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February 19, 2013

VIA FEDERAL EXPRESS

Mr. Philip Derfler
Mr. Daniel Engeljohn
Dr. David Goldman
U.S. Food Safety & Inspection Service
Jamie L. Whitten Building, Rooms 331-E, 341-E
1400 Independence Ave., S.W.
Washington, DC 20250

Re: Evidence of Use of Drugs on American Horses Destined for Slaughter

Dear Messrs. Derfler and Engeljohn, and Dr. Goldman:

I wanted to thank you again for meeting with us in December regarding issues surrounding horse slaughter and the production of horse meat. This letter follows up on one of the points we discussed, and on which I promised further information.

As you know, Exhibit 1 to the rulemaking petition filed by Front Range Equine Rescue and HSUS identifies a large number of drugs used on American horses on a regular basis. (A copy of Exhibit 1 is included with this letter.) Under federal law, many of these drugs are "not intended for human consumption."¹ Even with respect to those drugs that are not expressly prohibited by federal law for use in horses who will be eaten, none of that latter group has ever been tested to determine any potential dangers related to the ingestion of meat from horses who have been given those drugs over the course of their lifetimes.

We assume that in order to approve horses for slaughter, and their meat for sale, the agency must determine (among other things) (1) whether the horses have ever been given drugs which federal regulations have banned from use in horses who are to be eaten; and (2) whether the horse meat contains any unacceptable/illegal residue of those drugs that, while not absolutely banned by federal law, raise potential problems if their residues are found in horses destined for slaughter, or in their meat. This letter and the attached declarations provide indisputable proof that virtually every American horse that ends up in a slaughterhouse has been given drugs which render the horses' meat unacceptable for human consumption. (True and correct copies of the eight declarations mentioned in this letter are attached.)

¹ Exhibit 1 includes citation to close to fifty regulations in the Code of Federal Regulations, each of which identifies a drug and states that use of that drug on a horse precludes that horse's meat from entry into the market as human food.



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Exhibit 1 to this letter is the same list of drugs that was included as Exhibit 1 to the rulemaking petitions. It provides just a sample of the drugs routinely given to American horses throughout their lifetimes. As you can see, roughly fifty of the over 115 drugs on the list have been identified by the Food and Drug Administration as unsuitable for use in animals who will be eaten. In other words, if horses receive those drugs, their meat cannot be used for human consumption, as a matter of federal law. It does not matter *when* they had the drugs, or how much of the drugs the horses had, or whether any residues of the drugs or their metabolites can be detected. Because of the uncertainty about the consequences to consumers, horse meat from horses who have had those drugs simply cannot be human food.

When we met, you expressed interest in further evidence establishing that American horses who went to slaughter were exposed to these substances which result in an absolute ban on their meat. Beginning after our meeting, we began canvassing a variety of individuals who deal with horses in different areas, to confirm that the use of these drugs was endemic. Our results categorically support (and bolster) the statements in the petitions, and attached to this letter are simply eight examples of the kind of testimony that is available and, we believe, essentially undisputed.

Drs. Sandra Grover and Holly Colella are veterinarians who see, collectively, approximately 2,700 horses per year. Dr. Colella's practice covers a wide range of horses, including companion, hunter-jumper (competition) horses, ranch (work) horses, and horses who perform in the rodeo. This coverage is important, as Dr. Colella's experience provides information about the drugs given to horses in all those categories. Notably, Dr. Colella is familiar with most of the drugs on Exhibit 1; she testifies that the majority of those drugs are "regularly and routinely used by owners of horses in the areas" where she works, and she believes that to be the practice nationwide. Dr. Grover concurs.

Shirley Hoffman is a well-known and decades-long breeder of American Saddlebred horses. Over the course of her involvement in the business, she has had between thirty and 100 horses at a time, and so has extensive experience with the care and treatment of professional show horses. She has witnessed the use of drugs like phenylbutazone, which bars a horse from being used for meat, in most horses in the show horse industry. As an owner she is also familiar with the use of drugs on privately-owned horses. Based on her own knowledge and in consultation with her veterinarian, she attests that almost all of the drugs on Exhibit 1 are given to her horses at one point or another, and several of the banned drugs have been given to ninety per cent of her horses.

Cynthia Newberry is the owner and head trainer of a ranch in Maryland. Ms. Newberry brings her own special expertise to the table, with a degree in Equine Studies and Business Management. She also has over four decades of hands-on involvement with horse ventures, and she has been breeding, training, riding, showing and judging horses over that time period. Her

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vast experience provides important additional evidence to the issue here. Ms. Newberry testifies that she is familiar with eighty per cent of the drugs on Exhibit 1, and that she has given seventy percent of the drugs to her own horses to keep them healthy. She also provides the agency with the information that “[a]lmost every item” on Exhibit 1 “is either commonly found in barns housing horses, and is used on those horses, or is found in catalogues and supply stores, for sale to private horse owners in America or available with a veterinarian’s prescription. I am personally familiar with and use or have used at least seventy-nine of the substances on that list, and am informed and believe that all of those substances are used regularly on American horses.”

