlots, where they have access to food, water, and rest. Owners have an incentive to provide equines awaiting transport to a slaughtering facility with food, water, and rest because malnourished equines have a reduced slaughter value and dead equines have no slaughter value. Furthermore, most equines are stored on farms or in feedlots for 6 consecutive hours or more because it usually takes at least that long for owners to accumulate enough equines to fill a conveyance. At most, the rule would result in owners having to keep their equines in a farm or feedlot for an additional 6 hours to fulfill the preloading requirements for the last equines needed to fill a conveyance. This worst-case scenario assumes that the "last-in" equines have not had the required preloading services prior to their acquisition by the owners. If the last-in equines have had those services, then the owners would be able to load them onto the conveyance immediately. For example, owners might be able to stop at an auction en route to a slaughtering plant and pick up their last-in equines.

We cannot estimate the precise dollar effects of this requirement because no hard data is available on the prevalence of slaughter equines receiving the required food, water, and rest prior to loading. However, for the reasons stated above, the economic effects would be minimal. Storing equines in feedlots costs about $2 per day per animal. (This amount is the typical rental rate for a pen, which includes food and water.) If an owner had to store a truckload of equines (assume 38) for a full day, the cost would be $76. The cost for storing 500 equines (the estimated average number of equines shipped annually to slaughter per affected entity) would be $1,000.

This rule will require that owners or commercial shippers sign an owner-shipper certificate for each equine being transported to a slaughtering facility. Among other things, the owner-shipper certificate will include a statement that the equine has received the required preloading services. If, as a result of this requirement, commercial shippers load fewer equines per conveyance, the shippers should not be affected because they typically charge owners a flat rate to transport equines to slaughtering facilities regardless of the number of equines on the conveyance. For owners who use their own vehicles for transportation, fewer equines per conveyance translates into increased costs. As an example, assume that it costs an owner $1,850 ($1.85 per mile—a representative average rate for commercial shipment of slaughter equines—times 1,000 miles) to transport a truckload of equines in the person's own conveyance. Assume also that, as a result of this rule, the owner could ship only 35 equines in a particular shipment, 3 fewer than the 38 that would have been shipped had the rule not been in effect. Using that data, the owner's transportation costs on a per-equine basis for that particular shipment would increase by 8.6 percent, from $48.68 to $52.86. The owner would incur similar costs if the owner secured the services of a commercial shipper.

This rule will require that any equine that has been on the conveyance for 28 consecutive hours or more without food, water, and the opportunity to rest be offloaded and, for at least 6 consecutive hours, provided with food, water, and the opportunity to rest. This rule will also require that each equine be provided with enough space on the conveyance to ensure that no animal is crowded in a way likely to cause injury or discomfort. Finally, this rule will require that stallions and other aggressive equines be segregated from each other and all other equines on the conveyance.

Available data suggest that the "28-hour rule" should not pose a problem for the vast majority of slaughter equine transporters. Officials at two of the U.S. equine slaughtering facilities, including the largest facility, indicate that, barring unusual circumstances, the overwhelming majority of equines arrive at the slaughtering facilities in 28 hours or less. Indeed, there is reason to believe that few equines actually fit the "worst-case" scenario in terms of travel distance—equines transported from the east or west coasts to the slaughtering facilities, which are all located in the central part of the United States. Equines on the east coast, at least from the State of Maryland northward, as well as those on the west coast and in the States of Montana and Idaho, are usually transported to Canadian slaughtering facilities. (For example, the slaughtering plant at Massueville, Quebec, is about 100 miles from the port of entry at Champlain, NY. For transporters in the northeastern part of

the United States, the Massueville plant is closer than any of the U.S. plants.) Furthermore, even for equines that do originate at east and west coast locations, the time spent on conveyances is reduced considerably by the common transport practice of using two different drivers on long trips. This practice allows the equines to be transported virtually nonstop because one person can drive while the other rests, thereby avoiding federally mandated rest periods that apply in a single-driver situation. Assuming an average speed of 55 mph and two different drivers, and allowing 1½ hours for loading and 2 hours for refueling and meal stops, even a trip as long as 1,300 miles would take only about 27 hours.

If equines do have to be offloaded for feeding, rest, etc., while en route to a slaughtering facility, transporters would incur additional costs. As stated previously, pens can generally be rented at a rate of about $2 per day per equine. (The rent for a 6-hour period is unknown but, presumably, it would be less than the full-day fee.) In addition to the pen rental fee, transporters would have to spend time unloading the equines. Also, they may have to: (1) Adjust routes and schedules to find pens to accommodate the equines; (2) wait while they are being serviced; and (3) reload them after they have been serviced. These activities would add to the cost of servicing equines at intermediate points.

This rule will also require that, during transport, equines must be provided with enough space to ensure that they are not crowded in a way that is likely to cause injury or discomfort. One source of injury and discomfort, double-deck trailers, will be banned in 5 years. (See "Alternatives Considered," below, for a discussion of why we selected a 5-year phase-in period rather than a shorter time.) Overcrowding can also occur in single-deck (also called straight-deck) trailers, which are used to transport equines to a lesser extent than double-deck trailers. The requirement concerning adequate space could translate into fewer equines per conveyance. As stated previously, commercial shippers typically charge owners a flat rate to transport their equines, so the possibility of fewer equines per shipment should not result in less revenue for commercial shippers. For owners, however, fewer equines per conveyance translates into increased costs, regardless of whether the owners hire commercial shippers or use their own vehicles for transportation.

The requirement that aggressive equines be segregated during transport is not likely to have a significant impact. Available data suggests that such segregation is already common practice. Owners have an incentive to make sure that aggressive equines are segregated because equines that arrive at the slaughtering facilities injured as the result of biting and kicking en route command lower market values. The segregation of equines requires that transporters spend more time and effort during loading, but that added time and effort is considered to be relatively minor. Nor should most transporters have to buy special equipment, because livestock trailers usually come equipped with devices, such as swing gates, that permit animal segregation. As a final point in this regard, relatively few stallions are transported for slaughter. USDA personnel stationed at two of the slaughtering facilities estimate that no more than about 5 percent of the equines arriving for slaughter are stallions.

This rule will require that an owner-shipper certificate be completed for each equine prior to departing for the slaughtering facility. The certificate must describe, among other things, the equine's physical characteristics (color, sex, permanent brands, etc.), and it must show the number of the animal's USDA backtag. It must also certify the equine's fitness to travel and note any special care and handling needs during transit (e.g., segregation of stallions). An equine will be fit to travel if it: (1) Can bear weight on all four limbs; (2) can walk unassisted; (3) is not blind in both eyes; (4) is older than 6 months of age; and (5) is not likely to give birth in transit. Affected entities will not need the services of a veterinarian in order to make the fitness-to-travel determination. This rule will require that either the owners or the commercial shippers sign the certificate and that the owner-shipper certificate accompany the equine to the slaughtering facility.

This requirement for an owner-shipper certificate will create additional paperwork for both owners and commercial shippers. As with the other preloading services discussed above, it is reasonable to assume that the responsibility for providing the data on the certificate will generally rest with the owners, not the commercial shippers. The owners have possession of the equines prior to departing for the slaughtering facility and presumably are more qualified to provide the data required by the owner-shipper certificate. It is also reasonable to assume that the responsibility for obtaining and installing the USDA backtag will be theirs, not the commercial shippers. The owners will not incur a cost for obtaining the backtags, which are available free of charge from a variety of sources. The backtags are adhesive and are attached simply by sticking them on the equine's back, so owners will not incur installation costs.

The added administrative costs that owners will incur as a result of having to complete and sign the owner-shipper certificate is difficult to quantify. Assuming that it takes 5 minutes to complete each certificate, an owner who ships 500 equines to slaughter annually will have to spend about 42 hours per year complying with the rule. Assuming a labor rate of $7 per hour, the 42 hours translates into added costs of about $300 per year. For reasons explained earlier, the added administrative costs for commercial shippers will likely be less than those for owners.

This rule will allow the use of electric prods only in life-threatening situations and will prohibit the transport of equines to slaughter on conveyances divided into more than one level, such as double-deck trailers, 5 years after publication of this final rule. The restriction on the use of electric prods should not pose a burden because effective, low-cost substitutes are available for use in non-life-threatening situations. For example, fiberglass poles with flags attached, which cost only about $5 each, are considered to be an effective alternative to electric prods. Any current use of electric prods by transporters of slaughter equines probably derives from the traditional use of these devices to assist in moving other livestock, such as cattle and swine.

The retail cost of a new double-deck livestock trailer averages about $42,000; single-deck trailers retail for about $38,000 each. The cost varies depending largely on the model, type of construction, and optional features. The useful life of the trailers also varies, depending on such factors as the weight and type of animals hauled and the needed frequency of cleaning. It is not uncommon, however, for trailers of both types to provide 10 to 12 years' worth of useful service.

As discussed previously, double-deck trailers can carry more equines than single-deck trailers, and some owners and shippers will be negatively affected by the reduction in the numbers of equines that could be transported in a single conveyance. Upon publication of this rule, shippers using floating-deck trailers to transport equines to slaughtering facilities will need to collapse the decks so that they create only one level. Conveyances divided permanently into more than one stacked

level can be, and are, also used to transport commodities other than equines, including livestock and produce. In fact, it is estimated that double-deck trailers in general carry equines no more than about 10 percent of the time they are in use. Upon effect of the ban, commercial shippers who transport equines to slaughtering facilities could use their double-deck trailers to transport other livestock and produce. Owners who use their own double-deck trailers to transport equines to slaughtering facilities will have to find another use for the equipment or trade them for single-deck trailers. Owners should be able to sell their serviceable trailers at fair market value to transporters of commodities other than equines. Furthermore, some of the double-deck trailers now in use by owners will need to be taken out of service within the next 5 years anyway as the result of normal wear and tear and could be replaced by single-deck trailers.

In conclusion, we do not anticipate that any of the requirements will have undue onerous economic effects on any affected owners or commercial shippers. We believe that many transporters of slaughter equines may already be in compliance with many of the requirements. The requirement for an owner-shipper certificate will affect all transporters of slaughter equines, but we have designed the form to make its preparation as easy as possible. We do not believe that the completion and maintenance of these certificates will be unreasonably time-consuming or burdensome. As stated previously, the proposed "28-hour rule" should not pose a problem for the vast majority of slaughter equine transporters, and the ban on double-deck trailers should not have a significant economic effect on owners or commercial shippers because these trailers can be used for other purposes and will need to be replaced anyway within the next 5 years and could be replaced with a single-deck trailer.

At a minimum, the rule will require that affected owners and commercial shippers complete an owner-shipper certificate, an administrative task that they do not have to perform now. For an entity that transports 500 equines per year, the average for all potentially affected entities, the requirement regarding owner-shipper certificates will translate into added costs of about $300 annually. In a worst-case scenario, the rule can add several thousand dollars to the annual operating costs of an entity that transports 500 equines per year. This worst-case scenario assumes that, at the current time, affected owners and commercial shippers are engaging in little or no voluntary compliance with the requirements.

Economic Effects of the Rule on Horse Slaughtering Facilities

Up to this point, the discussion in this final regulatory flexibility analysis has centered entirely on owners and commercial shippers, who represent the bulk of the entities affected by this rule. However, the rule will also impact the three horse slaughtering facilities currently operating in the continental United States. While the deferral of the effective date for the prohibition on double-deck trailers will allow them time to respond to the expected decline in the number of transporters willing to haul horses to slaughter, these slaughtering facilities will nonetheless be affected because they will experience lost business as a result of that expected decline. Some transporters will choose to keep their double-deck trailers and carry other commodities (*i.e.*, other than equine) because in their locations it is more lucrative for them to do so. Other transporters will likely find that it is not cost effective to haul horses long-distance in conveyances that have a smaller capacity, i.e., straight-deck and goose-neck trailers.

The slaughtering facilities will also experience increased hauling costs over time, because transporters that continue to ship horses to slaughter will be forced to do so in smaller conveyances. The hauling cost that slaughtering facilities pay to acquire each horse will increase, because the number of horses per load (being hauled the same distance) will be reduced but the hauling cost per load will remain the same. Officials at one U.S. slaughtering facility indicate that commercial shippers currently charge a hauling fee of $1.65 per mile if they have a return load, and $2.25 per mile if they return empty, regardless of the type of conveyance used. For a trip of 1,000 miles at $1.65 per mile, the facility's hauling cost per horse is $36.67 with a double-deck trailer and $43.42 with a straight-deck trailer, an increase of $6.75 or 18 percent per horse.[2] For each lot of 1,000 horses delivered to the slaughtering facility, the per horse cost increase of $6.75 translates into increased costs of $6,750.

Economic Effects on Small Entities

The Regulatory Flexibility Act requires that agencies consider the economic effects of rules on small entities (i.e., businesses, organizations, and governmental jurisdictions). As discussed above, the entities that will be affected by this rule are owners and commercial shippers who transport equines to slaughtering facilities and the slaughtering facilities themselves.

As stated previously, we estimate that approximately 200 entities will be affected by this rule, most of whom are owners and commercial shippers. Although the sizes of these entities are unknown, it is reasonable to assume that most are small by U.S. Small Business Administration (SBA) standards. This assumption is based on composite data for providers of the same and similar services in the United States. In 1993, there were 30,046 U.S. firms in Standard Industrial Classification (SIC) 4213, a classification category comprising firms primarily engaged in "over-the-road" trucking services, including commercial shipping. The per-firm average gross receipts for all 30,046 firms that year was $2.6 million, well below the SBA's small-entity threshold of $18.5 million. Similarly, in 1993, there were 1,671 U.S. firms in SIC 5159, a classification category that includes horse dealers. Of the 1,671 firms, 97 percent had fewer than 100 employees, the SBA's small-entity threshold for those firms.

This rule will result in increased costs for affected entities, large and small. As indicated above, operating costs will increase somewhere between about $300 and several thousand dollars annually for an entity that transports 500 equines per year. However, the available data suggests that, for most entities, the economic consequences will fall somewhere near the minimum point on the impact scale because, as stated previously, many are already in compliance with at least some of the rule's provisions, such as stallion segregation. Because we did not have enough data to conclude that even a cost increase of as low as $300 annually will not be significant for most of the potentially affected entities, we requested public comment on the potential economic impact of the proposal on small entities.

We received several comments regarding the initial regulatory flexibility analysis.

One commenter stated that the effect of the rule is so minimal that the small entities are the "winners" at an impact of $300 per year or $25 per month. Another commenter stated that APHIS put more emphasis on not creating financial hardship for the entities involved than on what Congress mandated regarding the humane transport of equines to slaughter.

We believe that these regulations will help ensure the humane movement of

[2] This assumes 45 horses on a double-deck trailer and 38 horses on a single-deck trailer.

equines to slaughtering facilities via commercial transportation. However, we do not believe that small entities are not affected. In fact, in the discussion under the heading, "Executive Order 12866 and Regulatory Flexibility Act," we stated that the regulations would have a negative economic effect on affected entities, large and small. We determined that operating costs would increase somewhere between about $300 and several thousand dollars annually for an entity that transports 500 equines per year, which would be a negative impact on these entities. However, we stated that, for most entities, the economic consequences of the regulations would fall somewhere near the minimum point on the impact scale because many entities are already in compliance with at least some of the requirements in part 88.

One commenter stated that the number of affected entities was understated because certain entities were not counted. Commercial airlines; air and sea cargo carriers; vendors that supply packing plants; feed manufacturers; and suppliers of veterinary supplies and medications were among the entities the commenter cited.

We stated above that the entities that would be affected by this rule were owners and commercial shippers who transport equines to slaughtering facilities and the slaughtering facilities themselves. These are the primary entities that would be directly affected by this rule. It is possible that these regulations may indirectly affect other entities, including commercial airlines, vendors, and feed manufacturers; however, these entities are not directly affected by this rule, and this rule should not have a significant economic effect on them.

Alternatives Considered

The Regulatory Flexibility Act requires Federal agencies promulgating new regulations to consider alternatives that will lessen the economic effects of the regulations on affected small entities. In developing the proposed rule, we considered many alternatives, some of which are discussed below. In developing the proposed program to carry out the statute, we established a working group that included participants both from within the agency as well as from other parts of USDA, including FSIS and AMS. In addition, APHIS representatives attended two meetings about the statute hosted by humane organizations and attended by representatives of the equine, auction, slaughter, and trucking industries and the research and veterinary communities.

We considered requiring that owners and commercial shippers of equines destined for slaughter secure the services of a veterinarian to certify the equines' fitness for travel. However, this rule allows owners and commercial shippers to certify the equines' fitness to travel themselves. In addition, we considered various alternatives with regard to the types of equines that would be prohibited from shipment. After much consideration, we are prohibiting the shipment of equines that are unable to bear weight on all four limbs, unable to walk unassisted, blind in both eyes, less than 6 months of age, and likely to give birth during shipment. We believe that we must prohibit the shipment to slaughter of equines in these five categories to carry out congressional intent under the statute for ensuring the humane transport of equines for slaughter. In addition, we considered many allowable time frames for equines to be on conveyances without access to food and water; the proposed 28-hour period is based on available data and input from interested and potentially affected parties. Finally, in regard to the prohibition on the transport of slaughter equines in any type of conveyance divided into more than one stacked level, we determined that such a ban is necessary to ensure the humane transport of equines to slaughtering facilities. However, this rule would allow the use of double-deck trailers for a period of 5 years following publication of this rule to lessen the effect of the ban on affected entities.

The Regulatory Flexibility Act also requires that Federal agencies consider the use of performance-based rather than design-based standards. In keeping with this requirement and the direction provided in the conference report to employ performance-based rather than engineering-based standards to the extent possible, the requirements included in the proposed rule are primarily performance-based. As examples, the rule's requirements for design of the conveyance, space allotted per equine on the conveyance, and manner of driving the conveyance are all performance-based.

For this rule, we also considered establishing the effective date of the ban on double-deck trailers at various points of time in the future, ranging from 6 months to 10 years after the rule's publication. We chose a 5-year effective date because we believe it provides a strategy for steadily improving the welfare of equines transported to slaughter. For reasons discussed below, a shorter period could have an onerous impact on the slaughter horse industry and result in unintended consequences for equines.

As discussed above, hauling costs for slaughtering facilities will increase as a result of owners and commercial shippers using smaller conveyances, and to the extent that the transition to a new single-deck system results in more trips at the higher, empty backhaul rate. In this regard, slaughtering facility officials believe that transporters who decide to continue shipping horses in the new single-deck environment will need time to find markets or customers with alternative products to haul, thereby avoiding empty backhauls and saving the facilities money. As indicated above, transporters charge one slaughtering facility a hauling fee of $1.65 per mile if they have a return load and $2.25 per mile if they return empty. For one trip of 1,000 miles, the savings for that facility would be $600 if the transporter is able to secure a return load. For 100 trips, the savings would be $60,000.

Slaughtering facility officials believe that they also need a deferral of the effective date for the prohibition on double-deck trailers to allow them time to respond to the expected decline in the number of transporters willing to haul horses to slaughter. Specifically, they have stated that they need time to budget and to arrange for financing on equipment they may need to acquire if they must haul horses on their own because commercial shippers and owners will not. The largest facility currently owns two tractors and one straight-deck trailer and estimates that it would have to acquire about 10 additional tractor trailers in order to do all of its own hauling. One new tractor costs approximately $100,000, and one new single-deck trailer costs approximately $38,000.

Officials at one slaughtering facility believe that, because the profit margin for their operation is already very thin (due in part to the financial burden imposed by the new European Union Additional Residue Testing Program), the facility could not make the transition to single-deck trailers in 6 months.[3] However, the same officials believe that, with a gradual transition,

[3] The European Union established Maxxam Laboratory, Inc. (Maxxam) in Canada as the North American residue testing facility. Maxxam charged the horse slaughter facilities in the United States $130,000 start-up costs; as a direct result, one facility, Central Nebraska Packing in North Platte, NE., closed its operation. The three facilities in Canada in direct competition with the U.S. facilities are subsidized by the Canadian government for both start-up and future testing fees. This places the U.S. facilities at a financial disadvantange with their Canadian competitors.

over a 5-year period, they would be able to plan accordingly and the facility might survive. They point out that their facility, which generates export sales exclusively, may be forced to close regardless of the time frame imposed by this rule, but the facility's chances of remaining open would be substantially improved with a 5-year phase-in.

If the facility closes, we believe it likely that horses in the United States that are intended for slaughter will be trucked to feedlots in Canada or Mexico, ostensibly as saddle horses, then go to slaughter. If that happens, we will have no jurisdiction over those movements because our statutory authority to regulate is limited to the commercial transportation of horses to slaughter and to movements to slaughter within the United States. Thus, a critical factor in our decision to use a 5-year time frame for the ban on double-deck trailers is our belief that if the rule has too great an impact on horse slaughtering facilities in the United States, our rule will not provide equines transported to slaughter the protection that we intend.

The information collection and recordkeeping requirements contained in this rule were described in the proposed rule and have been approved by the Office of Management and Budget. See "Paperwork Reduction Act," below.

Executive Order 12372

This program/activity is listed in the Catalog of Federal Domestic Assistance under No. 10.025 and is subject to Executive Order 12372, which requires intergovernmental consultation with State and local officials. (See 7 CFR part 3015, subpart V.)

Executive Order 12988

This final rule has been reviewed under Executive Order 12988, Civil Justice Reform. This rule: (1) Preempts all State and local laws and regulations that are in conflict with this rule; (2) has no retroactive effect; and (3) does not require administrative proceedings before parties may file suit in court challenging this rule.