It is well established that probably tens of thousands of racehorses are slaughtered for their meat. Gail Vacca’s declaration confirms that fact, based on her attendance at horse auctions over the past thirty years. She estimates that more than 20,000 racehorses go to slaughter each year. Ms. Vacca’s declaration also presents a clear recitation of the use of drugs in the horseracing industry. Ms. Vacca’s declaration establishes her as a “nationally licensed thoroughbred trainer, . . . involved with top level show horses, in both the hunter and jumper categories,” and a licensed racehorse owner. While working with racehorses at the track, she worked on many horses and was aware of the practices of her fellow trainers. She states that “racehorses involved in the breeding process, while they are in production, are given large amounts of hormones and antibiotics and anti-inflammatory drugs. These drugs are used to treat the normal medical and metabolic consequences and sequelae of multiple inseminations, pregnancies, and births.” Whatever other problems may exist with respect to the use of drugs for competition horses, under federal law, a horse who has had many of these drugs, at any time, simply cannot be used for human consumption.

Ms. Vacca also reviewed Exhibit 1, and is familiar with the “vast majority” of the listed drugs, and their use on horses in America. She states that “[o]ver the course of the time I have owned horses, my veterinarians and/or I have given most of the drugs on the chart to the horses I have owned, cared for, and trained.” She also testifies that every item on Exhibit 1 is “either commonly found in racetrack and racehorse barns and other barns housing horses, and is used on those horses,” or is available for purchase by American horse owners. She herself was familiar with at least 98 of the substances on that list, and believes that they are all “used regularly on racehorses, companion, pleasure and recreation, and competition/show horses.”

Michelle Conner runs a boarding and training facility for horses, and has been training horses for eleven years. She has also worked closely with the Bureau of Land Management in its wild horse program, and testifies to the treatment of foals taken from the range with a number of drugs and vaccines which are among those prohibited for use in horses whose meat will be eaten. She has also been involved with local horse shows and 4-H Clubs, and her declaration attests that most of the drugs listed on Exhibit 1 are commonly found in barns or catalogues and supply stores. She states that she has “used at least eighty percent of the substances on that list.”



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Ronald Fitch is a Health Environment and Safety Engineer for Chevron, and actively involved in horse rescue, fostering, and adoption of horses. He is a published author who writes regularly about wild horses, domestic horses, horse racing, and horse slaughter. "Over the course of the time I have owned horses, my veterinarians, other owners and/or I have given more than eighty percent of the drugs on the chart to the horses I have owned, cared for, and trained." He has also reviewed Exhibit 1, has used at least sixty percent of the drugs listed on his own horses, and believes that all of the listed substances are used regularly on all categories of horses.

Dirk Murphy submits a declaration as a lifelong horseman, having raised and trained over 100 horses over the course of his life, and having used them regularly (and still) in his ranch work, as well as in rodeos and has had them as companions. Mr. Murphy maintains an almost all-natural (drug-free) treatment program for his horses, so that he does not use most of the drugs on Exhibit 1. But even Mr. Murphy with his natural program acknowledges that he "periodically" uses drugs on his horses that render them incapable, as a matter of law, from being turned into meat.

These eight declarations are illustrative of the facts of life for American horses. Whatever category they come from – companions, work animals, racehorses, rodeo horses or from the range – they are treated by their owners with a multitude of drugs that have been expressly banned from use in animals intended for food. The only way to find a horse that is not ruined for food production is to have them taken at birth, not treated with any of these typical medications, and raised solely for the purpose of becoming food. In order to ensure that only horses who fit that category end up in meat production, the only safe method seems to be to track horses from birth (or from the date of gather from the range) until the day of slaughter.

I hope this information is helpful to the agency in its consideration of our petition and the general evaluation of the standards and requirements that need to exist if any applications for horse slaughter facilities are being considered.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'Bruce A. Wagman', written over a horizontal line.

Bruce A. Wagman
Front Range Equine Rescue

BAW:ifl

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AR0004004

BANNED AND DANGEROUS SUBSTANCES COMMONLY GIVEN TO HORSES SENT TO SLAUGHTER

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
1. Acpromazine	<p>Anti-anxiety/tranquilizer</p> <p>Previously used in humans, but use discontinued</p>	<p>See also Citak A, Soysal DD, Uçsel R, Karaböcüoğlu M, Uzel N., <i>Seizures associated with poisoning in children: tricyclic antidepressant intoxication</i>, PEDIATR INT. 48(6):582-585 (2006) (Two children suffered cardiac arrest from intoxication from acepromazine and died.)</p>
2. Acetazolamide	<p>Diuretic for horses.</p> <p>Used to treat epilepsy and benign intracranial hypertension in children and adults.</p>	<p>Acetazolamide (sulfonamide) induces metabolic alkalosis and is contraindicated in patients with hyperchloremic acidosis, angle-closure glaucoma, kidney and liver disease, and in patients with Addison's disease. Fatalities have occurred (rare) due to Stevens-Johnson syndrome (diffuse rash that sloughs), toxic epidermal necrolysis, fulminant hepatic necrosis, agranulocytosis, aplastic anemia, and other blood dyscrasias. Sensitizations may recur when a sulfonamide is readministered irrespective of the route of administration. If signs of hypersensitivity or other serious reactions occur, discontinue use of this drug.</p> <p>Caution is advised for patients receiving concomitant high-dose aspirin and Acetazolamide, as anorexia, tachypnea, lethargy, coma and death have been reported. http://www.drugs.com/pro/acetazolamide.html</p>
3. Acriflavine	<p>Blue-Kote (topical ointment, antiseptic, protective wound dressing)</p> <p>http://www.drugs.com/vet/dr-nay/or-blk-kote.html</p> <p>Not for use on animals intended for food.</p> <p>http://www.horsesuppliesplus.com/a/nuseptics.htm</p>	<p>A criflavine is an ingredient found in Blue-Kote, which is itself labeled "not for use on animals intended for food." The dangers for humans who ingest this substance are unknown.</p>
4. Altrenogest	<p>Regu-Mate (altrenogest/oral progestin) (growth promoter)</p> <p>21 CFR § 520.48:</p> <ul style="list-style-type: none"> - "Do not use in horses intended for human consumption." - "Do Not Use In Horses Intended For Human Consumption." <p>http://www.drugs.com/vet/regu-mate-solution.html</p>	<p>Active harmful ingredients (residue): <u>Progesterin.</u></p> <p>Progesterin is used in the mini-pill to prevent contraception so progesterin could result in an aborted fetus in a pregnant woman.</p> <p>Progesterin along with estrogens are pro-thrombotic meaning that they cause deep blood clots, including venous thrombosis and cerebral thrombosis. http://www.nlm.nih.gov/doi/full/10.1056/NEJM200105173442007</p> <p>Combined with estrogens, progesterin increases the risk of breast cancer and cardiovascular problems.</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
		<p>http://www.who.org/findings/ht/eplusp_3yr.php</p> <p>Increased stroke risk.</p> <p>http://www.who.org/findings/ht/ealone_stroke.php</p> <p>HUMAN WARNINGS</p> <p>Skin contact must be avoided as Regu-mate® (altrenogest) Solution 0.22% is readily absorbed through unbroken skin. Protective gloves must be worn by all persons handling this product. Pregnant women or women who suspect they are pregnant should not handle Regu-mate® (altrenogest) Solution 0.22%. Women of child bearing age should exercise extreme caution when handling this product. Accidental absorption could lead to a disruption of the menstrual cycle or prolongation of pregnancy. Direct contact with the skin should therefore be avoided. Accidental spillage on the skin should be washed off immediately with soap and water.</p> <p>http://www.drugs.com/vet/eplu-mate-solution.html</p>
5.	<p>Aluminum hydroxide</p> <p>Strepvax II (component in equine vaccine)</p> <p>Used in humans for gastrointestinal problems, ulcers.</p> <p>http://www.drugs.com/vet/strepvax-ii.html</p>	<p>WARNINGS/PRECAUTIONS</p> <p>May cause constipation. Caution with renal failure; prolonged use may result in or worsen dialysis osteomalacia. Elevated tissue aluminum levels contribute to the development of dialysis encephalopathy and osteomalacia syndromes. Caution with normophosphatemic patients; prolonged use may result in hypophosphatemia if phosphate intake is inadequate.</p> <p>ADVERSE REACTIONS</p> <p>Constipation, dialysis osteomalacia, hypophosphatemia.</p> <p>http://www.pdr.net/drugpages/concise/monograph.aspx?concise=1544</p> <p>Can cause constipation, confusion, loss of appetite, and muscle weakness.</p> <p>http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001056/</p>
6.	<p>Amikacin</p> <p>Antibiotic</p> <p>21 CFR § 529.56</p> <p>- "Do not use in horses intended for human consumption"</p>	<p>Antibiotics are potentially dangerous to humans who either have allergies or sensitivities to them. Additionally, the use of antibiotics in food animals, and the subsequent ingestion by humans of those animals, has the potential to create antibiotic resistance in humans, which can cause significant problems for humans upon subsequent illness.</p>
7.	<p>Amoxicillin</p> <p>Antibiotic</p>	<p>Infections and Infestations: Mucocutaneous candidiasis.</p> <p>Gastrointestinal: Nausea, vomiting, diarrhea, black hairy tongue, and hemorrhagic/pseudomembranous colitis. Onset of pseudomembranous colitis symptoms may occur during or after antibiotic treatment.</p> <p>Hypersensitivity Reactions: Anaphylaxis</p> <p>Serum sickness-like reactions, erythematous maculopapular rashes, erythema multiforme, Stevens-Johnson syndrome, exfoliative dermatitis, toxic epidermal necrolysis, acute generalized exanthematous pustulosis, hypersensitivity vasculitis and urticaria have been reported.</p> <p>Liver: A moderate rise in AST (SGOT) and/or ALT (SGPT) has been noted, but the significance of this finding is unknown. Hepatic dysfunction including cholestatic</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