Paperwork Reduction Act

In accordance with section 3507(d) of the Paperwork Reduction Act of 1995 (44 U.S.C. *et seq.*), the information collection or recordkeeping requirements included in this final rule have been approved by the Office of Management and Budget (OMB). The assigned OMB control number is 0579–0160.

List of Subjects

9 CFR Part 70

Administrative practice and procedure.

9 CFR Part 88

Animal welfare, Horses, Penalties Reporting and recordkeeping requirements, Transportation.

Accordingly, we are amending 9 CFR, chapter I, subchapter C, as follows:

PART 70—RULES OF PRACTICE GOVERNING PROCEEDINGS UNDER CERTAIN ACTS

1. The authority citation for part 70 is revised to read as follows:

Authority: 21 U.S.C. 111, 112, 114a, 114a–1, 115, 117, 120, 122, 123, 125–127, 134b, 134c, 134e, and 134f; 7 CFR 2.22, 2.80, 371.4.

2. In § 70.1, the list of statutory provisions is amended by adding at the end of the list the following:

§ 70.1 Scope and applicability of rules of practice.

* * * * *

Sections 901–905 of the Federal Agriculture Improvement and Reform Act of 1996 (7 U.S.C. 1901 note).

* * * * *

3. A new part 88 is added to read as follows:

PART 88—COMMERCIAL TRANSPORTATION OF EQUINES FOR SLAUGHTER

Sec.
88.1 Definitions.
88.2 General information.
88.3 Standards for conveyances.
88.4 Requirements for transport.
88.5 Requirements at a slaughtering facility.
88.6 Violations and penalties.

Authority: 7 U.S.C. 1901, 7 CFR 2.22, 2.80, 371.4.

§ 88.1 Definitions.

The following definitions apply to this part:

APHIS. The Animal and Plant Health Inspection Service of the U.S. Department of Agriculture.

Commercial transportation. Movement for profit via conveyance on any highway or public road.

Conveyance. Trucks, tractors, trailers, or semitrailers, or any combination of these, propelled or drawn by mechanical power.

Equine. Any member of the *Equidae* family, which includes horses, asses, mules, ponies, and zebras.

Euthanasia. The humane destruction of an animal by the use of an anesthetic agent or other means that causes painless loss of consciousness and subsequent death.

Owner/shipper. Any individual, partnership, corporation, or cooperative association that engages in the commercial transportation of more than 20 equines per year to slaughtering facilities, except any individual or other entity who transports equines to slaughtering facilities incidental to his or her principal activity of production agriculture (production of food or fiber).

Owner-shipper certificate. VS Form 10–13,[1] which requires the information specified by § 88.4(a)(3) of this part.

Secretary. The Secretary of Agriculture.

Slaughtering facility. A commercial establishment that slaughters equines for any purpose.

Stallion. Any uncastrated male equine that is 1 year of age or older.

USDA. The U.S. Department of Agriculture.

USDA backtag. A backtag issued by APHIS that conforms to the eight-character alpha-numeric National Backtagging System and that provides unique identification for each animal.

USDA representative. Any employee of the USDA who is authorized by the Deputy Administrator for Veterinary Services of APHIS, USDA, to enforce this part.

§ 88.2 General information.

(a) State governments may enact and enforce regulations that are consistent with or that are more stringent than the regulations in this part.

(b) To determine whether an individual or other entity found to transport equines to a slaughtering facility is subject to the regulations in this part, a USDA representative may request from any individual or other entity who transported the equines information regarding the business of that individual or other entity. When such information is requested, the individual or other entity who transported the equines must provide the information within 30 days and in a format as may be specified by the USDA representative.

§ 88.3 Standards for conveyances.

(a) The animal cargo space of conveyances used for the commercial transportation of equines to slaughtering facilities must:

(1) Be designed, constructed, and maintained in a manner that at all times protects the health and well-being of the equines being transported (e.g., provides

[1] Forms may be obtained from the National Animal Health Programs Staff, Veterinary Services, APHIS, 4700 River Road Unit 43, Riverdale, MD 20737–1231.

adequate ventilation, contains no sharp protrusions, etc.);

(2) Include means of completely segregating each stallion and each aggressive equine on the conveyance so that no stallion or aggressive equine can come into contact with any of the other equines on the conveyance;

(3) Have sufficient interior height to allow each equine on the conveyance to stand with its head extended to the fullest normal postural height; and

(4) Be equipped with doors and ramps of sufficient size and location to provide for safe loading and unloading.

(b) Equines in commercial transportation to slaughtering facilities must not be transported in any conveyance that has the animal cargo space divided into two or more stacked levels, except that conveyances lacking the capability to convert from two or more stacked levels to one level may be used until December 7, 2006. Conveyances with collapsible floors (also known as "floating decks") must be configured to transport equines on one level only.

§ 88.4 Requirements for transport.

(a) Prior to the commercial transportation of equines to a slaughtering facility, the owner/shipper must:

(1) For a period of not less than 6 consecutive hours immediately prior to the equines being loaded on the conveyance, provide each equine appropriate food (i.e., hay, grass, or other food that would allow an equine in transit to maintain well-being), potable water, and the opportunity to rest;

(2) Apply a USDA backtag [2] to each equine in the shipment;

(3) Complete and sign an owner-shipper certificate for each equine being transported. The owner-shipper certificate for each equine must accompany the equine throughout transit to the slaughtering facility and must include the following information, which must be typed or legibly completed in ink:

(i) The owner/shipper's name, address, and telephone number;

(ii) The receiver's (destination) name, address, and telephone number;

(iii) The name of the auction/market, if applicable;

(iv) A description of the conveyance, including the license plate number;

(v) A description of the equine's physical characteristics, including such information as sex, breed, coloring, distinguishing markings, permanent brands, tattoos, and electronic devices that could be used to identify the equine;

(vi) The number of the USDA backtag applied to the equine in accordance with paragraph (a)(2) of this section;

(vii) A statement of fitness to travel at the time of loading, which will indicate that the equine is able to bear weight on all four limbs, able to walk unassisted, not blind in both eyes, older than 6 months of age, and not likely to give birth during the trip;

(viii) A description of any preexisting injuries or other unusual condition of the equine, such as a wound or blindness in one eye, that may cause the equine to have special handling needs;

(ix) The date, time, and place the equine was loaded on the conveyance; and

(x) A statement that the equine was provided access to food, water, and rest prior to transport in accordance with paragraph (a)(1) of this section; and

(4) Load the equines on the conveyance so that:

(i) Each equine has enough floor space to ensure that no equine is crowded in a way likely to cause injury or discomfort; and

(ii) Each stallion and any aggressive equines are completely segregated so that no stallion or aggressive equine can come into contact with any other equine on the conveyance.

(b) During transit to the slaughtering facility, the owner/shipper must:

(1) Drive in a manner to avoid causing injury to the equines;

(2) Observe the equines as frequently as circumstances allow, but not less than once every 6 hours, to check the physical condition of the equines and ensure that all requirements of this part are being followed. The owner/shipper must obtain veterinary assistance as soon as possible from an equine veterinarian for any equines in obvious physical distress. Equines that become nonambulatory en route must be euthanized by an equine veterinarian. If an equine dies en route, the owner/shipper must contact the nearest APHIS office as soon as possible and allow an APHIS veterinarian to examine the equine. If an APHIS veterinarian is not available, the owner/shipper must contact an equine veterinarian;

(3) Offload from the conveyance any equine that has been on the conveyance for 28 consecutive hours and provide the equine appropriate food, potable water, and the opportunity to rest for at least 6 consecutive hours; and

(4) If offloading is required en route to the slaughtering facility, the owner/shipper must prepare another owner-shipper certificate as required by paragraph (a)(2) of this section and record the date, time, and location where the offloading occurred. In this situation, both owner-shipper certificates would need to accompany the equine to the slaughtering facility.

(c) Handling of all equines in commercial transportation to a slaughtering facility shall be done as expeditiously and carefully as possible in a manner that does not cause unnecessary discomfort, stress, physical harm, or trauma. Electric prods may not be used on equines in commercial transportation to a slaughtering facility for any purpose, including loading or offloading on the conveyance, except when human safety is threatened.

(d) At any point during the commercial transportation of equines to a slaughtering facility, a USDA representative may examine the equines, inspect the conveyance, or review the owner-shipper certificates required by paragraph (a)(3) of this section.

(e) At any time during the commercial transportation of equines to a slaughtering facility, a USDA representative may direct the owner/shipper to take appropriate actions to alleviate the suffering of any equine. If deemed necessary by the USDA representative, such actions could include securing the services of an equine veterinarian to treat an equine, including performing euthanasia if necessary.

(f) The individual or other entity who signs the owner-shipper certificate must maintain a copy of the owner-shipper certificate for 1 year following the date of signature.

§ 88.5 Requirements at a slaughtering facility.

(a) Upon arrival at a slaughtering facility, the owner/shipper must:

(1) Ensure that each equine has access to appropriate food and potable water after being offloaded;

(2) Present the owner-shipper certificates to a USDA representative;

(3) Allow a USDA representative access to the equines for the purpose of examination; and

(4) Allow a USDA representative access to the animal cargo area of the conveyance for the purpose of inspection.

(b) If the owner/shipper arrives during normal business hours, the owner/shipper must not leave the premises of

[2] USDA backtags are available at recognized slaughtering establishments and specifically approved stockyards and from State representatives and APHIS representatives. A list of recognized slaughtering establishments and specifically approved stockyards may be obtained as indicated in § 78.1 of this chapter. The terms "State representative" and "APHIS representative" are defined in § 78.1 of this chapter.

a slaughtering facility until the equines have been examined by a USDA representative. However, if the owner/shipper arrives outside of normal business hours, the owner/shipper may leave the premises but must return to the premises of the slaughtering facility to meet the USDA representative upon his or her arrival.

(c) Any owner/shipper transporting equines to slaughtering facilities outside of the United States must present the owner-shipper certificates to USDA representatives at the border.

§ 88.6 Violations and penalties.

(a) The Secretary is authorized to assess civil penalties of up to $5,000 per violation of any of the regulations in this part.

(b) Each equine transported in violation of the regulations of this part will be considered a separate violation.

(Approved by the Office of Management and Budget under control number 0579–0160.)

Done in Washington, DC, this 3rd day of December 2001.

Bill Hawks,

Under Secretary, Marketing and Regulatory Programs.

[FR Doc. 01–30259 Filed 12–6–01; 8:45 am]

BILLING CODE 3410–34–U

MR. STEARNS. Thank you. Dr. Hogan.

DR. HOGAN. Thank you, Mr. Chairman and members of the subcommittee, for this opportunity to testify today in support of H.R. 503. Please allow me a moment just to introduce myself and give you a perspective as to why I feel my testimony is important and to help clarify some of the issues surrounding this bill.

My name is Patricia Hogan. I am an equine veterinary surgeon. I have been actively involved in the horse industry my whole life. My clientele is somewhat exclusive. I work primarily on some of the best thoroughbred and standard bred race horses in this country. Oftentimes,

HORSE WELFARE COALITION
FISCAL IMPACT OF HORSE PROCESSING FACILITY CLOSURES
This model assumes a constant number of unwanted horses

Year	Number of Horses	Alternate Disposal (%)	Number of Horses to be Boarded Per Year	Horses From Previous Year (10% loss due to death or euthanasia)	Total Horses Boarded	Cost Per Horse Per Year	Veterinary Cost Per Year	Total Cost Per Year
2006	70,000	60	28000	0	28000	$1,825	$120	$54,460,000
2007	70,000	60	28000	25200	53200	$1,862	$122	$105,543,480
2008	70,000	60	28000	47880	75880	$1,899	$125	$153,549,099
2009	70,000	60	28000	68292	96292	$1,937	$127	$198,751,460
2010	70,000	60	28000	86663	114663	$1,975	$130	$241,403,096
2011	70,000	60	28000	103197	131197	$2,015	$132	$281,736,283
2012	70,000	60	28000	118077	146077	$2,055	$135	$319,964,713
2013	70,000	60	28000	131469	159469	$2,096	$138	$356,285,028
2014	70,000	60	28000	143522	171522	$2,138	$141	$390,878,225
2015	70,000	60	28000	154370	182370	$2,181	$143	$423,910,952
2016	70,000	60	28000	164133	192133	$2,225	$146	$455,536,690
2017	70,000	60	28000	172920	200920	$2,269	$149	$485,896,846
2018	70,000	60	28000	180828	208828	$2,315	$152	$515,121,753

Assumptions:

The cost for care of each horse increases by 2% to account for cost of living increase. The original cost of $1825 was supplied by AAEP.
The veterinary costs per year increase by 2% to account for cost of living increase. Estimate provided by AAEP.
Includes basic care for a well horse (physical exam, vaccines, deworming). Does not include farm call, dental care.
Does not include farrier care.
The number of total horses available for boarding each year will be reduced by the alternate disposal rate to account for owners using other disposal methods.
The number of horses to be boarded from the previous year will be reduced by 10% due to death loss or euthanasia.

*********The figures above do not include costs for facilities, management, or equipment to board the horses.********

By the year 2012, there will be 146077 horses being boarded at adoption/rescue facilities at a cost of $319,964,713
By the year 2018, there will be 208828 horses being boarded at adoption/rescue facilities at a cost of $515,121,753

Compiled by AQHA/AVMA/AAEP

the market value of my patients exceeds several million dollars. Several of my patients, such as Smarty Jones and Afleet Alex have gone on to become household names. Yet I am here today to provide you with support for the tens of thousands of horses that are unwanted or bear little or no market value.

Let me just make something very clear before I start. I am not an animal activist. I had filet mignon for dinner last night and this is not about eating meat for me. I am here because I am a veterinarian and for me, personally, I am someone who has dedicated my whole life to caring for horses. The slaughter issue is not entirely about the act of slaughter, itself. It is about the welfare of the horse throughout this whole process, that being the manner in which they are treated from the moment they leave their place of origin to their arrival at the slaughterhouse.

I am surprised that no one ever really seems to openly discuss the absolutely deplorable way these animals are treated on their way to the slaughterhouse. Once these horses enter the path to the slaughterhouse, their treatment is not humane in any way. I dismiss the triviality of studies that detailed a number of whinnies per hour or the number of horses that arrive with or without a broken leg for use as statistical evidence of humane treatment. Or the proclaimed accuracy of the captive bolt. Sometimes we, as veterinarians, and yes, I mean the AVMA and the American Association of Equine Practitioners, of which both organizations I am a member of, we hide behind the term humane and it is often used as a catchall phrase to make us feel that things are done correctly and according to the letter of the law.

However, the whole act of being taken from an environment that is familiar, thrown into a hostile herd environment, shipped very long distances without food or water, and then placed in an assembly line where they can see, smell, hear, and sense the terror of what is happening in front of them is certainly not humane. We all agree that there are levels of intelligence dictating the rank of species in this world and at some point, we must draw the line. Horses are very intelligent and can perceive fear in a different manner than other forms of livestock, such as the chicken or the cow.

The concept of humane treatment therefore entails different basic requirements for different species. The American culture does not accept consumption of our dogs or cats for food, but there are other cultures in this world that do, yet we do not allow the commercial slaughter of dogs and cats for export in this country because we, as Americans, find that practice deplorable. That being said, Americans do not eat horse meat and in poll after poll, the American people say that the practice of horse slaughter is unacceptable and should be stopped. Yet we allow our

American horses to be slaughtered for foreign consumption. Where is the difference here?

It is important to remember that horses are not and nor have they ever been raised as food animals in this country. The American people have made it very clear that horse meat is not and will never be a desirable food item gracing their tables. Horses have traditionally been work animals throughout our history, but as society changes and evolves, so has the role of the horse changed in our culture. The majority of horses now are more commonly companion or sport animals.

I have personally been to a slaughterhouse as a surgery resident while in Texas and I found it to be a disgrace. I was not there on an announced visit, as those who defend horse slaughter are. I was there to collect specimens for a research project. In my ignorance I actually never even knew or thought about horse slaughter before I had been there. I was absolutely revolted at the way the horses were treated and the behavior of the people that were working there.

I believe there is some confusion regarding humane euthanasia and horse slaughter. We must remember that these are two distinctly different processes. Horse slaughter is not euthanasia by anyone's definition and to equate the two insults your intelligence. Euthanasia is a peaceful process that most commonly involves the overdose of an intravenous drug administered by a veterinarian. Horse are not afraid and there is no fear of anticipation. In most cases, the animal is sedated and then euthanized in a familiar environment.

Horse slaughter uses a method called a captive bolt which involves aiming a bolt gun at the forehead of a partially restrained horse in what is commonly termed the kill pen. This pen is at the end of an assembly line of horses that are fed through the plant. If the bolt is applied properly, the horse is rendered unconscious upon impact and drops to the ground so that the carcass can be bled out prior to death. There is a great deal of room for human and technical error with the captive bolt method and the recommendation for adequate restraint is loosely defined and open for interpretation.

If we are going to talk about horse slaughter as an economic industry, then there is the additional and timely issue of drug residues in American horse meat that is rarely addressed. The beef, swine, and poultry industry are highly regulated as far as permissible drug residues. The fear, of course, is the introduction of drug residues into the human food chain and the possible negative impact on human health. Horses receive a large amount of commonly prescribed medications expressly prohibited for use on animals intended for human consumption.

Is the matter not addressed simply because the meat is exported for foreign consumption? Would it be different if this meat was entering the

American food chain? As an equine veterinarian, I think we surely can do better. Is slaughter really the answer to this problem of irresponsible ownership? That really is the key and the root of this. Certainly, it is the easiest way out, but aren't we more intelligent than that? Americans do not eat horse meat. The American public clearly has overwhelmingly voiced their opposition to this practice and there are humane considerations that are being overlooked.

We are all concerned about the fate of unwanted horses if and when slaughter is eliminated, but allowing the practice to continue is not the right answer to the problem. Surely, we can do better and I believe it is painting with a very broad brush and it is too simplistic to assume that if slaughter is eliminated then 80 to 90,000 horses per year are going to be abused and die of starvation. That really just simply will not happen.

We have the opportunity to rid ourselves of this form of cruelty by passing this bill, something that should have been done years ago. We need to make sure that as we try to clean up this complicated problem, we continue to do whatever we can to care for horses. That is my role and this is where our combined efforts should be focused. I urge you to swiftly send this bill to the House floor and call upon the Congress to vote to end horse slaughter once and for all. Thank you very much.

[The prepared statement of Patricia Hogan, VMD, ACVS, follows:]

THE PREPARED STATEMENT OF PATRICIA HOGAN, VDM, ACVS, NEW JERSEY EQUINE CLINIC

Mr. Chairman, Members of the Subcommittee, I wish to thank you for the opportunity to testify before the Subcommittee today in support of H.R. 503, the American Horse Slaughter Prevention Act.

Please allow me a moment to introduce myself and provide you with a perspective as to why I feel my testimony will help clarify some of the issues surrounding the discussion of H.R. 503. My name is Dr. Patricia Hogan and I am an equine veterinary surgeon**.** I have been actively involved with the horse industry all of my life**.** I am originally a New Jersey native but was a graduate of the University of Pennsylvania's School of Veterinary Medicine. I completed several years of specialty training in both Kentucky and Texas in order to refine my veterinary focus to the surgical disciplines of the horse. I am a board-certified surgeon and have been practicing exclusively in the field of equine surgery for the past 10 years. I have been fortunate enough in my career to have received international recognition for my work in the treatment of equine sports injuries, arthroscopy, and internal fixation of fractures. My clientele is somewhat exclusive – I work primarily on some of the best Thoroughbred and Standardbred racehorses in this country – oftentimes the market value of some of my patients run into the many millions of dollars. Several of my patients, such as SMARTY JONES and AFLEET ALEX, have gone on to become household names. Yet I am here today before you to provide support for the tens of thousands of horses that bear little to no market value - the unwanted horse.

For me personally, as a veterinarian who makes a living caring for horses, the slaughter issue is not entirely about the act of slaughter itself. It is about the welfare of

the horse throughout this whole process – that being the manner in which they are treated from the moment they leave their place of origin to their arrival at the slaughterhouse.

I am surprised that no one ever seems to openly discuss the absolutely deplorable way these animals are treated on their way to the slaughter house. Once these horses enter the path to the slaughter house, their treatment is not humane in any way. I dismiss the triviality of the studies detailing the number of whinnies per hour or the number of horses that arrive with or without a broken leg as statistical evidence of humane treatment. Or the proclaimed accuracy of the captive-bolt. Sometimes, we as veterinarians (and yes, I mean the American Association of Equine Practitioners (AAEP) and American Veterinary Medical Association (AVMA) here) hide behind the term "humane" and it is often used as the "catch-all" phrase to make us feel that things are done correctly and within the letter of the law. However, the whole act of being taken from an environment that is familiar, then thrown into a hostile herd environment, shipped very long distances without food or water, and then placed in an assembly line where they can see, smell, hear, and sense the terror of what is happening in front of them is not humane. Certainly we all agree that there are levels of intelligence dictating the rank of species in this world and at some point we must draw the line. Horses are very intelligent and can perceive fear in a different manner than other forms of livestock such as a chicken or even a cow. The concept of "humane treatment" entails different basic requirements for different species.

The American culture does not accept consumption of our dogs or cats for food, but there are other cultures in this world that do. Yet we do not allow the commercial slaughter of dogs and cats for export in this country because we as Americans find that practice deplorable. That being said, Americans do not eat horsemeat and in poll after poll, the American people say that the practice of horse slaughter is unacceptable and should be stopped – yet we allow our American horses to be slaughtered for foreign consumption. Where is the difference here? It is important to remember that horses are not nor have they ever been raised as food animals in this country. The American people have made it very clear that horsemeat is not and will never be a desirable food item gracing their tables. Horses have traditionally been work animals throughout our history. But as society changes and evolves, so has the role of the horse changed in our culture. The majority of horses are now more commonly companion or sport animals.