8. Ampicillin sodium	<p>Antibiotic for treatment of respiratory tract infections (pneumonia and strangles) and skin and soft tissue infections (abscesses and wounds), when caused by susceptible organisms.</p> <p>21 CFR § 522.90c</p> <p>- "Do not use in horses intended for human consumption."</p>	<p>jaundice, hepatic cholestasis and acute cytolytic hepatitis have been reported. Hemic and Lymphatic Systems: Anemia, including hemolytic anemia, thrombocytopenia, thrombocytopenic purpura, eosinophilia, leukopenia, and agranulocytosis have been reported during therapy with penicillins. These reactions are usually reversible on discontinuation of therapy and are believed to be hypersensitivity phenomena.</p> <p>Central Nervous System: Reversible hyperactivity, agitation, anxiety, insomnia, confusion, convulsions, behavioral changes, and/or dizziness have been reported rarely.</p> <p>Miscellaneous: Tooth discoloration (brown, yellow, or gray staining) has been rarely reported. Most reports occurred in pediatric patients. Discoloration was reduced or eliminated with brushing or dental cleaning in most cases. http://www.drugs.com/sfx/ampicillin-side-effects.html</p> <p>COMMON SIDE EFFECTS</p> <p>Inflammation and redness of the tongue; irritation of mouth or throat; mild diarrhea; nausea; second infection; vomiting.</p> <p>SEVERE SIDE EFFECTS</p> <p>Severe allergic reactions (rash; hives; itching; difficulty breathing; tightness in the chest; swelling of the mouth, face, lips, or tongue); bloody stools; severe diarrhea; stomach pain/cramps; vaginal irritation or discharge. http://www.drugs.com/sfx/ampicillin-side-effects.html</p> <p>See also side effects for ampicillin injection:</p> <ul style="list-style-type: none"> *upset stomach, diarrhea, vomiting, mild skin rash More severe: <ul style="list-style-type: none"> *severe skin rash, itching, hives, difficulty breathing or swallowing, wheezing, unusual bleeding or bruising, headache, dizziness, seizures, sore mouth or throat <p>http://www.nlm.nih.gov/medlineplus/druginfo/meds/a601133.html</p> <p>Material Safety Data Sheet ("MSDS") for ampicillin sodium salt: Toxic Effects on Humans: Hazardous in case of ingestion, of inhalation. http://www.sciencelab.com/msds.php?msdsid=9925610</p>
9. Aspirin	<p>Aspirin-paste</p> <p>http://www.dr.fostersmith.com/1/1/1/0913-aspirin-paste-by-oral-x.html</p> <p>Reduces joint, muscle, and lameness pain.</p>	<p>WARNINGS/PRECAUTIONS</p> <p>Avoid in children or teenagers for chickenpox or flu symptoms; Reye's syndrome may occur. May cause severe allergic reaction (hives, facial swelling, asthma, shock) and stomach bleeding. Avoid in asthma, stomach problems that persist or recur, ulcers, or bleeding problems.</p> <p>ADVERSE REACTIONS</p> <p>Allergic reaction, hives, facial swelling, asthma, shock. http://www.pdr.net/drugpages/concise/monograph.aspx?concise=195</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
10. Avermectin A1a, 5-O-demethyl-25-de(1-methylpropyl)-22,23-dihydro-25-(1-methylethyl)-	Farnam Ivercare (dewormer) http://msds.farnam.com/m001116.htm Ivercare Paste is labeled "Do not use in horses intended for food purposes." http://www.drugs.com/vet/ivercare-paste-1-87.htm	Can cause excessive bleeding in those taking warfarin; http://stroke.ahajournals.org/content/40/5/1944.full Severe allergic reactions (rash; hives; itching; difficulty breathing; tightness in the chest; swelling of the mouth, face, lips, or tongue); black or bloody stools; confusion; diarrhea; dizziness; drowsiness; hearing loss; ringing in the ears; severe or persistent stomach pain; unusual bruising; vomiting. http://www.drugs.com/sfx/aspirin-side-effects.html A hazardous component of the Farnam Ivercare dewormer product. http://msds.farnam.com/m001116.htm Links to the toxicological literature here: http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=14145#x50 http://toxnet.nlm.nih.gov/cgi-bin/sis/search/1/cdbs-toxline:@term+(m+65195-51-9+@OR+@all
11. Benzyl alcohol	Equipoise Equipoise Injectable http://www.drugs.com/vet/equipoise-injectable-can.html	ADVERSE REACTIONS Pruritis, erythema, pyoderma, ocular irritation. http://www.pdr.net/search/searchResult.aspx?searchCriteria=Benzyl+alcohol
12. Boldenone undecylenate	Equipoise injectable 21 CFR § 522.204 - "Do not administer to horses intended for human consumption." Equipoise injectable (boldenone undecylenate injection) is recommended as an aid for treating debilitated horses when an improvement in weight, haircoat or general physical condition is desired. http://www.drugs.com/vet/equipoise-injectable-can.html	Boldenone undecylenate is a steroid ingredient in Equipose (for horses). It is not indicated for use in humans but appears to have off-label uses as a bodybuilding steroid. Known side effects consist of: nausea, leukopenia, symptoms resembling a peptic ulcer, acne, excitation (commonly referred to as roid rage), sleeplessness, chills, vomiting, diarrhea, hypertension, prolonged blood clotting time, increase in libido. Females had reported menstrual irregularities, post-menopausal bleeding, increased sex drive, swelling of the breasts, hoarseness or deepening of the voice, and enlargement of the clitoris. Men had reported acne, gynecomastia, and increased aggression. http://www.anabolicsmall.com/equipoise.html Steroids should be taken under a doctor's supervision and have multiple significant adverse affects including severe allergic reactions, hormonal changes, changes in menstrual functions, mental and mood changes, respiratory problems, nausea and vomiting, joint swelling, vision changes, and unusual weight gain.
13. Butorphanol	For the relief of pain associated with colic and postpartum pain in adult horses and yearlings.	COMMON SIDE EFFECTS Dizziness; drowsiness; dry mouth; light-headedness; nasal irritation; nausea; runny nose; sore throat; stuffy nose; trouble sleeping; unpleasant taste; vomiting.

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
	<p>21 CFR § 522.246</p> <p>"Do not use in horses intended for human consumption."</p>	<p>SEVERE SIDE EFFECTS</p> <p>Severe allergic reactions (rash; hives; itching; difficulty breathing; tightness in the chest; swelling of the mouth, face, lips, or tongue); blurred vision; burning, numbness, or tingling; change in the amount of urine produced; chest pain; confusion; ear pain; fainting; fast, slow, or irregular heartbeat; flushing; hallucinations; mental or mood changes (agitation, anxiety, depression); restlessness; ringing in the ears; seizures; severe or persistent dizziness, drowsiness, or light-headedness; severe or persistent headache or trouble sleeping; shortness of breath; slow, shallow, or difficult breathing; tremors; unusual swelling.</p> <p>http://www.drugs.com/sfx/butorphanol-side-effects.html</p>
14.	<p>Butoxy Polypropylene Glycol</p> <p>Farnam Bronco Gold (fly spray) http://msds.farnam.com/m001650.htm</p> <p>Farnam Endure Fly Spray http://msds.farnam.com/m000080.htm</p> <p>Farnam Endure Sweat-Resistant http://msds.farnam.com/m001046.htm</p> <p>Farnam Tri-Tec 14 http://msds.farnam.com/m000490.htm</p> <p>Farnam Wipe (fly control)</p>	<p>In 2002, a woman in Oklahoma was hospitalized after using Pyranha fly spray on horses. Her face was distorted, and her words slurred. She reportedly had leg problems, tremors, memory problems. The medical toxicologist's conclusion was that the patient, a professional horse trainer, developed a complex neurotoxic movement disorder following sensitization to a product that contained 33% /butoxy polypropylene glycol/ BPG.</p> <p>Adverse reactions and side effects of ingestion are unknown.</p>
15.	<p>Carbadox</p> <p>Antibiotic used for growth promotion purposes (generic)</p>	<p>Not permitted for use in food-producing animals in Australia (http://www.apvma.gov.au/registration/not_permitted.php) Or in Canada, or the European Union. (http://www.hc-sc.gc.ca/dhp-mps/vet/faq/faq_mrl-lmr-eng.php#a6)</p> <p>Not for human use.</p> <p>http://www.drugs.com/pro/mecadox.html</p> <p>Chronic health effects, including cancer, mutagenic effect, changes in lung function. Accidental ingestion may cause serious harm or be fatal.</p> <p>MSDS SUPPLIER http://datasheets.scbt.com/sc-204668.pdf</p>
16.	<p>Ceftiofur Crystalline Free Acid</p> <p>Excede (antibiotic)</p> <p>For the treatment of lower respiratory tract infections in horses.</p> <p>21 CFR § 522.313a</p>	<p>Intended for use in horses which are non-food animals. Because this indication for this new animal drug is not intended for use in food producing animals, there is no data pertaining to drug residues in food (i.e., human food safety).</p> <p>WARNINGS</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
17. Cefthiofur Sodium	<p>- "Do not use in horses intended for human consumption." http://www.excede.com/Excede.aspx?country=US&drug=XT&sec=100&species=EQ</p> <p>Ceftiflex powder For treatment of respiratory infections in horses. 21 CFR § 522.313c - "Do not use in horses intended for human consumption." http://www.drugs.com/vet/ceftiflex.html</p>	<p>Potential problems from human ingestion of residue or metabolites</p> <p>Not for use in humans. For use in animals only. Consult a physician in case of accidental human exposure. Do not use in horses intended for human consumption. http://animalhealth.pfizer.com/sites/pahweb/US/EN/Products/Documents/Combined%20FUI%20P%20%20%20-%20EXEO0110014.pdf</p> <p>Penicillins and cephalosporins can cause allergic reactions in sensitized individuals. Topical exposure to such antimicrobials, including ceftiofur, may elicit mild to severe allergic reactions in some individuals. Repeated or prolonged exposure may lead to sensitization. Avoid direct contact of the product with the skin, eyes, mouth, and clothing. http://www.drugs.com/vet/ceftiflex.html</p>
18. Chloramphenicol	<p>Chlor-500 Chlor-1000 Chloramphenicol 1% Ointment</p> <p>"Not for use in animals that are raised for food production. Must not be used in meat, egg, or milk-producing animals. 21 CFR § 520.390a; 520.390c; 522.390; 524.390. http://www.drugs.com/vet/chlor-500-can.html http://www.drugs.com/vet/chlor-1000-can.html http://www.drugs.com/cdi/chloramphenicol.html http://www.drugs.com/vet/chloramphenicol-1-ophthalmic-ointment-can.html</p>	<p>Some medicines may interact with Chloramphenicol:</p> <ul style="list-style-type: none"> •Anticoagulants (e.g., warfarin) because side effects, including risk of bleeding, may be increased. •Hydantoin (e.g., phenytoin) or sulfonylureas (e.g., glyburide) because the actions and side effects of these medicines may be increased. •Medicines that may decrease your bone marrow (e.g., cancer chemotherapy) because the risk of serious side effects, such as low blood platelet levels and low white blood cell counts, may be increased. <p>Chloramphenicol has caused severe and sometimes fatal blood problems (e.g., anemia, low blood platelets, low white blood cell counts). Leukemia has also been reported after use of Chloramphenicol. Blood problems have occurred after both short-term and long-term use of Chloramphenicol. Do not use chloramphenicol if safer, effective medicines can be used. http://www.drugs.com/cdi/chloramphenicol.html</p>
19. Chloroform	Anesthetic	Prohibited for use in food-producing animals in the European Union.
20. Cimetidine	Prevention and prophylaxis of	<p>The IARC (International Agency for Research on Cancer) classifies chloroform as possibly carcinogenic to humans. http://monographs.iarc.fr/ENG/Monographs/vol73/mono73.pdf</p> <p>ADVERSE REACTIONS</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
	gastrointestinal irritation and ulcers	Diarrhea, headache, dizziness, somnolence, reversible confusional states, reversible impotence, increased serum transaminases, rash, gynecomastia, blood dyscrasias. WARNINGS/PRECAUTIONS Reversible confusional states reported, especially in severely ill patients. Increased risk of developing confusional states with advancing age (≥50 yrs), renal and/or hepatic impairment. Risk of hyperinfection of strongly/loidiiasis in immunocompromised patients. http://www.pdr.net/drugpages/concise/monograph.aspx?concise=1440
21. Clenbuterol	Beta-agonists used for growth promotion purposes Prohibited from any use in any food-producing animal. http://www.farad.org/eidu/prohibit.asp	Not approved for human use. http://www.deadiversion.usdoj.gov/drugs_concerns/c/enbuterol.htm
22. Copper Naphthenate	Kopertox Treatment of thrush. 21 CFR § 524.463 - "Do not use in horses intended for human consumption." http://www.drugs.com/vet/kopertox.html http://www.sciencelab.com/msds.php?msdsid=9923553	Toxic to central nervous system, blood, and kidneys. May produce vomiting, headache, shock, jaundice, kidney damage, nervous system damage, liver damage.
23. Crude Liver Extract	Liver 7 injection http://www.drugs.com/vet/liver-7-injection.html	FDA cautions against the use by humans of any animal organ extract. http://www.healthline.com/natstandard/content/liver-extract
24. Cupric Sulfate	Proudsoff (ointment for control and removal of proud flesh) Not for use on animals intended for food. http://www.drugs.com/vet/proudsoff.html	Harmful if swallowed. May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea, metallic taste, burning sensation in the stomach or epigastrium, abdominal pain, and possible gastrointestinal tract bleeding. May affect metabolism, liver (liver damage, jaundice), blood, urinary system (kidney damage, hematuria, hemoglobinuria, albuminuria), behavior/nervous systems (somnolence, tremor, psychosis, muscle weakness, coma), cardiovascular system (lowering of blood pressure, dysrhythmia).
25. Cypermethrin	Famam Endure Sweat-Resistant (fly spray) http://msds.farnam.com/m000080.ht	"Pyrethroid ingestion gives rise within minutes to a sore throat, nausea, vomiting and abdominal pain. There may be mouth ulceration, increased secretions and/or dysphagia. Systemic effects occur 4-48 hours after exposure. Dizziness, headache and fatigue are common, and palpitations, chest tightness and blurred vision less