I have personally been to a horse slaughterhouse as a surgery resident while in Texas and I found it to be a disgrace. I was not there on an "announced" visit as those who defend horse slaughter were - I was there to collect specimens for a research project. In my ignorance, I had actually never even thought much about slaughter before then. I was absolutely revolted at the way the horses were treated and the behavior of the people that were employed there. I have also been to a beef and a chicken slaughter plant too. The treatment of and reaction by the horses was very much in contrast to that of the other livestock I had observed.

I believe there is some confusion regarding humane euthanasia and horse slaughter. We must remember that these are two distinctly different processes. Horse slaughter is NOT euthanasia by anyone's definition. Euthanasia is a peaceful process that most commonly involves the overdose of an intravenous anesthetic drug administered by a veterinarian. The horses are not afraid and there is no fear of anticipation. In most cases, the animal is sedated and then euthanized in a familiar environment. Horse slaughter uses a method called the captive-bolt which involves aiming a bolt gun at the forehead of a partially-restrained horse in what is commonly termed the "kill pen". This pen is at the end of an assembly line of horses that are fed through the plant. If the bolt is applied properly, the horse is rendered unconscious upon impact and drops to the ground so that the carcass can then be bled out prior to death. There is a great deal of room for human and technical error with the captive bolt method and the recommendation for 'adequate restraint' is loosely defined and open for interpretation.

If anyone on this subcommittee would like to see videos of each process I would be happy to provide them for you so that you may judge for yourself which is the 'humane' method. I am confident that the difference would be dramatic to you.

If we are going to talk about horse slaughter as an economic industry, then there is the additional and timely issue of drug residues in American horsemeat that is rarely addressed. The beef, swine and poultry industry are highly regulated as far as permissible drug residues. The fear of course is the introduction of drug residues into the human food chain and the possible negative impact on human health. Horses receive a large amount of commonly prescribed medications expressly prohibited for use on animals intended for human consumption. Is this matter not addressed simply because this meat is exported for foreign consumption? Would it be different if this meat was entering the American food chain?

As an equine veterinarian, I think that surely we can do better. Is disposal really the answer to this problem of too many horses? Certainly it is the easiest way out but aren't we more intelligent than that? Americans do not eat horsemeat, the American public clearly has overwhelmingly voiced their opposition to this practice, and there are humane considerations that are being overlooked. When organizations such as the AAEP and the AVMA opposed the bill in a blanket fashion, equine veterinarians suffered a major public relations blow. The public, much of the horse industry, and most of the rescue and retirement organizations simply cannot believe that the equine veterinary world - the "protector of the horse" - is "for slaughter". I know that is not what these organizations meant when they opposed the bill but it is the perception that was given. This position has translated into the AAEP being "pro-slaughter". I know the intentions were good but the way they went about it was not. We are all concerned about the fate of unwanted horses if and when horse slaughter is eliminated but allowing the practice to continue is not the right answer to the problem. Surely we can do better.

The Unwanted Horse Coalition is a step in the right direction, but even that effort would never have been considered had it not been for the introduction of the American Horse Slaughter Prevention Act. Nobody was talking about these very important issues until Congressman John Sweeney, Congressman John Spratt and Congressman Ed Whitfield introduced this sound piece of legislation.

While the introduction of the AHSPA has been a catalyst for discussion into ensuring the humane treatment of horses it has also sparked a surge in horse rescues, cruelty awareness and responsible horse ownership education across the country, all things that must continue to expand. In addition, a valuable resource was created in conjunction with veterinarians, equine rescues and humane groups, called *Basic Guidelines for Operating an Equine Rescue or Retirement Facility* which is currently being used by rescues across the US. These provide a basic outline for individuals interested in opening rescues or assisting those currently operating a sanctuary to ensure they have adequate information to ensure the proper care of horses they may care for.

There are many things we need to clean up within the horse community such as over breeding, cruelty, neglect, and proper long-term care. People must be educated and made responsible horse owners. In my opinion, this is not merely an argument about whether or not you are for slaughter. That is too simple with the current state of all the unwanted horses in this country. The gray area in-between needs a lot of work and for me, that is where I personally want to be. We have the opportunity to rid ourselves of a form of cruelty by passing the American Horse Slaughter Prevention Act, something that should have been done years ago. We need to make sure that as we try to clean up this complicated problem, we continue to do whatever we can to continue to "care for horses". This is where our combined efforts should be focused. I urge this Subcommittee to swiftly send the American Horse Slaughter Prevention Act to the House floor and call upon the House of Representatives to vote to end horse slaughter, once and for all.

Thank you again Mr. Chairman for the opportunity to testify before the Subcommittee in support of H.R. 503, the American Horse Slaughter Prevention Act.

MR. STEARNS. Thank you. Dr. Corey.

DR. COREY. Chairman Stearns, distinguished members of the committee, thank you for the opportunity to appear before you today. My name is Dr. Douglas Corey. I have been an equine practitioner for 30 years. I am here today not only as a long-time horse owner, but also as President-elect of the American Association of Equine Practitioners. The AAEP is a professional association representing nearly 7,300 equine veterinarians worldwide. Our mission is dedicated to the health and welfare of the horse. I would like to make three main points today.

First, this bill will negatively impact the health and welfare of horses across the country and offers no solution to the underlying problem of unwanted horses. Second, horse processing at a USDA-regulated facility does provide a humane euthanasia option. And third, AAEP has undertaken a leadership role in working with the industry to develop solutions to this industry problem.

I turn to my first point. The way this bill is written, it will negatively impact horses and it offers no solutions. In addition, we strongly believe that if passed, this bill will not stop the slaughter of horses. We believe horse processing is symptomatic of a larger problem affecting the welfare of our Nation's horses and this problem is created by issues that are surrounding unwanted horses. The unwanted represents a group within a domestic equine population that are no longer wanted, needed, or useful, or their owners are no longer interested in them or capable of providing physical or financial care.

While this bill and its supporters are well-intentioned, its passage without adequate funding or an infrastructure in place to care for unwanted horses, will create a series of unintended consequences. Therefore, the AAEP membership vigorously opposes this legislation as it is currently written. How and where are we going to put these horses? Simply put, there is not enough funding, volunteers, or placement options for all of the unwanted horses across this country. Current rescue and retirement facilities are at a maximum and cannot accommodate the surplus.

In addition, many people that adopt horses simply can't afford to provide proper care and feeding for a horse. While many of these folks have good hearts, the sad fact is that some of these horses are headed for a much worse fate than processing. We see this regularly as veterinarians. Also, this bill does not address the funding required to care of or dispose of an additional 90,000 horses per year that would result. Inadequate funding often creates inadequate care. The AAEP, in addition to the Horse Welfare Coalition of 64 organizations which

represents million of members, horse owners, farmers, and citizens, believe that processing is a necessary option that is currently needed for the industry to prevent abuse and neglect.

My second point is that horse processing at a USDA-regulated facility provides a humane euthanasia option. In July of 2003, several members of the AAEP leadership, including myself, did visit a Beltex plant in Texas to see the process first-hand. A USDA veterinarian was on site to regulate the humane treatment of animals. During our visit, we witnessed a professionally run operation that treated horses with dignity throughout the process and euthanized them humanely.

The AAEP believes that processing is not the ideal solution for addressing the large number of unwanted horses in the United States, however if a horse owner is unable or unwilling to provide humane care and no one is able to assume the responsibility, humane euthanasia at a USDA regulated facility is an acceptable alternative to a life of suffering, inadequate care, or abandonment. I ask a question; how many Congressional Members have ever seen a horse euthanized? And how many have seen a horse neglected and starved? I have seen both and humane euthanasia at a regulated facility is much preferred to seeing a horse starve to death.

My final point, the AAEP has taken a strong leadership role in working on and developing potential solutions for many of the unwanted horse problems. Our association has been a renowned leader in equine healthcare. Our members have spent thousands of hours educating horse owners and the industry about the importance of caring for horses. And additionally, in 2004 we developed care guidelines for equine rescue and retirement facilities.

In 2005 we spearheaded the first ever unwanted horse summit. A total of 26 equine industry organizations, animal care groups, and other stakeholders, including Representative Ed Whitfield from Kentucky, met for the purpose of examining the causes of unwanted horses and approaches to dealing with this segment of the population. Our members are on the front line every day helping horses and are committed to solving this problem.

In summary, the equine industry is working together to address the root cause of the unwanted horse. However and most importantly, please remember that your vote on H.R. 503 is not free. This bill, should it be enacted, will negatively impact the health and welfare of horses and offers no solution to help unwanted horses. We are confident that if you vote no on H.R. 503 you can feel secure that you are helping to protect the thousands of horses from a life of abuse and neglect and possible abandonment and that the equine industry is working to reduce the

number of horses being processed. The bottom line is that the industry can solve this. Thank you.

[The prepared statement of Douglas Corey, DVM, follows:]

THE PREPARED STATEMENT OF DOUGLAS COREY, DVM, PRESIDENT-ELECT, AMERICAN ASSOCIATION OF EQUINE PRACTITIONERS

Chairman Stearns, distinguished members of the Committee, thank you for the opportunity to appear before you today. My name is Dr. Douglas Corey and I have been an equine veterinarian for the past 30 years in a five-person mixed animal practice located in Walla Walla, Washington. I am here today, not only as a long-time horse owner, but also as the President Elect of the American Association of Equine Practitioners. The AAEP is a professional association, which represents nearly 7,300 equine veterinarians worldwide, many whom are long-time horse owners as well. Our mission is dedicated to the health and welfare of the horse. Our world headquarters are located in Lexington, Kentucky. I have served as the Chair of the AAEP's Equine Welfare Committee and the American Veterinary Medical Association Animal Welfare Committee. I currently Chair the Professional Rodeo Cowboys Association Animal Welfare Committee and serve on the American Horse Council Animal Welfare Committee.

I want to make three main points today:

- First, this bill will negatively impact the health and welfare of horses across the country and offers no solution to the problem of unwanted horses.
- Second, horse processing at a U.S.D.A. regulated facility provides a humane euthanasia.
- Third, the AAEP has taken a leadership role in working on and developing potential solutions for many of the unwanted horse problems.

I turn now to my first point – the way this bill is written will negatively impact the welfare of horses and it offers no solution to the problem of unwanted horses. In addition, we feel strongly that, if passed, this bill will not stop the slaughter of horses.

Guided by a dedication to equine welfare, the AAEP is actively involved in the issues that surround the care of unwanted horses in the United States. The AAEP has evaluated H.R. 503, based on the legislation's ability to serve the health and welfare of the horse. The intent of this legislation is to ban the transportation and sale of horses for processing for human consumption and other purposes. The AAEP believes processing is symptomatic of a larger problem affecting the welfare of our nation's horses, and this problem is created by issues surrounding unwanted horses.

The Unwanted horse represents a group of horse's within the domestic equine population that are no longer wanted, needed or useful or their owners are no longer interested in them or capable of providing physical care or financial care.

While H.R. 503 and its supporters are well intentioned, the passage of this legislation, without adequate funding or an infrastructure in place to care for unwanted horses it will create a series of unintended consequences that negatively impact the health and welfare of the horse. Therefore, the AAEP and 84% of its membership, based on a 2002 membership survey, vigorously oppose this legislation as it is currently written.

The AAEP's chief concerns regarding H.R. 503 are:

1. Long-term placement of affected horses. How and where are we going to put these horses? The volunteers, alternative homes, rescue and retirement facilities are already stressed to the maximum. Simply put, there is not enough funding, volunteers or placement options for all of the unwanted horses across this country. Giving credit to the many volunteers and people involved with these sanctuaries and

facilities, their good hearts are there, but unfortunately, their good hearts are not going to take care of these animals for 20 to 30 years, not to mention the financing needed to care for these horses. This simple fact is that should this bill be enacted, the number of facilities will have to increase significantly in order to match the demand.

In addition, many of the individuals that adopt horses are not financially secure enough to adopt and provide proper care and feeding for a horse. While many of these people are well-intentioned individuals, the sad fact is that many of these horses are headed for a much worse fate of starvation, abuse and neglect. Unfortunately, many of the people that adopt horses have no idea of the cost to care for a horse.

It would be nice to absorb every unwanted horse into the equine society, but as the years go on, the sheer numbers of horses, and people with the great hearts will not be able to sustain this.

2. The Funding of care for unwanted horses. H.R. 503 does not address the funding required to care for or dispose of an additional 80,000 horses per year. Assuming an average cost of $5 per day to provide a horse's basic needs, the funding needed per year, per horse is approximately $1,825. This does not include veterinary and farrier care. Inadequate funding often creates inadequate care, which is a significant welfare concern for unwanted horses. Disposal alone can range from burial $75.00 to cremation up to $2,000.

3. Ambiguous language of the bill itself. H.R. 503 seeks to prohibit the shipping, transportation, moving, delivering, receiving, possessing, purchasing, selling or donation of horses and other equines to be processed, and for other purposes. "Other purposes" is not defined and, if taken literally, could mean the transportation of horses for any reason, including sporting events, sales, recreation or transportation for medical care. This language is detrimental to the equine industry as a whole and if not addressed, could have unintended consequences.

The AAEP, in addition to the Horse Welfare Coalition of 64 organizations represents millions of members, horse owners, farms and citizens, who believe that processing is a necessary option that needs to be available to the equine industry to prevent abuse and neglect to a certain population of horses.

My second point is that horse processing at a U.S.D.A. regulated facility provides humane euthanasia.

In July of 2002, several members of the AAEP leadership, including myself, visited the Beltex plant in Texas to see this process first-hand. A U.S.D.A. veterinarian was on-site to regulate the humane treatment of the animals throughout the process. During our visit, we witnessed a professionally run operation that treated horses with dignity throughout the process and euthanized them humanely.

Based on U.S.D.A. figures, more than 80,000 U.S. horses were processed in the U.S. in 2005, representing approximately 1 percent of the domestic equine population. The AAEP's position on processing is that horses destined for a processing facility should be:

- Treated humanely and with dignity;
- Transported according to guidelines approved by the U.S.D.A. in 2002 regarding the commercial transportation of equines to processing; and
- Euthanized in a humane manner in accordance with guidelines established by the American Veterinary Medical Association (AVMA).

The AAEP believes that processing is not the ideal solution for addressing the large number of unwanted horses in the U.S. However, if a horse owner is unable or unwilling to provide humane care and no one is able to assume the responsibility, humane

euthanasia by captive bolt at a U.S.D.A.-regulated facility is an acceptable alternative to a life of suffering, inadequate care or abandonment.

I ask the question, how many congressional members have ever seen a horse euthanized, and how many have seen a horse neglected and starved? The opponents of this legislation, animal health care providers, have seen both. We have consciously decided the humane euthanasia alternative at the processing plants is infinitely preferable to seeing a horse starve to death.

Nobody likes or truly wants to see a horse euthanized, but when care is poor, horses suffer, owner neglect and abuse is evident, euthanasia at a processing plant is a humane option.

My final point has to do with the efforts that AAEP has taken a strong leadership role towards working on and developing potential solutions for many of the unwanted horse problems.

For more than fifty years, our association has been a renowned leader in promoting and fostering the welfare of horses. The AAEP and its members have spent numerous hours of their own time educating horse owners and the industry about the importance of caring for horses. Education takes a long time to show real change; however, we are confident that through our efforts, and the efforts of other equine organizations and through the assistance of congress, we can continue to decrease the number of horses heading to a slaughter facility. The AAEP is committed to educating its members and the public about the health and welfare of horses, and especially unwanted horses.

One of the many efforts that AAEP has worked on towards education includes the development and publishing in 2004 of a 32-page booklet titled the AAEP Care Guidelines for Equine Rescue and Retirement Facilities.

In April of 2005, the nation's first-ever Unwanted Horse Summit, an effort spear-headed by the AAEP, took place during the American Horse Council Annual Meeting. A total of 26 equine industry organizations, animal welfare groups and other stakeholders, including Representative Ed Whitfield from the first district of Kentucky, met for the purpose of examining the causes of unwanted horses and identifying approaches to dealing with this segment of the equine population. Following the Summit, a coalition was formed to continue the work until a more formal governance structure could be formed.

Over the last 18 months, the group developed a mission statement, began identifying long-term solutions for improving the quality of life for unwanted horses, and considered an operating plan that ultimately led to the suggestion that the American Horse Council provide a permanent administrative home for the group's work.

In June of this year, it was announced that the coalition was being folded into the American Horse Council to begin generating far reaching and practical solutions. The mission of the Coalition is to explore ways to reduce the number of horses that are unwanted each year and to improve their welfare through education and the efforts of organizations committed to the health, safety and responsible care of the horse. Owner education will be a focal point.

So, as you can see, this industry is coming together to address this industry problem. Our members are the front line every day helping horses and are committed to solving this problem.

In summary, the equine industry and you, our congressional leaders, must work together to address the root cause of the unwanted horse, not just the symptom of processing. We need proactive solutions and we believe that the AAEP, veterinarians across this country and the equine industry are developing solutions that will continue to help decrease the number of horses being processed. However, and most importantly, please remember that your vote on H.R. 503 is not a free vote. This bill, should it be enacted, will negatively impact the health and welfare of horses across the country and offers no solution to the problem of unwanted horses.

The AAEP, a respected group of equine health care providers, are confident that if you vote no on H.R. 503, that when you go home and speak to your constituents, can feel secure in saying, "I voted no on H.R. 503 in order to protect horses from a life of increased abuse, neglect and abandonment. I am confident that the equine industry is making great strides to help reduce the number of horses being processed and I supported them with my no vote on H.R. 503."

Thank you for the opportunity to address you today. I will be happy to answer any questions.

The AAEP
The American Association of Equine Practitioners (AAEP) is the world's largest professional association of equine veterinarians. The AAEP's mission is to improve the health and welfare of the horse, to further the professional development of its members, and to provide resources and leadership for the benefit of the equine industry.

A Historical Journey
From its beginnings in the basement of the Brown Hotel in Louisville, Kentucky, 11 veterinarians chartered the American Association of Equine Practitioners with determination to demand excellence among its practitioners, and meticulous concern for the health and welfare of the horse. Since that day in 1954, the AAEP membership has expanded to over 9,000 veterinarians and veterinary students representing 57 countries who dedicate their life's work to caring for the horse. The AAEP provides the opportunity for veterinarians in all types of practices, from all parts of the world, to join together in a common pursuit: to protect the health and welfare of the horse.

To the Horse
From a child's pony to a stakes winning Thoroughbred, horses are top priority for the AAEP. As a result of tremendous advancements in equine sports medicine within the last decade, horses from the barnyard to the winner's circle are proving to be heartier, healthier animals. The AAEP has called special attention to finding cures and treatments for particular problems. The AAEP is an active participant in equine research and development programs.

To the Owner
The practice of veterinary medicine embraces all animal species and is focused into many disciplines including surgery, internal medicine, and diagnostics. The equine practitioner, and every AAEP member, includes or even limits their practice to the horse assuring the most individualized and specialized medical care available today. AAEP members have interest in the care of horses well beyond their professional practice. Many veterinarians not only practice equine medicine, but also own their own and enjoy horses for business and pleasure. As horse owners and enthusiasts themselves, AAEP members have a unique perspective on the concerns of their clients and the people responsible for the well-being of their horses. In an effort to encourage regular health maintenance and preventive medicine programs, the AAEP is actively involved in public education programs regarding prevention and treatment of injury and disease as well as programs on nutrition and parasite control.

To the Industry

Ranging from animal welfare to inform medication rules for racing, the AAEP stands as a solid source of information for the entire equine industry. AAEP members concern themselves with issues facing the complex horse business from Washington, D.C., to Harare, Zimbabwe. As a liaison to such organizations as The American Horse Council and other industry associations, the AAEP dedicates time and resources to provide a consistent veterinary perspective to contemporary equine issues. With its commitment to research and development, the AAEP also maintains its presence with schools of veterinary medicine, and equine research institutions and organizations throughout the world.

To the Veterinarian

Today, AAEP veterinarians carry the AAEP charter to maintain and improve the health and welfare of the horse. Renowned as the most prestigious and comprehensive equine veterinary meeting, the AAEP annual convention and the published proceedings of its professional sessions are in demand throughout the equine and veterinary industries. As a result of its commitment to excellence in continuing education for members, the AAEP is expanding its communications base. With great advancement in diagnostics, surgery, preventative medicine, and reproduction, the AAEP is aggressively addressing animal welfare, medication, and injury issues. The AAEP is concerned with the public image of the equine veterinary profession. Improvements in ethics and standards, practice management and owner education continue to be important issues for AAEP members. The equine practitioner commands a strong position and an authoritative voice within the equine industry today, and the AAEP strives to enhance this position.

American Horse Council Press Release

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Unwanted Horse Coalition Folded into AHC

June 27, 2006, Washington, D.C. – The Unwanted Horse Coalition, which started as the Unwanted Horse Summit during the American Horse Council's annual convention in April, 2005, is being folded into the American Horse Council, it was announced today by Nick Nicholson, the Chairman of the American Horse Council.

"The issue of 'unwanted horses' has faced this industry for some time," said Nicholson, President of Keeneland Association. "It is an important and challenging national issue that faces all breeds and all activities in the horse world. Putting this initiative under the umbrella of the AHC, which represents all segments of the horse industry, is a natural fit."

The Unwanted Horse Coalition grew out of a workshop that the American Association of Equine Practitioners organized as part of the 2005 AHC National Issues Forum in Washington, D.C.

That meeting, and a subsequent summit in Chicago five months later, drew equine and welfare organizations together to begin discussions about the tens of thousands of horses that are unwanted each year and sent to slaughter facilities.

Over the last 18 months, the group developed a mission statement, began identifying long-term solutions for improving the quality of life for unwanted horses, and considered an operating plan that ultimately led to the suggestion that the AHC provide a permanent administrative home for the group's work.

"The need for a more formal structure, funding and staff to accomplish the Coalition's mission prompted many of the members of the Coalition to suggest that it be affiliated with the AHC," explained Dr. Tom Lenz, who is a past President of the AAEP and served as chairman of the group. "Many of these associations already have a relationship with the Horse Council and feel comfortable in getting the Council more involved."

The mission of the Coalition is to explore ways to reduce the number of horses that are unwanted each year and to improve their welfare through education and the efforts of organizations committed to the health, safety and responsible care of the horse. Owner education will be a focal point.

Advocacy in the legislative arena is not part of the mission. In fact, the Coalition will not involve itself in any federal or state legislation dealing with slaughter or the processing of horses for human consumption.

"The horse industry has a responsibility to its horses," said Jay Hickey, President of the AHC. "All organizations and individuals, whether they use their horses for breeding, sport, show, work, recreation or pleasure, have a responsibility to ensure that everything is being done to minimize the number of horses that might fall into this unwanted group."

Several members of the Coalition have already indicated they will continue to be involved with the effort through the AHC and provide funding. The list includes the American Association of Equine Practitioners, American Quarter Horse Association, National Horsemen's Benevolent and Protective Association, National Thoroughbred Racing Association, Professional Rodeo Stock Contractors, The Jockey Club, and the U.S. Trotting Association.

"We expect other organizations to be added to these groups," said Hickey. "Several have already indicated their interest in staying involved in this effort."

The Coalition will be hiring a staff person to run the day-to-day activities of the Coalition and a web site will be launched in the near future to provide horse owners with resources about caring for horses and finding new homes for them.

As the national trade association representing the horse industry in Washington, D.C., the American Horse Council works daily to represent equine interests and investments. Organized in 1969, the AHC promotes and protects the industry by communicating with Congress, federal agencies, the media and the industry on behalf of all horse related interests each and every day.

The AHC is member supported by individuals and organizations representing virtually every facet of the horse world from owners, breeders, veterinarians, farriers, breed registries and horsemen's associations to horse shows, race tracks, rodeos, commercial suppliers and state horse councils.

The Plight of the Unwanted Horse: Scope of the Problem

Nat T. Messer, IV, DVM

For the past 10 yr or so, 1–2% of the domestic equine population is sent to slaughter and assumed to be unwanted. To their credit, equine welfare advocates attempt to identify suitable placement for these horse in the private and public sector; however, there simply are not enough volunteers, funding, or placement opportunities for all of the unwanted horses. There is not enough information dealing with why so many horses are unwanted and what can reduce their numbers. Author's address: College of Veterinary Medicine, University of Missouri, 379 East Campus Drive, Columbia, MO 65211. © 2004 AAEP.

On average, ~1–2% (75,000–150,000 horses) of the domestic equine population in the United States was sent to slaughter each year for the past 10 yr.[1] Another 10,000–20,000 horses were exported to Canada each year for slaughter, and an unknown number of horses were sent to Mexico for the same purpose. In 1998, >1% of the domestic equine population was sent to slaughter (~72,000 horses). In comparison, according to the 1998 National Animal Health Monitoring System (NAHMS) report, 1.3% of horses aged 6 mo–20 yr (~80,500 horses) on all premises surveyed either died or were euthanized in 1997. Additionally, 11.1% of horses >20 yr (~55,000 horses) on all premises surveyed either died or were euthanatized in 1997.[2] Assuming these numbers are at least somewhat representative of what occurs annually, nearly 100 horses either die or are euthanatized for every 50 horses that go to slaughter. Almost 200,000 equine carcasses must be disposed of annually, one-third of which are being processed for human consumption with the remainder being cremated, buried, "digested," disposed of in landfills, or rendered.

Unwanted horses represent a subset of horses within the domestic equine population that are no longer needed or useful or their owners are no longer interested in or capable of providing care for them either physically or financially. Most unwanted horses will likely be sent to slaughter with fewer numbers being euthanatized and disposed of through rendering. Still fewer are simply abandoned and left to die of natural causes. Unwanted horses range from being essentially normal, healthy horses of varying ages and breeds to horses with some type of disability or infirmity, horses that are unattractive, horses that fail to meet their owner's expectations for their intended use (e.g., athletic ability), horses with non–life-threatening diseases, horses that have behavioral problems, or horses that are truly mean or dangerous. In many cases, these horses have had multiple owners, have been shipped from one sale barn, stable, or farm to another, and have ultimately been rejected as eligible for any sort of responsible, long-term care.

Along with the number of unwanted horses, there are also ~10,000 feral horses deemed to be unadopt-

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able or unwanted that are being maintained by the Bureau of Land Management (BLM) on privately owned sanctuaries. Additionally, 5000 or so horses are awaiting adoption in short-term holding facilities operated by the BLM, and ~20,000 pregnant mares and their foals from the pregnant mare urine (PMU) industry are displaced. One can readily see that the number of truly and/or potentially unwanted horses constitutes a significant number of horses to be dealt with each year and in the future.

To their credit, various equine welfare organizations, breed-specific organizations, benevolent equine welfare advocates, and horse owners have made a conscientious and concerted effort to provide care for unwanted horses, provide funding for the care of unwanted horses, or find suitable accommodations for them in both the private and public sector. These efforts coupled with widespread efforts to inform the public about the plight of the unwanted horse and a relatively high demand for horses by prospective buyers probably accounts for the decrease in horses sent to slaughter over the past 5–10 yr. The carrying capacity for these retirement farms, rescue farms, and sanctuaries as they are called is unknown at this point, but despite their noble efforts to provide care for many unwanted horses, the number of unwanted horses far exceeds the resources currently available. Even well-meaning volunteers can become overburdened with unwanted horses, which can be to the detriment of the horses under their care. There simply are not enough volunteers, funding, or placement opportunities for all of the unwanted horses.

Why are there so many apparently unwanted horses? Is there, as some would suggest, a glut of horses in the United States today? Was there, then, an even larger glut of horses when 200,000–300,000 horses were being sent to slaughter in the early 1990s? The horse industry depends, to a large extent, on the buying and selling of horses. It also depends on being profitable. Without demand from buyers and supply from sellers, the horse industry would not exist. When the monetary value of horses cannot be established or has no bottom limit, horses with minimal value will more likely be neglected. For the past 5–10 yr, the demand for horses on the part of those buying horses has been very good. Over the years, however, this demand has certainly run in cycles that frequently follow other economic trends. In general, when the demand for horses is low, then the number of unwanted horses increases, regardless of what their bloodlines may be. Recent changes in various breed organizations' rules, such as permitting the use of embryo transfer and frozen semen, have favored the production of horses, allowing breeders to produce more than one offspring per year from mares and allowing breeders to more efficiently select for horses with desirable bloodlines or performance records. New technology will further facilitate this practice in the future. Unfortunately, even with the help of technological advances, not every mating will produce a horse that meets the expectations of a buyer. For those in the business of breeding and raising horses, an unsold horse becomes a liability rather than an asset.

Currently, to the author's knowledge, there is a lack of information about the demographics of unwanted horses other than the generalizations made previously (i.e., not marketable, disabled or infirm, unattractive, lacking athletic ability, dangerous, or mean). A more detailed study investigating the demographics of horses deemed to be unwanted would allow the horse industry to focus more appropriately on the problem. For example, former racehorses are frequently singled out as examples of unwanted horses when their racing careers end and they are not candidates for breeding or other athletic endeavors. There are undocumented estimates suggesting that <10% of the horses that go to slaughter are Thoroughbreds, but just how many of the 50,000–70,000 horses that went to slaughter last year in the U. S. and Canada were former racehorses? What is the average age and sex of those unwanted horses? What are the types of things that cause them to be unwanted? Are they purebred or grade horses? Answers to questions such as these and many more need to be addressed to understand the problem and potentially reduce the number of unwanted horses.

Whenever there are large numbers of unwanted horses, there is always concern for the welfare of these horses. According to Rebecca M. Gimenez, a member of the advisory board of the South Carolina Awareness and Rescue for Equines organization, "we have seen a huge upsurge in abuse and neglect cases over the last three years in our state alone."[3] She goes on to say that "looking on the web and talking to veterinarians, farriers, and horse industry professionals all tell me that this isn't only a South Carolina problem."[3] Neglect of horses takes many forms and is caused by a variety of factors. Could this upsurge in neglect, referred to by Dr. Gimenez, be solely the result of an increasing number of uninformed horse owners unfamiliar with the proper care of horses, could it be purely caused by economic constraints created by the downturn in the economy since 9/11, or could it be the result of the lack of affordable ways to responsibly dispose of unwanted horses brought about by regulations prohibiting burial of animal carcasses in some locales, costs associated with veterinary euthanasia and disposal by cremation, "digestion," or rendering, and fewer slaughter plants processing horses for human consumption? All of these factors must be considered when faced with such a large number of unwanted horses. A solution is needed to ensure that these horses are treated humanely and with dignity until the end of their lives.

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An Overview of Acceptable Euthanasia Procedures, Carcass Disposal Options, and Equine Slaughter Legislation

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One of the most difficult decisions a horse owner or veterinarian must make is when to end a horse's life. Many of these decisions must be made in stressful and less than ideal situations. It is the responsibility of every equine veterinarian to aid the client in reaching a timely decision, to ensure that the horse's life is ended with the highest degree of respect, and to make the horse's last days as painless and free of distress as possible. The term euthanasia is derived from the Greek terms eu, meaning good, and thanatos, meaning death.[1] A good death is one that occurs with minimal pain and at the appropriate time in the horse's life as to prevent unnecessary pain and suffering. Justification for euthanization of a horse for humane reasons should always be based on medical considerations as well as future quality-of-life issues for the horse.

The following criteria should be considered in evaluating the necessity for euthanization of a horse[2]:

- Is the horse's condition chronic, incurable, and resulting in unnecessary pain and suffering?
- Does the horse's condition present a hopeless prognosis?
- Is the horse a hazard to itself or its handlers?
- Will the horse require continuous medications for the relief of pain and suffering for the remainder of its life?

The American Association of Equine Practitioners' Euthanasia Guidelines[3] make the additional clarification that justification for euthanasia of a horse for humane reasons should be based on medical grounds rather than economic considerations.

The need to minimize animal distress, including fear, anxiety, and apprehension, must be considered in determining the method of euthanasia. In addition, any human observer's psychological response to euthanasia of the animal needs to be considered. When owners choose to be present during euthanasia, they should be prepared for what will happen, what method will be used, and how the animal may respond. Behaviors such as vocalization, muscle twitching, and failure of the eyelids to close can be distressing, and these issues should be addressed before the euthanasia process.

There are only three acceptable methods of euthanasia for horses as published by the 2000 American Veterinary Medical Association (AVMA) Expert Panel on Euthanasia and endorsed by the American Association of Equine Practitioners.[1] They are[1]:

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- Overdose of a barbiturate anesthesia
- Gunshot
- Penetrating captive bolt

Sodium pentobarbital is the most commonly used barbiturate for euthanasia, and when administered intravenously, it depresses the central nervous system, causing deep anesthesia progressing to respiratory and cardiac arrest.[4] However, this method of euthanasia can cause violent falls and thrashing if administered too slowly or in insufficient quantities. Therefore, the drug should be administered rapidly and in sufficient quantities to produce immediate recumbency and rapid death. Placement of a 14-gauge IV catheter aids in the rapid delivery of the drug and minimizes complications. The use of sedatives (e.g., xylazine or detomidine) before the barbiturate overdose can minimize undesirable side affects and provide a more controlled recumbency process. This usually makes the procedure less painful for the owner and other people to view. However, sedatives may affect the horse's circulation, especially in geriatric or very ill animals, and delay the onset of the euthanasia agent. The result may be prolonged gasping and movement of the animal, which may be disturbing to the lay observers. The primary advantages of barbiturates are speed of action and minimal discomfort to the animal. The major disadvantage is that it requires IV administration and, therefore, the animal must be restrained. In addition, the carcass will contain high levels of barbiturate and must be considered an environmental hazard to wildlife and domestic animals such as dogs and cats. If neuro-muscular agents or potassium chloride are used in conjunction with sodium pentobarbital to prevent terminal gasping and muscle movement, they must be used after the animal is unconscious and not as a "cocktail" with sodium pentobarbital.

Unacceptable injectable agents include strychnine, nicotine, caffeine, magnesium sulfate, potassium chloride (in an unanaesthetized animal), cleansing agents, solvents, disinfectants, neuromuscular blocking agents (in an unanaesthetized animal), and other toxins and salts.[1]

Physical methods of euthanasia in the horse include gunshot and penetrating captive bolt. When properly applied, both cause trauma to the cerebral hemisphere and the brainstem, resulting in an immediate, painless, and humane death. However, both methods require skill and experience. When using gunshot, the optimal site for penetration of the horse's skull is one-half inch above the intersection of a diagonal line from the base of the ear to the corner of the opposite eye (Fig. 1).[5]

The firearm should be aimed directly down the neck, perpendicular to the front of the skull, and held at least 2–6 in away from the point of impact. The firearm should not be held directly against the horse's head, because movement of the head could misdirect the path of the bullet. A .22-caliber long rifle is adequate, but 9-mm or .38-caliber pistols have greater penetrating potential. The use of a hollow-point or soft-nose bullet will increase brain destruction and reduce the chance of ricochet. If a shotgun is the only available firearm, a rifled slug is preferred. When performed properly, gunshot induces instantaneous unconsciousness and does not require close contact with the horse. The main disadvantage of this form of euthanasia is that it can be dangerous if the bullet ricochets. Therefore, the operator and bystanders must use extreme care in positioning themselves when the procedure is being performed. Another disadvantage is that the procedure may be aesthetically unpleasant for observers and should be used only when injectable agents are not available or the horse cannot be positioned or restrained properly.

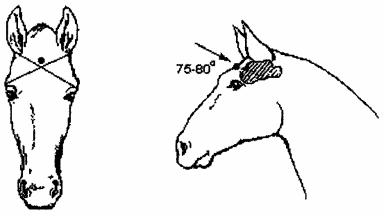

Fig. 1. Gunshot/penetrating captive bolt placement.[4]

Captive bolt instruments are powered by gunpowder or compressed air that provides sufficient energy to penetrate the horse's skull. Its mode of action is concussion and trauma to the cerebral hemisphere and brainstem, resulting in instantaneous brain death (Fig. 2).

Adequate restraint is important to ensure proper placement of the captive bolt, which must be held firmly against the horse's forehead. A non-penetrating captive bolt only stuns animals and should not be used for euthanasia of horses. Like gunshot, the major advantage of penetrating captive bolt is that it renders the animal instantly unconscious, resulting in a painless, humane death. In addition, the carcass is not hazardous to wildlife or other domestic animals. The major disadvantage is that the process may be aesthetically displeasing to lay observers.

In most states, after euthanasia, it is the legal responsibility of the attending veterinarian to ensure that the carcass is properly disposed of in a safe manner that does not pose a hazard to people or other animals.[6] All states regulate the disposition of animal carcasses. However, approved methods vary widely with animal species and states. Therefore, it is important that all veterinarians know the specific regulations regarding disposal of horse carcasses in their state.

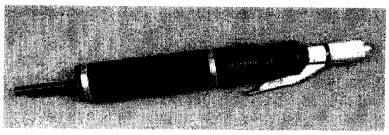

Fig. 2. Handheld penetrating captive bolt device.

Several methods of carcass disposal are commonly used. They include burial, composting, incineration, rendering, and biodigesters. Individual carcass burial regulations vary from state to state, but generally, 3–4 ft of dirt covering the carcass is required. Many states mandate that the burial site must be at least 100 yd from wells and streams.[6] With horses, a trench 7 ft wide and 9 ft deep is typically needed. This requires the services of a backhoe. Backhoe service costs to bury the horse on the owner's property vary with the area of the country, but they usually range from $250 to $500.[a] Landfill is an alternative to burial in some states, but costs may be high. Additionally, not all municipal landfills will accept horse carcasses. Costs vary but average around $80 to $150. Some landfills will not accept horses that have been chemically euthanized.[a] Rendering cooks the carcasses to destroy pathogens and produces useable end products such as meat, bone, and blood meal that can be used in animal feeds. This is an environmentally safe method for disposal of dead livestock and is used in ~50% of states.[6] Rendering companies will generally pick up euthanized animals, and depending on the state, they can charge from $75 to $250. Incineration or cremation is one of the most biosecure methods of carcass disposal, but it is costly. Depending on the area of the country and the cost of propane fuel, incineration of a 1000 lb horse costs between $600 and $2000. Ashes are either returned to the owner or transported to a landfill. To prevent air pollution, incinerators are regulated by the federal Environmental Protection Agency (EPA) as well as the state's EPA. A method of carcass disposal that has recently gained popularity is composting, which is defined as controlled, sanitary decomposition of organic materials by bacteria. It takes 9–10 mo to compost an intact horse carcass.[7]

During proper composting with vegetative material and moisture, the carcass tissues reach at least 130°F for several days. This, in turn, kills most pathogenic viruses and bacteria.[7] When properly performed, composting is safe and produces an end product that is a fairly odorless, spongy, and humus-like substance that can be used for soil supplementation. The process is usually performed in covered piles or in trenches, and therefore, it is important that compost areas be placed away from run-off and drinking water to avoid contamination during high water periods. In most states, the Department of Agriculture office can provide detailed instructions for management of composters.

A relatively new method for carcass disposal is the use of a biodigester. This is a giant pressure cooker-like machine that can turn a 1000-lb horse carcass into a pathogen-free, aqueous solution of small peptides, amino acids, sugars, soaps, and powdered bone. Because remains are sterile and pose no risk to the environment, they can be taken to the local landfill. Biodigesters use alkaline hydrolysis to solubilize and hydrolyze the animal's carcass and other potential hazardous wastes rapidly. This method has become popular with veterinary colleges and industrial research facilities. This method is a less expensive, more environmentally friendly alternative to incineration. Many of the veterinary colleges, including Kansas State, Colorado State, and Florida, are currently using this process for carcass disposal. Costs, environmental impact, and other information on this process can be found on the web.[8,9] When reviewing the various state's regulations governing disposal of horse carcasses, two interesting methods were found that have not been covered in this paper. In Alaska, horse carcasses can be donated to dog mushers, and in Minnesota, they can be used for fur farm consumption.[b]

The discussion of horse euthanasia and carcass disposal would not be complete without a discussion of horse slaughter in the United States and the American Association of Equine Practitioners' position on recently proposed legislation that wants to ban all slaughter. Pending legislation from the 108th Congress that convened in January of 2004 could prohibit the slaughter and processing of horses in the United States. Annually, nearly 68,000 U.S. horses are slaughtered each year for human consumption in European and Asian markets. A small percentage of the meat is sold to zoos and wildlife refuges. In addition, nearly 30,000 U.S. horses are exported annually to Canada for processing. An unknown number of horses are exported each year to Mexican processing plants. Currently, there are two horse processing plants operating in Texas; another plant will be reopening in Illinois after a fire destroyed it in 2002. On February 13, 2003, Representative Sweeney of New York introduced the American Horse Slaughter Prevention Act (H.R. 857). Similar proposed legislation (S.2352) was introduced into the Senate by Senator Ensign of Nevada, a veterinarian, on April 27, 2004.[10,11] The goals of both legislative proposals are to:

- Prohibit the slaughter and processing of horses for human consumption.
- Prohibit importing to, or exporting from, the United States horseflesh or horses for human consumption.
- Prohibit selling, bartering, transferring, re-

ceiving, or distributing horseflesh or horses for human consumption.

On April 24, 2002, a survey was sent to all American Association of Equine Practitioners' members who have an e-mail address on file at the Association office. The survey asked the members to record their opinions on horse slaughter and the proposed legislation to ban it. A total of 3068 members received the survey, and 628 responded (to achieve statistically significant results, a response rate of 342 was needed). Ninety-four percent of the respondents considered the issue of horse slaughter important. Sixty-six percent rated their knowledge of the issue and the legislation as moderate or high, whereas 33% said their knowledge level was low. Seventy-seven percent believed that slaughter is an acceptable means of addressing the issue of unwanted horses, but 20% of the respondents disagreed with that statement. When asked if the American Association of Equine Practitioners should support legislation that would ban the slaughter of horses in the United States, 85% disagreed. When asked if the American Association of Equine Practitioners should have no position statement on any aspect of the horse slaughter issue, 89% disagreed. Finally, when asked if the American Association of Equine Practitioners should provide more information to the membership on this issue, 94% agreed.[12] Today's program is the result of that request.