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
	<p><u>iii</u></p>	<p>Coma and convulsions are the principal life-threatening features. Most patients recover within 6 days. . . .” S.M. Bradberry <i>et al.</i>, <i>Poisoning Due to Pyrethroids</i>, Toxicol Rev. 24(2):93-106 (2005) (quoting abstract).</p> <p>Potential organ damage. http://pmr.pace.com/jell.edu/profiles/exxonnet/carbaryl-diclorofos/cvypemnet-ext.html</p>
26.	<p>Dapsone</p> <p>Dermatitis skin problems in horses. Acne treatment in humans.</p>	<p>Adverse effects include agranulocytosis, aplastic anemia, leucopenia, thrombocytopenia, hemolysis, and other blood dyscrasias have been reported after treatment. It may cause significant reduction in leukocytes, platelets, or hemopoiesis. Caution with glucose-6-phosphate dehydrogenase (G6PD) deficiency, methemoglobin reductase deficiency, or hemoglobin M, and those who are exposed to other agents or conditions such as infection or diabetic ketoacidosis capable of producing hemolysis. Toxic hepatitis and cholestatic jaundice reported after use. Liver function tests must be monitored if there are any abnormalities. Can cause muscle weakness. Peripheral neuropathy, nausea and vomiting, abdominal pain, and pancreatitis may occur. http://www.pdr.nsf.gov/search/SearchResult.aspx?searchCriteria=Dapsone</p>
27.	<p>Deodorized Kerosene</p> <p>Component in Farnam Repel Xp (fly spray). http://msds.farnam.com/m000031.html</p>	<p>Ingestion may cause aspiration hazard, nausea, fatigue, pulmonary edema, central nervous system depression, convulsions and loss of consciousness. http://www.science.tuff.com/msds/C1935.html</p>
28.	<p>Deslorelin</p> <p>Used for inducing ovulation within 48 hours in ovulating mares. 21 CFR § 522.533 - “Do not use in horses intended for human consumption.”</p>	<p>Deslorelin stops the production of certain sex hormones in horses, and has never been approved for use on humans. If it was approved, it would be for a small targeted complement of the human population with identified diseases related to the production of too much of certain sex hormones, but could otherwise produce unwanted hormonal effects and responses.</p>
29.	<p>Detomidine Hydrochloride</p> <p>Dormosedan Pain relief and sedative for minor surgery. Also used in humans for sedation in intensive care and surgery conditions. 21 CFR § 522.536; 529.536 - Not for use in horses intended for food.” - “Do not use in horses intended for human consumption.” http://www.dormosedan.com/</p>	<p>Can cause hypotension, hypertension, bradycardia, dry mouth, respiratory depression, tachycardia, nausea and vomiting, atrial fibrillation, fever, hyperglycemia, anemia, hypovolemia, hypoxia, atelectasis. http://www.pdr.net/drugpages/concise.aspx?concise=2848</p>

	Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
30.	Dexamethasone	<p>Dexamium injection</p> <p>Anti-inflammatory drug.</p> <p>21 CFR § 522.540</p> <ul style="list-style-type: none"> - (d)(4) (sterile aqueous solution). "Not for use in horses intended for food." - (e)(5) (sterile aqueous solution). "Not for use in horses intended for food." <p>21 CFR § 522.542</p> <ul style="list-style-type: none"> - "Not for use in horses intended for food." <p>http://www.drugs.com/vet/dexamium-injection.html</p> <p>Steroid for humans.</p>	<p>Adverse reactions include fluid/electrolyte disturbances, muscle weakness, osteoporosis, peptic ulcer, pancreatitis, ulcerative esophagitis, impaired wound healing, headache, psychic disturbances, growth suppression (pediatrics), glaucoma, hyperglycemia, weight gain, nausea, malaise.</p> <p>http://www.pdr.net/drugpages/considemothorahh.aspx?concise=798</p> <p>Steroids should be taken under a doctor's supervision and have multiple significant adverse effects including severe allergic reactions, hormonal changes, changes in menstrual functions, mental and mood changes, respiratory problems, nausea and vomiting, joint swelling, vision changes, and unusual weight gain.</p>
31.	Dichloromethane	<p>Furall</p> <p>Antibacterial</p> <p>http://msds.farnam.com/m000394.htm</p>	<p>If eaten, this drug can cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause carboxyhemoglobinemia.</p> <p>Dichloromethane has been treated as a carcinogen in California since 1988 and it may also have adverse reproductive effects.</p> <p>http://www.sciencelab.com/msds.php?msdsid=9948&code=SLM2677</p>
32.	Diclazuril	<p>Clinacox Antiprotozoal</p> <p>Used to treat infections leading to myoencephalitis.</p> <p>21 CFR § 520.606</p> <ul style="list-style-type: none"> - "Do not use in horses intended for human consumption." 	<p>Administered to some AIDS patients, but effects in humans largely unknown.</p>
33.	Diclofenac Sodium	<p>Surpass (topical)</p> <p>Arthritis treatment in humans and horses.</p> <p>21 CFR § 524.590</p> <ul style="list-style-type: none"> - "Do not use for horses intended for human consumption." <p>http://www.drugs.com/vet/surpass-</p>	<p>May cause hypertension, edema, or heart failure. Some individuals with prior gastrointestinal disease may be hypersensitive to the drug's effects. Potential kidney failure and danger for patients with renal disease. May cause anaphylactic reactions; may harm fetus in utero. May cause liver problems. May cause anemia and affect blood. May cause abdominal pain, constipation, diarrhea, dyspepsia, flatulence, gross bleeding/perforation, heartburn, nausea and vomiting, gastrointestinal ulcers, renal function abnormalities, anemia, dizziness, edema, elevated liver enzymes.</p> <p>http://www.pdr.net/search/searchResult.aspx?searchCriteria=Diclofenac+Sodium</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
34. Diflufenuron	<p>topical-cream.html</p> <p>Equitrol II</p> <p>Fly control</p> <p>http://www.drugs.com/vet/equitrol-ii-feed-flu-fly-control.html</p>	<p>May cause anemia.</p>
35. Dimethylsulfoxide	<p>Topical application for sprains, soreness; may also be injected or combined with other drugs for administration.</p> <p>Limited treatment use in humans -- used as a topical application to reduce acute swelling due to trauma.</p> <p>21 CFR § 524.660a</p> <ul style="list-style-type: none"> - Dimethyl sulfoxide solution - "Not for use in horses and dogs intended for breeding purposes nor in horses slaughtered for food." <p>21 CFR § 524.660b</p> <ul style="list-style-type: none"> - Dimethyl sulfoxide gel - "Do not use in horses and dogs intended for breeding purposes or in horses slaughtered for food." <p>http://www.webmd.com/vitamins-supplements/ingredientmono-874-DMSO%20(DIMETHYLSULFOXIDE).asp?activeingredientid=874&activeingredientName=DMSO%20(DIMETHYLSULFOXIDE)</p>	<p>May cause headache, dizziness, drowsiness, nausea, vomiting, diarrhea, constipation, breathing problems, vision problems, blood problems, and allergic reactions. Also may harm the liver and kidneys.</p> <p>http://www.webmd.com/vitamins-supplements/ingredientmono-874-DMSO%20(DIMETHYLSULFOXIDE).asp?activeingredientid=874&activeingredientName=DMSO%20(DIMETHYLSULFOXIDE)</p> <p>MSDS available here: http://www.sciencelab.com/msds.php?msdsid=9927347</p>
36. Dimetridazole (generic)	<p>Bactericidal</p> <p>Antibacterial</p>	<p>Withdrawn from European market because of dangers of gastrointestinal problems, potential for cancer.</p> <p>http://www.bioarimix.com/msds/36/36280/3628007.pdf</p>
37. Di-n-propyl isocinchomeronate	<p>Fly control products:</p>	<p>High toxicity - classified as a carcinogenic Pesticide Action Network (PAN) "Bad Actor".</p>