Based on that survey, the leadership of the American Association of Equine Practitioners developed a position statement opposing the passage of H.R. 857 and S. 2352.[19] The American Association of Equine Practitioners is not pro-slaughter. We believe that slaughter is not the best option for solving the problem of the unwanted horses, which is truly at the heart of this issue, but it is currently a necessary aspect of the equine industry. It provides a humane alternative to allowing a horse to continue a life of discomfort, pain, and possibly, inadequate care or abandonment. In a perfect world, all unwanted horses would be turned out on green pastures to live out their days in peace. However, this is not a perfect world, and because of owner neglect or failed expectations, nearly 68,000 horses are sent to slaughter each year. The American Association of Equine Practitioners recognizes that human consumption of horse meat is a cultural issue and does not fall within the purview of the Association. However, we oppose both pieces of legislation to ban slaughter, because they pay little attention to equine welfare and provide neither an infrastructure nor funding provisions to care for the large number of unwanted or unserviceable horses that will no longer be removed from the nation's horse population. Both bills require the Secretary of Agriculture to enforce the act either directly or through agreements with federal, state, or local agencies. According to the proposed regulations, authorities would be required to work with animal welfare societies and animal control departments to place confiscated horses temporarily with "an animal rescue facility," but no funding is provided to pay for their care. The American Association of Equine Practitioners estimates that basic subsistence care will cost ~$1825/horse/yr, resulting in needed funds of over $124,000,000/yr during the first year of enactment. In addition, although there may initially be 68,000 horses for which care is needed, that number could be expected to increase by 68,000 or more per year during subsequent years. Additionally, there will be a corresponding increase in cost. H.R. 857 proposes United States Department of Agriculture (USDA) grants to assist horse facilities in meeting these costs, but no funds are currently available in the USDA budget. In addition, neither bill addresses financial support for unwanted horses that are voluntarily given up by owners. Inadequate funding has a huge potential to create opportunities for abuse. In addition, the legislation does not establish standards of care that horse rescue facilities must meet to receive federal funds to support the care of unwanted horses. Citing the "extreme costs" and staff time needed to shelter horses, the Humane Society of the United States has warned of the need to be aware of "distinctions between sheltering horses and sheltering other companion animals."[13] The American Association of Equine Practitioners commends horse adoption and rescue facilities that are currently caring for unwanted horses. Many American Association of Equine Practitioners members donate their professional services in support of their efforts. Unfortunately, there are currently not enough organizations with adequate resources to care for the thousands of horses that will require care if the legislation banning horse slaughter passes.

In addition, H.R. 857 would limit the methods that could be used for euthanasia of horses. Under H.R. 857, injectable barbiturates would be the method of choice with gunshot permitted only in cases of emergency. The bill prohibits the use of penetrating captive bolt. This restriction does not conform to the expert advice of the AVMA's Panel on Euthanasia and removes the opportunity for professional judgment when determining the best form of euthanasia for a particular horse. Regarding the assertion of supporters of H.R. 857 that euthanasia by captive bolt is inhumane, members of the American Association of Equine Practitioners visited a processing facility in Texas to witness first-hand treatment and euthanasia of the horses. USDA veterinarians were overseeing the process, and each of us in attendance agreed that the horses were treated with dignity and euthanized humanely. The horses were provided feed and water and were quiet throughout the entire process. The horses were not "stunned" or "bludgeoned" as some ill-informed commentaries have stated, but they were rendered instantly brain dead by a penetrating cap-

tive bolt. Independent inspections of slaughter plants by a number of experts including Grandin[14,15,17] of Colorado State University have verified that the animals are handled and euthanized humanely.

In addition, the American Association of Equine Practitioners opposes both legislative proposals, because they fail to provide an enforcement plan to ensure horses are not shipped to foreign processing plants. Longer hauls to plants that are not regulated by the USDA are not in the best interest of the horse.[16] California's ban on the shipment of horses to slaughter is often cited as the model for this type of legislation. Because there were no funds allocated for enforcement or rescue, no arrests have been made since the law took affect. Additionally, it is widely known that horses continue to be shipped out of California to processing plants in other states and foreign countries.[18,C] Currently, the Transport to Slaughter Bill, enacted in 2001, ensures that horses being shipped to processing plants receive adequate care. The USDA strictly enforces this law and have arrested and fined those found in violation. If the slaughter of horses is banned in the United States, this law will no longer be in effect, and horses being shipped longer distances to foreign slaughter plants will not be protected. Advocates of the bills believe that if horses are no longer allowed to go to slaughter, owners will be forced to have their unwanted animals euthanized. We doubt that this will occur. Rather, horses will be ignored, abused, neglected, or abandoned.

The American Association of Equine Practitioners does not stand alone in our opposition to these legislative initiatives. We are a member of the Horse Welfare Coalition, an alliance of veterinary, horse industry, and agricultural groups representing over 500,000 individual members concerned about equine welfare that opposes the legislation. The coalition's mission is to promote humane and responsible care of the horse through public education and policy advocacy, and it represents over 29 equine-concerned associations including the AVMA, the American Quarter Horse Association, the Equine Nutrition and Physiology Society, and a number of state horse associations.

The slaughter of horses in the United States has struck an emotional chord within the horse industry and the general public. Although the American Horse Slaughter Prevention Act and its supporters are well intentioned, the passage of these proposed acts of legislation will create a series of unintended consequences that will negatively impact the health and welfare of our nation's horses. As advocates for the health and welfare of all horses, we must proactively address relevant equine issues, provide leadership to the industry, and educate horse owners on the need for taking life-long responsibility for their horses. Only then can we develop strategies to reduce the number of unwanted horses in this country and eliminate the need for slaughter.

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ORGANIZATIONS OPPOSING "THE AMERICAN HORSE SLAUGHTER PREVENTION ACT"

HORSE WELFARE COALITION MEMBERS

Agribusiness Association of Iowa
American Association of Equine Practitioners
American Farm Bureau Federation
American Feed Industry Association
American Meat Institute
American Quarter Horse Association
American Paint Horse Association
American Veterinary Medical Association
Animal Health Institute
Animal Welfare Council
California Cattlemen's Association
Colorado Horse Council
Colorado Outfitters Association
Equine Nutrition and Physiology Society
Federation of Animal Science Societies
Florida Cattlemen's Association
Grain & Feed Association of Illinois
Hooved Animal Rescue and Protection Society
Iowa Cattlemen's Association
Horsemen's Council of Illinois
Illinois Beef Association
Illinois Farm Bureau
Indiana Thoroughbred Owners and Breeders Assoc.
Kansas Grain & Feed Association
Kansas Livestock Association
Kentucky Quarter Horse Association
Livestock Marketing Association
Masters of Foxhounds Association of North America
Michigan Horse Council
Michigan Agri-Business Association
Mid-America Horse Show Association
Missouri Equine Council, Inc.
National Cattlemen's Beef Association
National Chicken Council
National Grain & Feed Association
National High School Rodeo Association
National Milk Producers Federation
National Pork Producers Council
National Turkey Federation
Nevada Cattlemen's Association
New Jersey Horse Council, Inc.
New York State Horse Council, Inc.
North Carolina Horse Council
Ohio Agribusiness Association
Ohio Cattlemen's Association
Ohio Horsemen's Council
Oklahoma Cattlemen's Association
Oklahoma Grain & Feed Association
Pacific Coast Quarter Horse Association
Palomino Breeders of America
Professional Rodeo Cowboys Association
Rocky Mountain Quarter Horse Association
South Dakota Quarter Horse Association
Texas Grain & Feed Association
Texas Horse Council
Texas & Southwest Cattle Raisers Assoc.
United Egg Producers
U.S. Animal Health Association
Utah Horse Council
Utah State Quarter Horse Association
Vermont Quarter Horse Association
Virginia State Horse Council
Virginia Farm Bureau
Wisconsin Horse Council

Frequently Asked Questions About Unwanted Horses in the United States

What is an unwanted horse?
Unwanted horses represent a group of horses within the domestic equine population that are no longer needed or useful, or their owners are no longer interested in or capable of providing financial or physical care. Unwanted horses generally range from being normal, healthy horses of varying ages and breeds to horses that are unattractive, horses that fail to meet their owner's expectations for their intended use (such as athletic ability), horses with non-life threatening diseases, horses that have behavioral problems, or horses that are mean or dangerous.

In many cases these horses have had multiple owners and have been shipped from one sale barn, stable, or farm to another without finding a permanent owner or long-term care.

What is the scope of the problem?
Currently there is a lack of information regarding the total number of unwanted horses existing in our nation. However, it is widely believed that many unwanted horses are sent to slaughter, and United States Department of Agriculture statistics indicate that greater than 80,000 U.S. horses were sent to processing facilities in the U.S. in 2005. This represents approximately one percent of the U.S. horse population. Fewer numbers are euthanized by a veterinarian and disposed of through rendering, and still fewer are simply abandoned and left to die of natural causes.

Adding to these numbers are nearly 8,400 wild horses and burros deemed unadoptable by the Bureau of Land Management and which federal law now allows to be sold at auction. An additional 20,000 pregnant mares and their foals from the pregnant mare urine (PMU) industry have been recently displaced due to the downsizing of these facilities.

What factors create large numbers of unwanted horses?
The success of the horse industry depends, to a large extent, on the buying and selling of horses. Over the years, the demand for horses has run in cycles that frequently follow other economic trends. The AAEP estimates that the minimum yearly cost to care for a horse, not including veterinary and farrier expenses, is $1,825. Add in veterinary and farrier costs as well boarding expenses in some cases, and the yearly cost for keeping one horse can easily reach $5,000. In general, when expenses are high and the demand for horses is low, the number of unwanted horses increases, regardless of the breed of horse.

Other factors, such as uneducated owners, irresponsible breeding and lack of owner responsibility, also create circumstances where the horse cannot be cared for or it simply does not meet the expectations of a buyer.

Do unwanted horses face an increased risk of neglect and/or abuse?
Whenever there are large numbers of unwanted horses, there is always concern for the welfare of these animals. Neglect of horses takes many forms and is due to a variety of factors. Some reasons may include an increasing number of uninformed horse owners unfamiliar with proper

horse care; economic constraints created by a downturn in the economy; and lack of affordable and accessible ways to dispose of unwanted horses in some locales.

There is no central system in the U.S. for reporting and maintaining data about equine neglect cases, so it is hard to quantify the level at which neglect is occurring. However, depending on the location, some equine veterinarians and others involved with horse rescue have noted an upsurge in abuse and neglect cases in the last three years.

How do equine rescue and retirement facilities impact the unwanted horse population?
Several excellent equine rescue and retirement facilities operate in the U.S. and play a vital role in providing lifelong care or finding new owners for unwanted horses. Some of these groups are registered as nonprofits and others are privately run by individuals or families. There is no national body that provides oversight or accreditation for these facilities, however.

The key issue is the total number of unwanted horses that can be cared for permanently or placed with a new owner by existing facilities. The capacity of most facilities, however, is 30 horses or less. Despite the efforts of these groups to care for unwanted horses, the number of horses exceeds the resources currently available.

What other options exist for unwanted horses?
In addition to possible placement in a rescue or retirement facility, a horse owner can work to find a new home for the horse or sell the horse at auction in hopes of attracting a new owner. Individual owners may also sell their horse to one of three horse processing facilities in the country, where it will be euthanized by captive bolt and its meat then sold for human consumption or used for other purposes. Many horses that are not sold at auction to a private owner are purchased and sold to a processing facility.

A horse owner also can choose to have his or her horse euthanized by a veterinarian. According to the AAEP's National Fee and Market Study, the average fee for euthanasia by a veterinarian is $66. This fee does not include disposal of the carcass. Approved methods of carcass disposal vary widely from state to state, but commonly include burial, rendering and incineration. Fees for these methods range from $75 to $250 for rendering (depending on location) up to $2000 for incineration.

How is the AAEP working to address this issue?
Driven by its mission to protect the health and welfare of the horse, the AAEP is leading the effort to improve the quality of life for unwanted horses. The Unwanted Horse Summit, hosted by the AAEP in April 2005, was an unprecedented meeting designed to bring together all segments of the equine industry to address this issue. The Summit served as the catalyst in generating practical and far-reaching solutions designed to reduce the number of unwanted horses and increase humane and responsible care.

In addition to hosting the Summit, the AAEP has developed care guidelines for equine rescue and retirement facilities. Many AAEP members also provide veterinary care free of charge to individuals or facilities who care for unwanted or abused and neglected horses.

American Association of Equine Practitioners
4075 Iron Works Parkway • Lexington, KY 40511
859.233.0147 www.aaep.org

THE UNWANTED HORSE AND H.R. 503: AN EQUINE VETERINARY PERSPECTIVE

As the world's largest professional organization dedicated to equine veterinary medicine, the American Association of Equine Practitioners (AAEP) comprises nearly 9,000 veterinarians and veterinary students who dedicate their life's work to caring for the horse. The AAEP brings together leading veterinarians from the areas of general practice, surgery, reproduction, sports medicine, research and academia in the pursuit of a common mission: to protect the health and welfare of the horse.

The Unwanted Horse and H.R. 503

Guided by this dedication to equine welfare, the AAEP is actively involved in the issues that surround the care of unwanted horses in the United States. The AAEP evaluates all legislative efforts, such as H.R. 503, based on the legislation's ability to serve the health and welfare of the horse. The intent of H.R. 503 is to ban the transportation and sale of horses for processing for human consumption and other purposes. The AAEP believes processing is symptomatic of a larger problem affecting the welfare of our nation's horses, and this problem is created by issues surrounding unwanted horses.

Unwanted horses represent a group of horses within the domestic equine population that are no longer needed or useful, or their owners are no longer interested in or capable of providing financial or physical care. In some cases the horses are infirm or dangerous. Currently, there is a lack of information regarding the total number of unwanted horses in the U.S. However, it is widely believed that many unwanted horses are sent to a processing facility. Fewer numbers are euthanized by a veterinarian and disposed of through rendering, and still fewer are simply abandoned and left to die of natural causes.

Based on U.S.D.A. figures, more than 80,000 U.S. horses were processed in 2005 in the U.S., representing approximately 1 percent of the domestic equine population. According to the AAEP's position on the issue, horses destined for a processing facility should be:

- Treated humanely and with dignity;
- Transported according to guidelines approved by the U.S.D.A. in 2002 regarding the commercial transportation of equines to processing; and
- Euthanized in a humane manner in accordance with guidelines established by the American Veterinary Medical Association (AVMA).

The AAEP believes that processing is not the ideal solution for addressing the large number of unwanted horses in the U.S. However, if a horse owner is unable or unwilling to provide humane care and no one is able to assume the responsibility, humane euthanasia by captive bolt at a U.S.D.A.-regulated facility is an acceptable alternative to a life of suffering, inadequate care or abandonment.

AAEP Concerns Regarding H.R. 503

While H.R. 503 and its supporters are well intentioned, the passage of this legislation, without adequate funding or an infrastructure in place to care for unwanted horses, will create a series of unintended consequences that negatively impact the health and welfare of the horse. Therefore, the AAEP opposes H.R. 503 as it is currently written.

The AAEP's chief concerns regarding H.R. 503 are:

- **Long-term placement of affected horses.** H.R. 503 fails to address how and where unwanted horses will be placed if processing is banned. If H.R. 503 is passed, over 80,000 U.S. horses will need to be placed in alternative homes, or be euthanized and disposed of properly. While there are many equine rescue and retirement facilities providing homes for unwanted horses, their care capacities ranges dramatically.
  In the first year alone of a processing ban, assuming an average capacity of 30 horses per facility, nearly 2,700 additional equine rescue facilities would be needed. Based on these numbers, there are not enough volunteers or placement opportunities currently to provide the level of care that will be required annually.

- **Funding of care for unwanted horses.** H.R. 503 does not the address the funding required to care for or dispose of an additional 80,000 horses per year. Assuming an average cost of $5 per day to provide a horse's basic needs, the funding needed per year, per horse is approximately $1,825. This does not include veterinary and farrier care. Inadequate funding often creates inadequate care, which is a significant welfare concern for unwanted horses.

- **Ambiguous language of the bill itself.** H.R. 503 seeks to prohibit the shipping, transportation, moving, delivering, receiving, possessing, purchasing, selling or donation of horses and other equines to be processed, **and for other purposes**. "Other purposes" is not defined and, if taken literally, could mean the transportation of horses for any reason, including sporting events, sales, recreation or transportation for medical care. This language is detrimental to the equine industry as a whole and if not addressed, could have unintended consequences.

Current Legislative Status
H.R. 503 was introduced on February 1, 2005 by Rep. John Sweeney (R-20th/NY) and was referred to the Committee on Energy and Commerce.

Address the Root Cause, Not the Symptom
The equine industry must work together to address the core issues that contribute to the number of unwanted horses in the U.S. To mobilize key stakeholders, the AAEP is sponsoring an Unwanted Horse Summit on April 19, 2005 to begin generating far-reaching and practical solutions. From this meeting, specific action plans were developed and in June of 2006, the Unwanted Horse Coalition, which started as a result of the Summit is being folded into the American Horse Council.

The mission of the Coalition is to explore ways to reduce the number of horses that are unwanted each year and to improve their welfare through education and the efforts of organizations committed to the health, safety and responsible care of the horse. Owner education will be a focal point.

The American Association of Equine Practitioners, headquartered in Lexington, Ky., was founded in 1954 as a non-profit organization dedicated to the health and welfare of the horse. Currently, the AAEP reaches more than 5 million horse owners through its over 8,000 members worldwide and is actively involved in ethics issues, practice management, research and continuing education in the equine veterinary profession and horse industry.

MR. STEARNS. I thank the gentleman. Mr. Williams.

MR. WILLIAMS. Thank you, Mr. Chairman and members of the committee. May I reiterate that I am appearing today in my individual

capacity and not representing any of the organizations that were mentioned when I was introduced. I am expressing only my own opinions.

The evidence is building to show that the American people strongly oppose horse slaughter once they find out that it exists. The horse racing industry depends almost entirely on the perceptions of our customers. We are a fashion business. We put on a show for the public. So we have issues we have to be constantly concerned with: the honesty of racing, medication issues. Horses have similar medication issues as the Olympic athletes and other athletes. Horse slaughter is now appearing on the horizon. Equine athletes have a well-deserved mystique that brings racing fans back generation after generation.

So let us talk about Barbaro for a minute. Can we imagine Barbaro being sent to slaughter? If he is unable to recover, he won't be of any use to his owners or to the thoroughbred industry. Why not send him to Texas? And if not Barbaro, why any other horse? Why should any other horse be condemned to this fate? Famous horses have found their way to slaughter, as has been mentioned, and this has been a terrible black eye for the racing industry. We have to be alert to avoid this kind of problem given the nature of our business. We cannot afford to lose even a small segment of our fan base.

I am not an animal rights activist. I am a horse breeder. I derive my livelihood from that business. In fact, the horse business was here once before not long ago trying to ask Congress to tighten up rules to control animal activists' interference in horse events and you did. I thank you for that. We are here today to look at the opposite end of the spectrum. When people find out about horse slaughter, most of them vehemently reject it. You have heard what happened in California, you have heard what happened in Texas. Now a Federal District judge has ruled that Texas cannot enforce its laws and that only Congress can address the problem.

So what we have are three horse slaughter plants that pay minimal taxes, provide few jobs, and they are threatening native industry that involves millions of Americans and billions of dollars of economic impact. I submit that something is really wrong here. Slaughter is not a humane solution to anything. Slaughtered horses are less than 1 percent of the horse population in general, a number that the horse industry is capable of looking after and the industry is taking steps to do so, as you have just heard.

I suggest that if forced, the industry will be able to grapple with this problem pretty quickly. I am most familiar with the standard bred breed and I think that we would be able to surmount our difficulties in a short period. There may be other problems for other breeds, breeds that are

introducing 144,000 new horses into the population annually versus the standard bred breed, which is at about 11,000, and they have to make other decisions. But passage of H.R. 503 would put the burden squarely on the horse industry. We breed them, we race them, we sell them, we derive all the benefit from them and we should pay for looking after them throughout their careers.

So I am not asking Congress to take on any of that burden. I am asking Congress to require the horse industry to carry the burden, as it should, and to put an end to a source of suffering for a creature that occupies a unique place in American history and in the American heart. Thank you, Mr. Chairman.

[The prepared statement of Russell Williams follows:]

PREPARED STATEMENT OF RUSSELL WILLIAMS, VICE CHAIRMAN, AMERICAN HORSE COUNCIL; VICE CHAIRMAN, HANOVER SHOE FARMS

I am a fourth-generation participant in the Standardbred racing industry, from which I derive virtually my entire livelihood. Hanover Shoe Farms, in which I am an officer and part owner, is the world's largest breeder of Standardbreds, or trotters and pacers: we send nearly three hundred yearlings through the auction sales annually, from which they go into training to compete in races at thirty-nine major tracks in the New England and Mid-Atlantic States, Kentucky and the Midwest, Florida, and California. As this is written our horse population at the farm is 1,315, which includes 77 retired horses. These are mostly old broodmares who have outlived their breeding usefulness. They will be looked after until they die of natural causes or must be humanely euthanized.

Standardbreds have been part of this country's life for more than 200 years. They can be traced back to an English Thoroughbred named Messenger, imported to America in the 1790's, that sired a number of fast trotters. Brown Beauty, the horse that Paul Revere borrowed to make his famous midnight ride, was said to be a Narragansett Pacer. In addition to being the world's fastest horse in harness, the Standardbred excels in a variety of other equine disciplines. It's a breed able to face every task with gentleness, patience, and endurance. They are wonderful horses.

Though I wish to make clear that I am appearing as an active member of the horse industry and am not speaking for or representing any particular organization, I am also Vice Chairman and a trustee of the American Horse Council, Vice Chairman of the United States Trotting Association (the Standardbred breed's registry organization), and an advisory board member of the Standardbred Retirement Foundation. The Standardbred Retirement Foundation has arranged nearly 2,000 lifetime adoptions of non-competitive racehorses, transitioning some of them into new careers, and providing all of them with the care and dignity they deserve.

Thank you, Mr. Chairman, for conducting this hearing on H.R. 503, the Horse Slaughter Prevention Act. Commercial horse slaughter is a dark and ugly secret in the United States and, in my opinion, a serious threat to the horse industry itself. In essence, horse racing is a form of entertainment; consequently we depend on public perception. We compete, nowadays, with many other forms of entertainment, and we work constantly to maintain high standards of quality and integrity so that we may continue to earn our customers' loyalty. If horse racing has an edge over any other type of entertainment, it is the mystique that surrounds the horse itself. In a race, horses can display a unique distillation of beauty, power, speed, and above all courage, which enables an individual to defeat all expectations and prevail by sheer force of will. Public

awareness that we subject this noble animal to the needless suffering that goes with commercial horse slaughter could turn our customers against the sport of horse racing.

Commercial horse slaughter is not humanely carried out. I have seen continuing violations of state and federal transportation regulations where horses are being shipped to slaughter from the livestock sales. These violations continue because enforcement is extremely difficult. The protective regulations were promulgated in the first place because of the deplorable conditions under which horses were being loaded and sent on the long ride to slaughter, and in my opinion regulation will never be very effective. This problem also exists at the sales themselves, where pregnant mares, stallions, elderly, debilitated, blind, and injured horses are jumbled together and sold in an atmosphere that makes it extremely difficult, if not impossible, to sort out individuals that should be euthanized on the spot.

A logical argument can be made that ending slaughter would put some huge number of additional horses at risk of neglect by their owners, and thus of needless suffering. This argument only has force, however, if you assume that slaughter is humanely carried out, which it is not. Such an argument does not mean that slaughter is part of any humane solution to the problem of unwanted horses; it means only that slaughter is a more acceptable evil than the alternative.

Congress need not accept the evil of slaughter. By ending slaughter, which is the only aspect of this problem now within legislative control, Congress will not only stop the needless suffering that accompanies slaughter, but also cause people like me, members of the horse industry itself, to move faster and work harder to put our own house in order. We breed them, we race them or show them, we enjoy and profit from them, and it ought to be our responsibility to look after them properly to the end of their lives. I submit that we must eliminate horse slaughter in order to retain the confidence of the public.

I am familiar with growing, industry-wide efforts in the Standardbred, Thoroughbred, and Quarter Horse fields to provide for horses that are past their usefulness. An Unwanted Horse Task Force has been set up at the American Horse Council within the past three months that will coordinate these efforts within the breeds so that unwanted horses can cease to be a national problem. To be frank, if the horse industry is deprived of the ability to discard and forget about a horse by sending it on that long trailer ride to slaughter, we will act far more efficiently to solve the problem by more appropriate means. Horses will cease to be disposable.

Passage of H.R. 503 will enable Congress to accomplish two very laudable effects in our country: to stimulate the horse industry to look after its own interest more responsibly and efficiently, and to put an end to a known source of suffering imposed on what is, for so many Americans, a beloved animal.

Thank you.

MR. STEARNS. Thank you. Mr. Koehler.

MR. KOEHLER. Mr. Chairman and members of the subcommittee, thank you for the opportunity to speak to you today to clear up some misconceptions about my industry. I am Dick Koehler, Vice President, Beltex Corporation, representing the country's three USDA-regulated horse processing plants; two are in Texas and one in Illinois. The horse processing industry is a victim of a massive misinformation campaign waged by animal rights activists, so we are pleased to have the opportunity to set the record straight and testify before this committee.

The three plants provide vital services that are integral to the Nation's $40 billion horse industry. Academic research laboratories for

the country's leading veterinarian research programs, including Texas A&M, Oklahoma State University, University of Illinois, Southern Illinois University, as examples, would not be able to continue research for many veterinarians like Dr. Hogan, who would need this background to continue their education. The only source of USDA-inspected equine protein for American zoos for the lions, tigers, bears, and birds of prey come from the horse processing plants. Leading source of equine pericardium for human heart surgery comes from the horse processing plants.

The essential role of horse processing, which sets the baseline value for horses for the U.S. horse market by providing a service of choice to those horse owners and it is a matter of choice. If you don't wish to bring your horse to slaughter or have your horse slaughtered, I honor that. If you wish to do that, I believe you should have the choice to do that with your property.

Contrary to animal rights groups' misrepresentations, the horse processing industry operates as follows: independent, not company buyers, purchase rejected and unwanted lower value horses from auction; that is after they go through the group that they would consider a recreational horse. That is a horse that they are going to move forward, try to sell at a profit, and that is their business. But the lower value horse, the horse that is unwanted because of its temperament, its physical attributes, or other issues, will probably come to slaughter. That is the unwanted of the unwanted.

Horses are transported according to humane transport laws approved by Congress and advocated by proponents of H.R. 503. There is a long list of rules and regulations for the transportation of horses only to slaughter. It is not a horse transportation act, it is a horse transportation to slaughter act. And in that act there are several guidelines for the condition of the animal to indicate the separation from aggressive animals to non-aggressive animals, so that when the animal arrives at the plant, it can be inspected by an APHIS representative who will then coordinate any type of issue that occurred during transportation.

Once that animal is received at the plant, they are fed and watered and housed in a covered holding area. They are inspected and their owner number, their sex, their breed, and other markings are documented in the State of Texas by a law enforcement representative to determine if they were stolen. And with due respect to Mr. Whitfield, I am not aware of any animal, after the 1997 act was passed by the State of Texas, where there was a stolen horse through Beltex. So I would appreciate information regarding that so I can follow up.

MR. WHITFIELD. I will be glad to give you a copy of the case with Beltex specifically named.

MR. KOEHLER. Yes, sir. Thank you. Horses are inspected by USDA Food Safety and Inspection Service veterinarians to make sure that they are free from disease and contamination for human consumption because these horses are being brought for human consumption. They are healthy horses. They are the unwanted of the unwanted, but it doesn't make them, by majority, unhealthy. There are some that are quite unhealthy and are condemned by the USDA veterinarian and they go straight to rendering.

Horses are humanely euthanized using the penetrating captive bolt method, which is mandated by Congress as a part of the Humane Handling Law recommended by the American Veterinary Medical Association and which meets the requirements of humane euthanasia set forth by the Humane Society of the United States. Plants have a legal obligation and a financial incentive to keep the horses calm and treat them humanely, because if the horse is under stress, it produces an inferior meat product.

The American meat, horse meat, is regarded as the best in the world. One of those reasons that it is regarded as the best in the world is the large amount of Federal and State regulation on this process. Included in that are the large amount of drug testing for antibiotics and other compounds which may be in the horse. The USDA sends forth a program to the veterinarian at each plant, tells him how many samples to draw, when to draw the samples, and what lab to send those samples to. In addition to that, the EU requires a much more extensive testing down to minute levels of various antibiotics that are sent to a lab of their choice also selected by the USDA veterinarian, the meat sample is, but it is sent to a lab of their choice, which is Maxim in Canada.

The passage of H.R. 503 would result in 60,000 to 90,000 extra horses, unwanted horses, flooding an inadequate and unregulated patchwork of adoption and rescue facilities. We ask that Congress vote no to this misguided legislation that would constitute unprecedented government intervention not founded on public health or food safety. We ask that Congress not eliminate an entire industry just because animal rights activists find the product of this law-abiding, taxpaying, legitimate business to be distasteful. Thank you.

[The prepared statement of Dick Koehler follows:]

PREPARED STATEMENT OF DICK KOEHLER, VICE PRESIDENT, BELTEX CORPORATION

Summary of Testimony

- I am Dick Koehler, Vice President, Beltex Corporation, representing the country's three horse USDA-regulated horse processing plants.
- The horse processing industry is the victim of a massive misinformation campaign waged by animal rights activists, so we are pleased to have the opportunity to set the record straight and testify before this committee.

- The three plants provide five distinct and vital services that are integral to the nation's $40 billion horse industry:
    - Academic research laboratories for the country's leading veterinarian research programs.
    - Only source of USDA-inspected equine protein to America's zoos
    - Leading source of equine pericardia for human heart surgery
    - Essential role of horse processing, which sets the baseline value of horses for the U.S. horse market
    - Preparation of euthanized horses for acceptance by U.S. rendering plants.
- Contrary to animal rights groups' misrepresentations, the horse processing industry operates as follows:
    - Independent buyers purchase low-value horses from auctions, which are unwanted because of temperament, physical attributes, behavioral
    - The horses are transported according to humane transport laws approved by Congress and advocated by the proponents of HR 503
    - The horses are fed and watered upon arrival and wait in a covered holding area
    - They are inspected and their owner number, sex, breed, and markings documented by a law enforcement officer to determine if they were stolen
    - The horses are inspected by a USDA Food Safety Inspection Service official to make sure they are free from disease and contamination
    - The horses are humanely euthanized using the penetrating captive bolt method, which is mandated by Congress as part of the Humane Handling Law, recommended by the American Veterinarian Medical Association, and which meets the requirements for humane euthanasia set forth by the Humane Society of the United States
    - The plants have a legal obligation and a financial incentive to keep the horses calm and treat them humanely because if the horse is under stress, it produces an inferior meat product
- The passage of HR 503 would result in 60-90,000 extra horses flooding an inadequate, unregulated patchwork of adoption and rescue facilities.
- We ask that Congress vote no to this misguided legislation that would constitute unprecedented government intervention.
- We ask that Congress not eliminate an entire industry just because animal rights activists find the product of this law-abiding, tax-paying legitimate business to be distasteful.

My name is Dick Koehler, Vice President of Beltex Corporation. Beltex Corporation is a Texas Corporation with European shareholders that operates a USDA and European Union - approved horse processing company located in Fort Worth, Texas. I am here today representing the 100-year-old U.S. horse processing industry, which would be eliminated in its entirety if this bill passes.

My business management background includes serving as a plant manager for Simeus Foods International, one of the country's few minority-owned food processors, for 14 years. I was also the primary meat buyer for Armour Foods/ConAgra for 10 years. Since 1998, I have been honored to be part of Beltex, which not only provides a vital service to the $40 billion horse industry, we provide food to zoos, contribute to the local community through donations to charities and community groups and allow our plant to be used as an academic research facility to improve veterinarian care.

I was eager to take the helm of the Beltex's Ft. Worth plant. My background in business prepared me for the many challenges involved with the daily tasks of running a company. What I was not prepared for was the continuous barrage of insults, attacks, and lobbying efforts by the animal rights community – which has sparked legislation like H.R. 503. These groups are relentless in their lobbying, public relations, and advertising campaigns, in which they have spread inaccurate descriptions of our industry through thousands of internet, print, radio, and television stories worldwide.

Furthermore, these groups have posted video footage on their Web sites, claiming it to be an accurate portrayal of the horse slaughter process. The truth is, this footage of cruelty and abuse does not reflect the modern USDA approved process we use here in the United States. I can promise you, irrefutably, that the video was also not filmed at the other two U.S, horse processing plants: Cavel, or Dallas Crown. Yet, we are the three companies that would be forced to shut down if you pass H.R. 503.

Not only do I have to go to work each day and make the high level decisions required to run my business. I also must deal with a cruel, misguided misinformation campaign against our industry that has reached mammoth proportions. This campaign, waged by animal rights groups supporting H.R. 503, has reached the point that it directly affects the long term planning of the corporation. The continuous threat of being shut down has made it impossible for us to commit to long-term investments that would improve our facility and our operations -- a burden not faced by most small businesses in America. These investments would bring more jobs to our community and fuel the local economy.

The goal of the animal rights groups that support this bad bill is best described by their own officials in their own words. In a Washington city paper article, Ingrid Newkirk, President and Founder of the People for Ethical Treatment of Animals stated, "Eating meat is primitive, barbaric, and arrogant." And in 1996, the current Humane Society of the United States grassroots executive J.P. Goodwin said, "My goal is the abolition of all animal agriculture."

In fact, the Animal Liberation Front, which is the animal rights community's branch devoted to violent and often criminal activity, is described by the Federal Bureau of Investigation (FBI) as a domestic terrorist organization. Just four days ago, the FBI announced that an ALF activist pled guilty to 54 counts of arson involving nine separate attacks. One of these attacks was on the Cavel West horse processing plant in Redmond, Oregon, which the animal activist burned to the ground in 1997. You can see that our concerns are not unfounded.

Today is the first chance horse processing industry has had to describe accurately the vital services we provide without having a reporter or producer edit it. It is the first chance we have had to explain to the U.S. House of Representatives exactly what we do, and we sincerely thank you for this opportunity.

Beltex, Cavel, and Dallas Crown are the only companies in America that provide five distinct and vital services that would be eliminated if this legislation passes. The mayor of Ft. Worth issued Beltex a special commendation for being a good corporate citizen. Beltex is a legal, tax-paying business that adheres to all applicable local, state, and federal regulations, as well as European Union regulations.

Following are the five vital services we perform:

- First, we serve as an academic research laboratory for Texas A&M, Oklahoma State University, Colorado State and other leading university veterinarian programs. By allowing students of veterinary medicine to visit our facilities and observe and examine large numbers of horses, we make possible the research that is used to enhance the quality of veterinary care.
- Second, we are the only source of USDA-inspected horsemeat for U.S. zoos. More people visit zoos in America than all sporting events combined. A high-protein diet using horsemeat mimics what many zoo animals would have

consumed in the wild. If the zoos cannot get meat from us, they will be forced to import horsemeat from other countries with less stringent safety and humane handling regulations.

- Third, we are the leading U.S. source of equine pericardia used to replace the human membrane that surrounds and protects the heart. Equine pericardia are stronger and thinner than other animal pericardia, making them ideal for human heart surgery. Again, if the pericardia have to come from overseas, the harvesting of them will not be under the same watchful eye as it is here in the United States.
- Fourth, we are an irreplaceable, interdependent part of the $40 billion horse industry, without which the market would fail, causing tens of thousands of horses to potentially become abandoned and abused.
- Fifth, when rendering plants reject horses, we euthanize and prepare the horse to meet the specifications set forth by these plants. This is important because proponents of closing our plants indicate that euthanasia and pick-up by rendering plants as an *alternative* to our services, when, in fact, we are often an integral part of the rendering process.

Because the horse processing industry has been misrepresented in the past, I am providing the following modern-day, *accurate* and detailed description of our industry.

Independent buyers purchase horses from auctions and other sources. They are looking for horses that can potentially be used as recreational or working animals. Some of these horses, because of temperament, physical attributes, or other reasons have no market value as a working or recreational animal. These “loose” animals, as they are called at auction, would be considered the bottom of the horse market, and the traders often sell them to one of the three processing plants. Most horse owners who take their animals to auctions realize that the animals may end up at processing plants. A portion of the animals we receive come from private individuals who deliver the animals to our plants. If horse owners do not want their animals to go to the processing plants, they should simply market their animals by private treaty. The choice now lies where it should – *with the horse owner.* This is why passage of H.R. 503 would constitute a clear violation of personal property rights.

The processing plants are the only outlet where the lowest-value, unwanted horses end up. Unwanted horses fall into a wide range of categories. They are healthy and of various breeds, suffer from non-life-threatening disability or infirmity, fail to meet the owner's expectations, have behavioral problems, or are just plain mean or dangerous.

As the unwanted horses are transported to processing plants, it is important to note that horses bound for slaughter are the only livestock that have any federal humane treatment guidelines governing their transport. The USDA’s Animal and Plant Health Safety Inspection Service (APHIS) enforces the "Commercial Transportation of Equines for Slaughter" (9 CFR 88). This regulation establishes the condition horses must be in before they can be transported by commercial livestock haulers to the plants. The Fitness to Travel Section of this law passed by Congress dictates that the horse must be able to bear weight on all four limbs, not be blind in both eyes, walk unassisted, be older than six months of age, and be not likely to give birth on the trip.

This regulation also sets out how frequently the trucks must stop to feed and water the horses enroute to a packing plant. The regulation makes it unlawful to transport horses in double deck trailers after 2006. Ironically, this very law was championed by the animal rights groups who are now criticizing these regulations. HSUS claims that nursing foals and blind horses are being transported to slaughter, but this and their other transportation concerns have already been addressed by Congress and the law and regulations are already being enforced.

This regulation also establishes criminal penalties for those that violate the rule. We encourage you to review Beltex's record with APHIS instead of listening to unfounded allegations by our critics. In fact, renowned animal welfare expert Temple Granden conducted a published study on this topic. She found that it was the original horse owners, not transport conditions, which were responsible for the reported horse abuse and neglect of horses that arrived at slaughter plants.

Upon the horses' arrival at the plant, the USDA APHIS inspector verifies all shipping documents. An additional inspector, a law enforcement official acting as a brand inspector, documents the owner number, sex, breed and markings on each horse to make sure none of the horses have been reported stolen from their original owners. This mandatory brand inspection by law enforcement has been in effect since 1997, when Texas Agriculture Code #148 took effect. In all the years I have been at the company, the brand inspectors have never found that a horse that has been reported stolen.

In order for meat to be exported to the European Union, a veterinary medical inspection officer from the United States Department of Agriculture's (USDA) Food Safety Inspection Service (FSIS) must be present at the time of slaughter. This USDA veterinarian must perform an antimortum inspection of livestock in pens before processing in order to confirm that the animals comply with all USDA regulations as being fit for processing. This USDA veterinarian monitors the complete sequence of events involved in euthanasia and processing. The USDA veterinarian has the authority to retain and condemn any carcass that is considered suspect for contamination or diseased in some fashion that would make the introduction of the meat from that carcass into the human food chain unsafe. Since horses are handled under both United States and European Union regulations, horses undergo more stringent inspection procedures than are other animals slaughtered in the United States.

Our plant has been designed specifically to put horses at ease. When horses are received, they are provided food and clean water in a clean and covered holding area. A captive bolt system is used to euthanize the horse, as is dictated by the Humane Handling Act approved by Congress. *A captive bolt is not a stun gun;* it is designed to produce instant brain death. In other words, we are bound by the Humane Handling Act to euthanize these horses in this specific way. Animal rights groups advocating H.R. 503 know that we are following this law that binds us to perform veterinarian-supervised humane euthanasia, yet their materials and media interviews continue to claim that the process is not humane. If any of the independent inspectors or USDA veterinarians see any impropriety at any step along the way, immediate action is taken.

Now that you have heard the accurate account of this carefully supervised process, there is no evidence that suggests a food safety or public health risk. We are required by law to adhere to the Humane Handling Act, the Humane Slaughter Act, the Meat Inspection Act, and additional regulations. Therefore, H.R. 503 would set the very dangerous precedent of the federal government banning a livestock product for reasons other than public health.

I also want to point out that our legal obligation to treat animals humanely is matched by our own incentive: animals under duress make for a substandard product. That is why the owners of the horse processing plants use the humane euthanasia methods supported by the U.S. Congress and the American Veterinarian Medical Association. In fact, our method also meets the requirements for humane euthanasia set forth by HSUS, which says "We recommend for use only those methods that cause a rapid loss of consciousness and that cause minimal pain, distress, and suffering in the animal."

The quality of meat is dependent upon many factors, not the least of which is that an animal at the time of slaughter should be as calm as possible in order to reduce the animal's stress levels. A stressed animal can have chemical reactions in the muscles that result in meat that is substandard.

This is why the unfounded claims of mistreatment are so ridiculous. The plants are not saying that difficult situations do not come up -- as they do with any animal -- but they are extremely rare and dealt with appropriately and immediately. Proponents of H.R. 503 inaccurately describe the slaughter process and continue to claim widespread mistreatment without evidence. Congress has already passed laws to assure that this is not the case. So, even if you believe that we are only driven by economics, note that we *do* have a financial incentive to handle the animals in as quiet and non-stressful a fashion as possible in order to produce the best quality product.

Since I have demonstrated Congress's own vigilance and provided USDA evidence that incidents of mistreatment are not a legitimate concern, the only argument left is, and I quote our opposition: "U.S. businesses shouldn't supply horse meat for other people to eat." With all due respect, I think that's a downright arrogant statement. The debate about which animals should and should not be eaten has been flourishing since before the Middle Ages and is likely to continue. It is extremely presumptuous of PETA and other anti-slaughter groups to claim the moral high ground across the globe regarding what is appropriate to eat, and not eat. If they really care about the humane treatment of animals, then let's talk about it. I'm confident that our plant meets that test. But don't try to get the U.S. government to shut down my legitimate business simply because you find our safe meat product distasteful.

Remember, we set the base price for the entire horse market…we're it. You are looking at the bottom of the horse market. If you close us, the bottom falls out, and you have a nightmare situation. Even the Congressional Research Service has expressed concern that the challenge of caring for an extra 60,000 to 90,000 unwanted horses per year couldn't be met by the rescue and adoption facilities in place today.

Yet none of the animal rights groups supporting this bill have offered to address this problem. An Animal Liberation Front activist who now works at HSUS once set 7,000 minks free from a farm in Oregon. Four thousand of those minks, mostly babies who weren't weaned from their mothers, died as a result. Is that what HSUS wants to happen here? Just let the horses die of starvation? The Humane Society of the United States is a $111 MILLION DOLLAR operation. Let me repeat that. They are a $111 million dollar organization! They have more revenue than all three of the horse processing plants combined, and as you've seen, they have several wealthy celebrities working with them. Yet we called the one and only shelter funded by HSUS that takes horses, and there is No Vacancy. The largest animal rights group in the country isn't willing to take one more horse, the shelter operator told us. Many other shelters are filled to capacity, as well.

Now, imagine what will happen when we add 60,000 to 90,000 unwanted horses per year to this overburdened system. Actually – the numbers are trending upwards of 90,000. Private owners will be able to absorb some of this infux, but the numbers are too staggering for that to even make a dent. Not only will eliminating processing be bad for horses, it will have a far-reaching negative ripple effect on the hundreds of businesses that make up our nation's $40 BILLION horse industry -- from hay farmers and trailer manufacturers to feed stores and truckers. In fact, our plant recently was recognized for being the number one airfreight client at Dallas Fort Worth airport. There are clearly more jobs on the line than just the workers in our plants.

Proponents of H.R. 503 have tried to polarize the two aspects of this bill -- the horse welfare part, which after this testimony they cannot lay claim to, and the economics, which they say are driving the mistreatment that they cannot document.

What I am here to clarify once and for all is that you *cannot separate* these two elements. A horse that is worth less money is more prone to neglect. Period. A horse trader that does not have a baseline guarantee of what he can get for a horse is not going to take a chance on a low-value animal. So that animal is going to have to go back to the person who didn't want it anymore, but they have no buyers and no options. How do you

think most people are going to treat that unwanted animal? The animals – the horses that HR 503 advocates are trying to protect – will clearly suffer then.

You can parade every celebrity known to man up here for as long as you want, and you can definitely get an eye full with some of them, but you cannot change the way the market works. You cannot change reality. Our industry exports one of the few agricultural products this country trades with Europe. To a businessman like me, the passage of H.R. 503 would be the big hand of government reaching into a private industry and destroying an entire segment -- a segment that is interdependent with every other aspect of the $40 billion horse market.

H.R. 503 claims to fix a so-called "problem" that has been misrepresented time and time again, while our plants have complied with every new law and every new regulation.

We hope you will consider the facts before you take the broad sweeping step of closing my business and the businesses of my competitors. Beltex is owned by a company based in the Netherlands, and Dallas Crown and Cavel are Belgian-owned, but all plant management and other employees live in the United States. Because Mr. Whitfield, the proponent of this bill, has a Japanese-owned Toyota plant in his state, I know he can appreciate what foreign ownership can do when an overseas corporation is willing to make an investment in your community and provide jobs to local residents. H.R. 503 would send the message that Americans reject foreign investment in our country.

In closing, I am asking you not to support this misguided legislation.

I am running a legal, tax-paying, humane business that is in compliance with every letter of every environmental and agriculture law on the books. Our industry is providing the underpinnings that allow our nation to safely and humanely manage its population of 9.2 million horses.

We have a track record of compliance with stringent regulations -- the most stringent in the entire livestock industry. I have talked about the services these three plants provide: essential nutrient-rich feed for zoos, medical materials for cardiac procedures, a humane end-of life option for horses, and employment opportunities for local communities. I hope you can look beyond the emotional arguments made by proponents of this bill, and listen to the experts from AVMA and AAEP who really know what is best for horses.

I hope you now realize that these plants provide a necessary service for the horse industry and for this country.

I urge you to stop now, before the federal government takes the unprecedented step of shutting down a legitimate, safe, law-abiding, tax-paying business.

I thank you for the opportunity to speak on behalf of the horse processing industry.

MR. STEARNS. I thank all of you and I will start with questions. Mr. Koehler, just a quick question. When the horse meat is sold in Asia or is sold in Europe, is it considered a gourmet meat or is it considered just a standard meat?

MR. KOEHLER. It is considered a protein source.

MR. STEARNS. Protein source, period. I was just curious what your reaction would be when someone indicated that one of the Kentucky Derby winners was slaughtered and then the French restaurant advertised it by saying "eat a champion." I just wonder what your response would be to that. I think that is sort of an emotional argument, but you can see how that colors this whole thing and it is not necessarily you can ask, but I say to you and Dr. Beaver, I am going to come to you here, too, but this

argument really sometimes comes down to the emotional and so you are going to have to perhaps address this and I think Mr. Goodlatte, the Congressman from Virginia, did not address that; Mr. Sweeney did, and I think that is an argument that you will have to take into account.

But Mr. Koehler, you mentioned a very good argument I would like Mr. Pickens to answer. In my hometown of Ocala there are about 465 horse farms. The large horse farms support this bill; the small ones don't. And when I go to talk to them, they all talk about private property rights and you probably know this better than anybody in this room, why should the Government, the United States government, tell private citizens what they can and cannot do with their own property? And so the question I have for you, as Mr. Koehler mentioned in his opening statement, just a small farm, they have a couple of horses. Some of them might have 30 horses. They own these horses, they paid for them. Why should the U.S. government tell them this isn't a private property issue?

MR. PICKENS. I suppose it is a personal property question where they have the right to do what they want to do with the horse, and if they wanted to have the horse slaughtered, that that would be their right.

MR. STEARNS. Yes.

MR. PICKENS. I don't think that most of the time these people know where these horses are going and don't know they are being slaughtered. I think when you have killer buyers talking to them, they are telling them that they are going to take your horse and maybe you can't afford to continue to pay for it, so we will allow somebody else to have it and we will put it in a nice home. If they had to sign an affidavit that said it is all right to slaughter my horse, I know what you are going to do, you are going to slaughter my horse and sign their name to it, I don't think anybody would sign their name to it.

MR. STEARNS. Mr. Pickens, in all deference to you, most of these people know these horses are being slaughtered and when I talk to them, they understand that they want to get paid for this horse and they want to have the right, and exercise their private property rights, to do with this horse what they want, and they feel this bill will deny them that, so that is just my observation.

Dr. Beaver, Congressman Sweeney talked about the emotional issue, which I think it is pretty important that you need to address. The horse, obviously, from the development of the frontier, has always been a symbol for America and Mr. Sweeney mentioned that we don't slaughter bald eagles and eat them. And I think a lot of people feel a little bit squeamish when they hear a Kentucky winner advertised in a restaurant "eat a champion" and so I think I would like you to address this issue about the mystic qualities that maybe Mr. Williams had talked about, this

horse; I mean, isn't that something that Members should consider also, besides just the nuts and bolts of it?

DR. BEAVER. The emotional issue is certainly something that you, as Congressional Members, have to deal with in your home districts. That is something that we all recognize. But if the general public actually knew the suffering that horses that are not being cared for go through, you would find that the polls that say we are opposed to slaughter would dramatically change to the opposite and say we need to have humane care for these particular horses.

The average U.S. citizen is at least three generations off the farm. Many people in this country do not even know, have not touched any kind of livestock. They are probably more familiar with horses, but they get their information about animals from shows like Bambi, from Animal Planet, from information off the Internet rather than from having lived and worked with these particular animals. So the concern about emotion is very real, but the concern about humane care is even greater.

MR. STEARNS. One last question and I will let you answer this, Dr. Corey, and you can bring in your other comments. Mr. Whitfield had mentioned that it is a concern of a lot of Members that the Federal government is going to have to pay for the caring of these animals and he pointed out that there are a lot of retirement facilities that exist in the United States; they have the capacity to absorb these, I don't know, 80,000, 60,000, 80,000, 90,000 horses.

I guess the question is how many equine retirement facilities are there in the United States today, what is their total capacity, and will they be able and will there be enough generosity in the American horse industry to pay for the caring of these animals through that whole extensive time? And I think what is on any member's mind, no matter how you feel on this issue, is the Federal government going to have to come in and bail us out? I have heard quotes as much as $250 million a year that the Federal government is going to have to pay to cover all this, so I guess if you can clear up the number of facilities, the capacity and what you expect in the future if this bill is passed.

DR. COREY. Well, I will try. I am not sure of the exact number of rescue and retirement facilities in the country. I have heard numbers all over the place, but I have heard that there are approximately 6,000 horses that right now are in sanctuaries or rescue and retirement facilities. We figure that we will have to have an additional 2,700 facilities to cover about 90,000 horses. The cost per year, roughly, is $1,800 for minimal care, feed and water, veterinary care, nothing extensive on top of that. So we are looking at anywhere from $120-$130 million per year and that is compounded each year because these horses are going to live and they are not going to die.

MR. STEARNS. That just goes on and on.

DR. COREY. And goes on and on.

MR. STEARNS. And with inflation, it could be a lot higher.

DR. COREY. Absolutely.

DR. HOGAN. Can I make a comment?

MR. STEARNS. Sure. Ms. Hogan.

DR. HOGAN. I think that is a little bit too simplistic to assume that every year there is going to be 80,000 or 90,000 horses that are just left standing out there to starve to death. I own horses, I breed horses, I take responsibility for my horses. Ninety-nine percent of the horses that are owned in this country are owned by responsible horse owners. The 60,000 to 90,000 horses we are talking about represent 1 percent of the horse population.

Are we going to pay for all of these people that, this 1 percent of the population that is not going to take care of their horses? We are just removing one option for them, that slaughter is not an option. You can kill your horse if you want to, but you cannot ship it to slaughter. You can render it, you can euthanize it, you can bury the carcass, there are a number of options for you. We are just removing one that will eliminate what we believe to be a cruel practice that is in existence.

MR. STEARNS. My time is expired. Do you want to finish up, Dr. Corey?

DR. COREY. Dr. Hogan is in a very exclusive practice and if you get across the country, they are not all exclusive practices such as hers. And if you get out in reality, in a lot of the veterinary practices, a lot of horse owners consider $200,000 to care for a horse a lot of money and I can tell you that when it comes down to feeding that horse or feeding your kids, what are they going to do? They are going to feed their horse.

MR. STEARNS. Yes. All right, my time is expired. Ms. Schakowsky.

MS. SCHAKOWSKY. I have to tell you that listening to this debate, I would say that the opponents of this legislation are presenting a picture that almost want me to call them the Humane Society, an organization that was actually discredited, Mr. Koehler, in your testimony. We are talking about a for-profit business here, right? People who are slaughtering horses to sell and make money.

MR. KOEHLER. Yes.

MS. SCHAKOWSKY. Okay. And I am looking at the five vital services that you say are performed and I wanted to ask the proponents of the bill whether or not this is the only way that these goals can be met. They say they, one, serve as an academic research laboratory for various, Texas A&M, et. cetera, and students can visit their facilities and observe a large number of horses; makes research possible. Second, they are the

only source of USDA-inspected horse meat for U.S. zoos, so the question is could we feed zoo animals in some other way?

Third, we are the leading source of equine pericardia, used to replace the human membrane that surrounds and protects the heart. Do we need this industry in order to meet that goal? Fourth, we are an irreplaceable, interdependent part of the horse industry and without the market, without which the market would fail causing tens of thousands of horses to potentially become abandoned and abused. So in other words, this is protecting horses because otherwise they would be abandoned and abused.

And fifth, I don't understand. It is about rendering and I don't get it, but so these other four, I am wondering, Dr. Hogan or Mr. Williams or Mr. Pickens and Dr. Hogan, let me also say I thought you made a really good point that I thought of, too. If you make this argument about horses, you really could make that argument about cats and dogs. There really is a market internationally for people who eat cats and dogs. I can't imagine. And it could be, potentially, a lucrative business, I presume. But we do distinguish among animals, we just do in this country. So Dr. Hogan, in terms of those laudable goals that they say they achieve--

DR. HOGAN. I am sure that the most obvious is that it is a for-profit business, but as far as the other attributes listed for this industry, I know one thing about the equine pericardial tissue; it is considered inferior, so I don't think that is the number one choice at all for pericardial tissue implants. And secondly, about the research. We are not saying that you cannot euthanize an animal. A gunshot to the head is far better than this slaughter process, but if you need research materials, we are not disputing that they are available, but it is not the slaughterhouse that is the ultimate supplier of these research materials.

MS. SCHAKOWSKY. Mr. Williams, you mentioned that there is such a thing as an Unwanted Horse Task Force that has been set up. I mean, are there other ways to more adequately address this issue? I am concerned about large numbers of unwanted and abandoned horses.

MR. WILLIAMS. Yes. The Unwanted Horse Task Force has been folded into the American Horse Council. It is getting started. These things can't be achieved overnight. The first thing that has been done is communication. A website is being set up to give a Web presence to the organization. The task force has determined that education of owners and members of the industry is a high priority and that this is something that can be done centrally. Some other things have to be done in the localities where the rubber meets the road.

When these numbers are being thrown around, I would like to just point out that, for example, in 2002 the number of horses slaughtered

was somewhere around 44,000; in 2005, 90,000. So that is 45,000 horses, roughly, that didn't get slaughtered in 2002. Where are they? Are they walking the streets today? No, it is not that simple and it is not good mathematics and it is not rational to say if we stop slaughtering 90,000 horses from last year, they are going to be on our hands and another 90 and another 90. History shows it doesn't work that way.

MS. SCHAKOWSKY. Okay, thank you. I yield back.

MR. STEARNS. The Chairman of the full committee, Mr. Barton.

CHAIRMAN BARTON. Thank you, Mr. Chairman. It is good to have Mr. Pickens here talking about something besides the high price of oil. My first question, in Dr. Corey's testimony, he has a list of 62 State and national organizations that oppose the bill and of those 62, 25 are specific organizations directed towards horses. Does anybody dispute that list? Any of the proponents of the bill? Does anybody dispute that the American Veterinary Association, the American Paint Horse Association, the American Quarter Horse Association, the Animal Welfare Council, Hooved Animal Rescue and Protection Society, Indiana Thoroughbred Owners and Breeders Association, Kentucky Quarter Horse Association, Michigan Horse Council, Mid-America Horse Show Association, Missouri Equine Council, New Jersey Horse Council, New York State Horse Council, North Carolina Horse Council, Ohio Horse Council, Pacific Coast Quarter Horse, Palomino Breeders of America, Texas Horse Council, Utah Horse Council; it can go on and on.

And some organizations that are not animal specific, Professional Rodeo Cowboys Association. I mean, it can't be purely economic that all these associations oppose the bill.

DR. HOGAN. May I comment?

CHAIRMAN BARTON. Yes, ma'am.

DR. HOGAN. There certainly are some financial interests there; in some cases, a lot of financial interests. I would like to make a couple of points. I stated on a number of the AAEP and the AMVA. The AAEP is a membership of 7,200 or so veterinarians. The poll that was conducted in 2002, online survey of 3,000 veterinarians in which 640 responded. That is the survey that is commonly quoted. I think it is more of a leadership's position. Also, the American Quarter Horse Association, this is their official latest magazine sent to their members. This is a quote from their magazine. "We should also say that issues concerning human consumption of horse meat are outside the scope of AQHA. Therefore, the Association takes no official position on this subject except to say that it is a personal, cultural, and social issue." This is from their own monthly magazine sent to members.

CHAIRMAN BARTON. Do you dispute that the American Quarter Horse Association opposes the bill?

DR. HOGAN. No.

CHAIRMAN BARTON. I am not saying that, I am just--what is in his testimony.

DR. HOGAN. I understand that, but I would like to say that a lot of those organizations--

CHAIRMAN BARTON. Mr. Chairman, you didn't start my clock and I'm at about the 2-minute mark. I have probably been going about--

MR. STEARNS. We will let the Chairman work that out in his best fairness.

DR. HOGAN. A lot of those associations have taken a leadership position, but do not necessarily represent all of the members.

CHAIRMAN BARTON. Okay. Dr. Beaver, you have talked to me about this several times when you were President of the American Veterinary Association. Do veterinarians take an oath similar to doctors that treat people about doing what is, you know, the Hippocratic Oath and things like that. Do you all have any kind of a similar oath to treat animals?

DR. BEAVER. Absolutely, yes, we do.

CHAIRMAN BARTON. And with the American Veterinary Association opposing this legislation, did you all have a substantial policy debate about that and talked about all the issues that have come out in this hearing before you took that position?

DR. BEAVER. This has been through several different committees and those committees make the recommendation that comes forward. The executive board talks about it and decides whether it should become the association's position or not, so it has been through a lengthy process and has had a lot of input, yes.

CHAIRMAN BARTON. So would it be your assessment that in that debate with the veterinary association that the veterinarians like Dr. Hogan, who obviously have a heartfelt opposition, were their voices heard in the debate? Were they given input into the debate and allowed to participate in some of these policy discussions?

DR. BEAVER. There was a lot of information gathered from a lot of different sources, yes.

CHAIRMAN BARTON. Okay. This is an open question. Is there any compromise possible on this? I mean, it seems to me to be a fine line between opposing the slaughter of horses but yet supporting euthanasia and all of the other avenues to what is commonly referred to as put down a horse. Could we get to something that everybody could agree upon? Dr. Corey.

DR. COREY. I definitely think there is always room to sit down at a table and talk about it. We, in fact, have never heard any of the problems that exist in transportation from anybody, so I sure think there is room to

always sit down and talk about this; the AAEP is always willing. But I also would like to correct something. The AAEP has done not only one survey, but two surveys; our general membership survey last year. And we are strongly, well near 80 percent of our members are in favor of our position. This is sort of a democratic process. I see that not all of the Congressmen agree on this issue. Dr. Hogan and I don't agree on this issue.

CHAIRMAN BARTON. The only issue we ever disagreed on.

DR. COREY. Uh-huh, I can tell. But at any rate, I do want you to know that we have surveyed our membership twice and we are very comfortable with our position.

DR. HOGAN. Just ask him how many members it was for the last survey.

CHAIRMAN BARTON. Mr. Pickens, you wanted to make a comment?

MR. PICKENS. How do you compromise slaughter? I don't know. I just don't see how you get there, Mr. Chairman. Let us just go back to the facts and you know, I have testified a number of times here in Washington and always think I am on the right side of the issue and it is proven that most of the time I have been. And I think clearly I am on the right side of the issue here. And when I see foreign-owned--

CHAIRMAN BARTON. Spoken like a true Texan.

MR. PICKENS. That is right. That is right. But foreign-owned and we don't have--we have an employee of one of the plants from Ft. Worth and we are the owners in the deal. They are not here speaking for themselves. So we have, I am told, Belgian-owned plants killing American horses, sending them to France and Belgium and Japan. I just don't get it. I don't understand why we are the bad guys in the deal. Horses cannot be eaten in Texas or other parts of the United States and we are sending them off--

CHAIRMAN BARTON. Nobody is saying that anybody is a bad guy. My point is I listened to what Dr. Hogan said and what Mr. Williams said. Dr. Hogan is a veterinarian and Mr. Williams trains animals and breed animals, breeds horses and I am trying to figure out if there is a moral difference between killing a horse one way versus in a slaughter facility. If it is done properly, regulated, as Dr. Beaver referred to, that is why I say is there a compromise possible, but maybe there is not. Maybe there are occasions where things are so black and white that you can't compromise. Mr. Chairman, my time has expired, so I appreciate the courtesy.

MR. STEARNS. I thank the Chairman. Mr. Gonzalez.

MR. GONZALEZ. Thank you very much, Mr. Chairman. I am probably missing something here because I think there are a couple of issues out here, regardless of the setting, whether it is a rendering plant

or a slaughterhouse, euthanasia, the humane treatment of horses should be paramount. That is where we are today. I am not sure that is the real issue here. I am not sure that this bill has such specifics that it is going to remedy all of those problems, but I do know what this bill addresses.

It has been established, I believe, that it is socially unacceptable in the United States to raise horses for the purpose of slaughtering them for human consumption. I think that is a given. And we will and the Government will, at every level of government, attempt to regulate human behavior that is not socially acceptable. So Mr. Koehler, yes, private property rights are very important, but the Government, every level of government, dictates to you what is socially acceptable, your personal behavior, what is acceptable or not; what you do with your private property, personal, real and so on, land use, because we are a Nation and we have certain mores and values.

One of them is how we look at and treat a particular animal, in this case, a horse, which is not raised with the intention of it being food stock and that is, I think, the real issue here. I think, at the end of this process, it is the consumption of horse meat, human consumption, that is objectionable. We are trying to address that here. We have three foreign-owned entities that, obviously, provide this particular service and that is kind of a curious thing is why we wouldn't have an American enterprise doing this if it is so profitable and acceptable. So let us just say we can govern this and we will, and we do it in other arenas.

But I do believe this, and I am assuming some things here and any of the witnesses can just raise your hand and I will recognize you to respond. Is there a difference in the type of animal that you find in a rendering plant and that which you find in the slaughterhouse for eventual human consumption of the meat in a foreign country? I have been told, informed, that it is a younger, more healthy specimen of a horse that you find at the slaughterhouse that is destined for human consumption. Is that or is that not a fact?

DR. HOGAN. Yes, it is.

MR. GONZALEZ. Okay, Dr. Hogan.

DR. HOGAN. You are correct. Yes, the majority of the animals in the slaughterhouse are younger and healthy and in very good shape.

MR. GONZALEZ. All right. Now, I am from Texas, not that I was ever a rancher, but I would assume that most of the cattle being raised and that are being slaughtered for human consumption are not ill, old, infirmed, and so on, correct?

DR. HOGAN. Right.

MR. GONZALEZ. The same logic would extend to a horse, wouldn't it? What I am getting at is that I believe the slaughtering of healthy animals is encouraged by the fact that this is the kind of horse meat that

would be at a premium price for human consumption, again, in a foreign land. And Mr. Koehler, am I wrong in that assumption or is it the same animal at these slaughterhouses that you would find at the rendering plants?

MR. KOEHLER. I think it is a misconception. The animals that come by majority for slaughter are healthy because they are inspected by a USDA veterinarian for, in fact, that it is meat that is going into the human food chain. So it will be healthy meat, by a majority; not all. He will condemn some. He will reject others. But the majority is that yes, they are going to be healthy animals, but these are the unwanted healthy animals. This is not a group of animals that was selected specifically for this. Let me give you an example.

MR. GONZALEZ. But you know, Mr. Koehler, because I only have like 1 minute, but if you give these individuals an available avenue, a way to dispose of a healthy animal, doesn't that basically allow them the luxury of being irresponsible horse owners? If they didn't have that available slaughterhouse method of disposing of an animal that they no longer care for and make a few dollars on or whatever, are you accommodating irresponsible ownership?

MR. KOEHLER. Let me quote Tim Grenlan, who said that "The damage, the poor condition of a horse to slaughter happened long before that horse ever went to slaughter," and I think that would be true for those animals that would be rejected or emancipated. Yes, there are laws on the books that should be addressed and that should be taken care of, but by and large, that is not we are talking about here.

MR. GONZALEZ. Thank you, Mr. Koehler. My time is up, but Mr. Chairman, if you would give Dr. Corey an opportunity to respond and Dr. Corey, thank you.

MR. STEARNS. Sure.

DR. COREY. I would just like to comment. By banning slaughter, it is probably not going to eliminate the process of slaughter. These horses will go to another location. A large majority of them will end up going to Canada or Mexico and probably the regulations are not near as stringent as they are at a USDA regulated facility here in the United States. So I don't think by eliminating this process here in the United States we are going to do an awful lot.

MR. STEARNS. The gentleman's time has expired. The gentlelady from California, Ms. Bono.

MS. BONO. Thank you, Mr. Chairman, and thank all of our witnesses. It has been very informative and interesting. Mr. Pickens, since you are always right on the issues and since we agree on this one, my first question is for you and can you speak a little bit more about the economics of this business and about the transfer of not only the

horsemeat, but how do the finances work here and do these entities pay solid good American tax dollars?

MR. PICKENS. I am not quite sure, but I want to respond to the question, but no, you are not talking to an expert. I talked to the mayor of Kaufman where the Crown plant is located and I believe their revenues were $12 million last year and the unbelievable part was that she told me that the taxes paid to Kaufman were $5 dollars.

MS. BONO. Thank you.

MR. PICKENS. And oh, let me speak just for a second. When we talk here about the slaughter and how we dispose of horses at a certain time of their lives and all and what is the most humane way, we have completely avoided what you just asked. This is all about making money, is what it is, because they kill here to make money in the United States for people that live in Europe and somehow, we keep avoiding that. There are some of their fees, I am told that are, when these animals are killed here in the United States and I think that ought to be addressed, too.

MS. BONO. Thank you. I am going to reclaim my time because it goes so quickly. Is it Mr. Koehler or Koehler?

MR. KOEHLER. Koehler.

MS. BONO. Koehler? Thank you. Quick question. Why don't you, or why doesn't your company that you work for, place in the American marketplace of human consumption of horse?

MR. KOEHLER. I didn't understand the question.

MS. BONO. Well, the question is one that you should actually know the answer. There is no market here in America because we don't support the consumption of horsemeat, so that, in itself, I think says the American people don't support the very notion of it, but if this is about money and if it is about markets, I mean, Dr. Beaver, I have a little question and I am sure one of you is certain this question, this is going to come up. Do you support the same sort of euthanasia for dogs and cats?

DR. BEAVER. The panel's report indicates that barbiturates are the preferred method for dogs and cats, there are different--

MS. BONO. Okay, yes or no. I am sorry. I have got 2 minutes. So no, you do not support the bolt in the head form of euthanasia?

DR. BEAVER. Each species has its own unique forms of euthanasia in many cases.

MS. BONO. So the biology of a dog or cat to either veterinarian or any veterinarian on the panel, the biology is different for a dog or cat but you don't support that.

DR. BEAVER. It has more to do with--

MS. BONO. Why don't we have--and again, this is going to be the emotional question, probably, of the day. Then why aren't we doing the same thing with dogs in the Korean market?

DR. BEAVER. We have an oversupply of dogs and cats. We don't want to create an oversupply of horses.

MS. BONO. But by creating a marketplace in France and Belgium, we are creating a marketplace. I think that sort of contradicts yourself.

DR. BEAVER. As I said, the AVMA is concerned about the humane care of the horse, not what happens to the tissue other than protecting the environment after the horse has been euthanized.

MS. BONO. Dr. Hogan, I am very interested to say that you made an unannounced visit to the slaughterhouse and can you just go on a little bit more about what you witnessed that you think we should know?

DR. HOGAN. Well, it was about 10 years ago. I really wasn't aware of slaughter, to tell you the truth. I just was a resident at Texas A&M. I went to the slaughter plant just to collect some legs for a project and so I was unannounced and really, it wasn't a hot button issue at the time so they didn't mind you coming. But I just was appalled at the way the animals were treated. They are very aware of things. They are not like cattle or chickens, they could see what was going on. They were intelligent about it, they were in a long line next to each other, processed through this line and then there was a stun gun of some type; I am not sure if it was a penetrating bolt at the time. But the people that worked there were just abusive to the animals. I am sure that has been addressed, but it was my only exposure, at that time, to slaughter and I was just appalled at the whole thing. Horses are not the same type of animal that is raised as a food animal. They are not raised in a herd environment, that they are put in this kind of environment. They are in there with stallions, geldings, mares, they are just--

MS. BONO. Why is it different; we have moved to a commercial marketplace for buffalo meat? Can you explain the difference a little bit between the buffalo, then, from the horse?

DR. HOGAN. Well, there certainly is a different level of intelligence, but they are not in a bonding type situation with humans. The buffalo and cattle are raised in manners that they learn to follow each other. They learn to get along in herds. They learn to eat out of the same feed trough. It doesn't happen that way with horses. There is a pecking order, there is a hierarchy. They fight, they hurt themselves, they hurt each other. It is a different type of situation. They are treated the same way as cattle in the current makeup of a slaughterhouse.

MS. BONO. Thank you. My time has expired. Mr. Chairman, thank you very much.

MR. STEARNS. Thank you. The gentleman from New Hampshire, Mr. Bass.

MR. BASS. Thank you, Mr. Chairman. I would assume that because the definition here on page three of the bill says that "the movement, showing, exhibition, or sale of sore horses in interstate commerce" and other equines to be slaughtered for human consumption. That is a finding. I guess my question is what would--there is a market for horse meat for zoos and other things. Would the passage of this bill affect that market? Would somebody like to address that? Would zoos still be able to get the meat they need to feed their animals?

MR. KOEHLER. Well, let me address that. From the standpoint of the USDA-inspected equine meat, no, because that part of the process alone will not sustain the plant. As much as in the cattle industry, you have to sell all parts of the animal to make it profitable, so in order to do that, you would have to have all parts of that to function, so selling one part of it would not make the business functional. And in connection with that, I don't know what is wrong with foreign investment. As a businessman, I am here for profit.

MR. BASS. Okay, I am not asking about foreign investment. Mr. Williams, do you have a comment?

MR. WILLIAMS. With respect to the zoo question, some of the proponents checked with the Washington Zoo. They are down to about 5 percent needing horse meat and they say they are phasing it out because it produces a bad reaction among the public when they learn that they are feeding horse meat.

MR. BASS. Do you have an alternative for horse meat?

DR. HOGAN. Yes, there is plenty of--

MR. BASS. Okay.

DR. HOGAN. I mean, horse meat is a wonderful protein source, but so is buffalo, cow, pork.

MR. BASS. Where do they get the buffalo?

DR. HOGAN. Well, that is raised commercially, as well.

MR. BASS. What about the issue of transport across boundaries. What would there be to prevent an auction house being set up across the border somewhere; Mr. Koehler would set up his slaughterhouse across the border and you--I know the bill says you can't ship for purposes of slaughter, but if you shipped it for purposes of sale in Canada or Mexico or some other country that allowed for it, what would stop, if this bill were to pass? Dr. Corey.

DR. COREY. Well, veterinarians can and do this daily and regularly. We send horses to Canada for shows, for showing purposes, for riding events. Those horses can end up going there for that, end up staying and

all of a sudden something happens to them and they end up going down that pipeline. Very simple. It won't stop a Ferdinand from happening.

MR. BASS. Anybody else want to comment on that? Dr. Beaver.

DR. BEAVER. There has to be teeth in the regulation to be sure that they would be stopped. If the regulations are in place, but not enforced, it will not help the horse.

MR. BASS. Well, if a horse is shipped to an auction house or a point of sale outside the United States, this bill passes, is shipped to a point of sale outside the United States and there were, as I understand, more than 10,000; 10,000 to 15,000 horses that have been shipped out of the country. What is to stop Mr. Koehler from simply moving his company from Texas a few hundred miles south to Mexico, having a sale made down there and just continuing with the practice? Would any of the proponents of the bill wish to address that issue? Are you a proponent of the bill?

MR. WILLIAMS. I am.

MR. BASS. Okay, go ahead.

MR. WILLIAMS. The language, the shipping, transporting, moving, delivering, receiving and so forth of any horse or other equine to be slaughtered for human consumption, I think, clearly covers that case and at least, based on instincts from my old days as a prosecutor, if I had an individual doing this in the United States, pointing towards Canada or Mexico, as soon as he let out the clutch on the truck and he started to move, he was transporting and I would be on him.

MR. BASS. So your answer is the prohibition on the transportation alone would stop, would limit, if not prohibit, any transport across or even if the point of sale wasn't clearly defined?

MR. WILLIAMS. Yes, because it would be easy enough to establish by other means what the purposes and intent of the perpetrator was.

MR. BASS. How would the passage of this bill prevent another Ferdinand event from occurring? It is my understanding--the counsel here just told me a second ago that Ferdinand was actually sold abroad for breeding and then wound up on a table, is that true?

MR. WILLIAMS. That is true. But this would not stop that. You still got these horses that are going to go to Canada or Mexico or Japan. It doesn't make any difference. They will still end up going there and I would prefer to have these horses processed in the United States where we have got the USDA governing these processing plants.

MR. KOEHLER. Representative, may I also comment on that? In addition to that, I see a lot more horses coming from some of the western States, Utah, Arizona, close to California. The implication of that could be that horses that are moving, also, and something like you are talking

about, out of the country thing across borders. I don't have any proof of that, just I see a larger number coming from that area.

MR. BASS. I know that the proponents of the bill believe that horses are not the same as cows, they are not livestock. Do the opponents, do any of the three of you who are appearing here as opponents of the bill perceive any difference in the characterization of a horse as livestock different from a cow, a chicken, or a pig for purposes of its treatment at the end of its life?

DR. BEAVER. The AMVA'S concern is for humane care of any species. Each species, as a behaviorist, is recognized as having its own unique features, both physiology, anatomy behavior. As long as it is treated humanely and both in life and in death, the resulting handling of the tissue afterwards is a totally separate subject.

MR. BASS. Okay.

DR. BEAVER. Currently, in the world, there are about 4.7 million horses eaten or slaughtered for human consumption around the world now. I guess part of the concern is what are we, as the United States, going to be dictating what the world is to eat and then if we choose to do that, who is next? Are we going to then dictate what we can also eat?

MR. BASS. All right. Yes, sir. Please be brief.

DR. COREY. I will be brief. Dr. Hogan, I am not sure where she became an expert on the intelligence of animals, because as far as I am concerned, I am a cattle rancher in Oregon and I think cattle are awful smart at times. And so it is kind of hard to evaluate which one is a lot more intelligent than the other one.

MR. BASS. Okay, fair enough. I would like to just conclude--yes, sir.

MR. PICKENS. France and Belgium do not allow the killing, the slaughter of horses, so they have to get their horse meat from us.

MR. BASS. All right. I just want to conclude, if I could. I have determined that there are basically four reasons why the proponents of this bill want it to pass. Number one, owners unknowingly sell their horses not understanding that they will be slaughtered. Two, stolen horses are sometimes slaughtered. Three, inhumane treatment between the auction house and the slaughterhouse exists in both transportation and the killing technique; and four, the sale of meat for human consumption is distasteful. Do any of the proponents of the bill have anything to add? Thank you very much, Mr. Chairman.

MR. STEARNS. I thank the gentleman and by unanimous consent, we have finished the members' questioning period, unless Ms. Bono wishes any additional time?

MS. BONO. Thank you, Mr. Chairman. I think it would be a great time for Mr. Whitfield to--

MR. STEARNS. Okay, so by unanimous consent, I recognize the gentleman from Kentucky, Mr. Whitfield, for 5 minutes, approximately.

MR. WHITFIELD. Thank you, and I hope you will be as generous with me as Chairman Goodlatte. I was reading some articles the other day about a paper, 10 years ago, actually 20 years ago, 1986 and this was the mayor of Kaufman, Texas talking to Dallas Crown Packing Company officers. "Quite frankly, we don't want you here." And I know that in the city of Kaufman that Dallas Crown has had 31 wastewater violations in the last couple of years. The city council and the zoning board authority has voted to shut the plant down on September 30, 2006.

And in the process of doing that, to meet some requirements of Texas law, they had to subpoena the tax records of Dallas Crown, and in those tax records they found, as Mr. Pickens referred to, that on $12 million of revenue they paid $5 in Federal income tax and they had made an $80,000 tax estimate payment and they received a $79,995 refund.

So in that instance, you have got a plant that the majority of people in that community don't want. Seventy-seven percent of the people in Texas, in a poll, said they don't approve slaughter. They are violating wastewater and environmental laws. And the judge has said in order to enforce 149--and because of Federal preemption and because of the interstate commerce clause, that the only entity that can shut these slaughterhouses down is the Federal government.

Now, Mr. Koehler, I know you are not Dallas Crown, but why do you even want to do business in a State in which there is such overwhelming sentiment against what you are doing?

MR. KOEHLER. Well, Mr. Whitfield, for one thing, on the lawsuit in Federal court, the Federal judge found, his number one finding was that the Texas law had already been repealed, so it was--

MR. WHITFIELD. But he didn't base it on that. He based it on the Interstate Commerce Act and the Meat Packing Act of 1906 in Federal preemption and he never made a formal finding on that point.

MR. KOEHLER. No, sir, he didn't. It is my understanding he found it was on three points and we won on all three points.

MR. WHITFIELD. And I might say that he talked about the fact that you are paying $5 for every horse slaughtered, $3 to the Cattlemen's Association and $2 to Texas A&M Extension Service and the purpose of that is try to identify, because in his opinion he talks specifically about the number of stolen horses that were being slaughtered in Texas at the two plants.

And the reason that they were going to go to this $5 was to try to come up with a plan to identify stolen horses. And you said, in your testimony, you did not identify any horses that had been stolen and in the San Antonio newspaper that I was referring to, which I have a copy of

here, and talking to the people at Texas A&M and the Southwestern Cattle Association, they said they have not found any horses that had been stolen being slaughtered.

Now, do you honestly believe that you are not slaughtering any stolen horses in your plant?

MR. KOEHLER. To my knowledge, that is correct.

MR. WHITFIELD. Do you have a database of stolen horses?

MR. KOEHLER. Do I have a database?

MR. WHITFIELD. A database.

MR. KOEHLER. I have a database of horses that are received for slaughter.

MR. WHITFIELD. Do you have a database of stolen horses?

MR. KOEHLER. If you mean information from various horse associations and individual owners that are given to the Texas Southwestern Cattle Raisers Association, that is a lot to say, yes, sir. They are given to the inspector so he is aware of what animals are--

MR. WHITFIELD. And does he get 80 cents a head?

MR. KOEHLER. Sir?

MR. WHITFIELD. The brand inspector, does he get 80 cents per head for a horse that goes through the process?

MR. KOEHLER. The brand inspector is paid by the Texas Southwestern Cattle Raisers.

MR. WHITFIELD. That you pay. You pay for that, though, right?

MR. KOEHLER. I pay to the State of--mandated by the State of Texas, part of it to the Texas--

MR. WHITFIELD. Yes, yes.

MR. KOEHLER. Which the State of Texas chose that brand inspector and--

MR. WHITFIELD. I don't think that anyone would--I mean, we have got--these were just from the last month, but these are articles around the country on horses stolen and taken to slaughter. I think one of the things that disturbs a lot of people is that fact. Second of all, Dr. Beaver, I noticed that you are a small animal specialist, it is my understanding. When you go to the website, it talks about your involvement with dogs, in particular, and that is your specialty.

DR. BEAVER. My academic housing is in the department of small animal clinical sciences, although animal behavior is my specialty area, so I work in both the large animal and small animal clinics.

MR. WHITFIELD. Now, I was a little bit shocked, truthfully, that--and I think Dr. Corey and Dr. Beaver, you talked about the Federal government's responsibility if you stop the slaughterhouse, the Federal government has got to be responsible for these horses that won't be slaughtered and I would just ask you; I know I read some of your

literature on the responsibility of dog owners and small pet owners and their personal responsibility. Don't the breeders of these horses, particularly the quarter horse, which is the leading entity opposing this bill, their leadership, don't they have any responsibility on their prolific breeding that they are doing?

DR. BEAVER. The majority of horses in the United States are not necessarily purebred horses. They are often mixed breed horses.

MR. WHITFIELD. Well, they said last year they had 144,000 foals of Texas quarter horse that were registered.

DR. BEAVER. That is correct.

MR. WHITFIELD. Do they have any responsibility on that number of horses?

DR. BEAVER. All horse owners have a responsibility for their own horses.

MR. WHITFIELD. So why should the Government take over responsibility if we stop the slaughterhouses?

DR. BEAVER. For the same reason that we have dogs and cats that are running loose.

MR. WHITFIELD. The Government doesn't take over that, does it?

DR. BEAVER. State--

MR. WHITFIELD. No, local groups raise money and they take care of that.

DR. BEAVER. No, State and local governments--

MR. WHITFIELD. Not in Kentucky, that is not the case. Not in Kentucky. Yes, sir?

DR. COREY. Well, you know, I disagree with you a little bit. I think it is an owner's responsibility.

MR. WHITFIELD. Right.

DR. COREY. But you also have to understand--

MR. WHITFIELD. Well, why should they be breeding them?

DR. COREY. The care of horses in eastern Oregon, it will run up to $2,000 and there are a lot of places that these horses are not of the value of a lot of thoroughbreds and the thoroughbred owners can definitely take care of--

MR. WHITFIELD. Why are the quarter horses breeding so many horses, 144,000 a year? Why are they doing it?

DR. COREY. I guess it is free trade.

MR. WHITFIELD. Oh, so you are making the argument that we have all these unwanted horses and that yet the quarter horse people are not taking any responsibility for their breeding practices.

DR. COREY. You have to ask the Quarter Horse Association that, but the point is that it is very expensive for some people to take care of their horses.

MR. WHITFIELD. Well, why do they have horses, then, if they can't take care of them?

DR. COREY. I think some people fall upon hard times, when they start out with horses, you can't avoid that.

MR. WHITFIELD. And you know when you go to an auction house like in New Holland, Pennsylvania, if you are not in the business, there isn't any disclaimer there, there is no notice about killer buyers being present. If I take a cattle to an auction, I know that that animal is going to end up being slaughtered, but if I have some horses and I am not in the real business and I go, I take a horse to auction, I don't necessarily know that that animal is going to be slaughtered and yet you have this--in fact, I have found some websites; you have Beltex listed, Dallas Crown listed, you have a long list of independent contractors, so-called killer buyers, running around the country gathering horses, one way or the other, for them.

DR. COREY. Well, I would sure disagree with you. In our area of the country, and most veterinarians that I know, these horses, when they leave a clinic and they have got something wrong, maybe they are permanently crippled, they are lame and they feel like they need to get a little value out of that horse, instead of feeding it, they know exactly where these horses are going.

MR. WHITFIELD. Are you making the argument that the only horses slaughtered are those that have some defect or--

DR. COREY. No, I think you will see a large range of horses. You will see behavioral problems. You will see crippled horses, non-life threatening injuries. Sure, you will see geriatric horses. You see many. I am just kind of curious. You mention these polls, these exit polls.

MR. WHITFIELD. No, not exit polls. It was done by--Fasig Tipton actually paid for it, which is the second largest auction house in the country and it was done in Texas and I can--

DR. COREY. Were they all horse owners and the horse public that know horses and know the welfare--

MR. WHITFIELD. It was the general public.

DR. COREY. A lot of the general public does not know equine.

MR. KOEHLER. Mr. Whitfield, may I address your question, also?

MR. WHITFIELD. Yes.

MR. KOEHLER. In the State of Texas, when an animal is brought to the auction, that owner is given a choice that he can either have a cognizance test done or that animal must come to slaughter. So those people that bring their animals to auction will--

MR. WHITFIELD. But that is not the case in other parts of the country.

MR. KOEHLER. In many States it is, but I can speak directly about Texas.

MR. WHITFIELD. Well, Mr. Chairman, you have been very kind. I have already gone 5 minutes over, so thank you.

MR. STEARNS. I thank my colleague. Mr. Corey.

DR. COREY. I just have one question for Mr. Whitfield. Are you suggesting that we control the breeding of horses?

MR. WHITFIELD. If you are going to make the argument that we have too many unwanted horses. Now, 12 years ago, 329,000 horses, approximately, were slaughtered in America and now we are down to around 85,000 and I haven't read anything, I haven't seen any scientific studies or anything else about more unwanted horses than can be taken care of. So if we have gone from 329 to 85, I don't buy the argument. Going from 85 to zero, the whole country would be covered up with horses that cannot be taken care of.

MR. STEARNS. Mr. Corey, I don't know if you can win with Members of Congress here because we usually get the last word in so let me just close here and just say I am very appreciative that we had the opportunity to have this hearing. I know folks on both sides wanted to have the opportunity to have the full facts out and I think we have done that, so with that, the subcommittee is adjourned.

[Whereupon, at 4:56 p.m., the subcommittee was adjourned.]

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