¹ "PAN Bad Actor pesticides" belong to a "most toxic" set of pesticides identified by the Pesticide Action Network and Californians for Pesticide Reform (CPR). These pesticides are at least one of the following: known or probable carcinogens, as designated by the International Agency for Research on Cancer (IARC), U.S. EPA, U.S. National Toxicology Program, and the state of California's Proposition 65 list; reproductive or developmental toxicants, as designated by the state of

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
	<p>Flysect Super-7 repellent spray</p> <p>Flysect Super-C</p> <p>Mosquito Halt</p> <p>http://www.drugs.com/vet/flysect-super-7.html</p> <p>http://msds.farnam.com/m000811.htm</p> <p>III</p> <p>http://www.drugs.com/vet/flysect-super-c.html</p> <p>http://www.drugs.com/vet/mosquito-halt-repellent-spray-for-horses.html</p> <p>Farnam Roll-On Repellent (fly spray)</p> <p>http://msds.farnam.com/m000018.htm</p> <p>III</p>	<p>www.pesticideinfo.org/Detail_Chemical.jsp?Rec_id=PC2798</p>
38. Dipropyl isochromerone		<p>High toxicity – PAN Bad Actor.</p> <p>Carcinogenic.</p> <p>www.pesticideinfo.org/Detail_Chemical.jsp?Rec_id=PC2798</p>
39. Domperidone	<p>In horses, used for treatment of toxicity from fescue grass that affects pregnancies.</p> <p>In humans, used to increase bowel contractions and combat nausea and vomiting caused by other drugs.</p> <p>21 CFR § 520.766</p> <p>– “Do not use in horses intended for human consumption.”</p> <p>http://www.fda.gov/AnimalVeterinary/SafetyHealth/ProductSafetyInformation/ucm235691.htm</p>	<p>FDA has warned that this drug passes into breast milk and should not be used in nursing human mothers.</p> <p>Side effects include dizziness, dry mouth, nervousness, flushing, irritability, insomnia, stomach cramps, hot flashes and leg cramps, chest pain, slow/fast/irregular heartbeat, swelling of the feet or ankles, difficulty urinating, swelling of the breasts or discharge from the nipple in men or women, menstrual changes, sexual difficulties.</p> <p>May affect absorption and action of other drugs, and interact with other drugs.</p> <p>http://www.medicinenet.com/domperidone-oral/article.htm</p>
40. Doxycycline	<p>Antibiotic for horses and humans.</p> <p>http://www.drugs.com/cdi/doxyvcvcli-ne-capsules.html</p>	<p>Dangerous for pregnant women; may cause tooth problems, gastrointestinal symptoms, autoimmune syndrome, renal problems.</p>

California's Proposition 65 list; neurotoxic cholinesterase inhibitors, as designated by California Department of Pesticide Regulation, the Materials Safety Data Sheet for the particular chemical, or PAN staff evaluation of chemical structure (for organophosphorus compounds); known groundwater contaminants, as designated by the state of California (for actively registered pesticides) or from historic groundwater monitoring records (for banned pesticides); pesticides with high acute toxicity, as designated by the World Health Organization (WHO), the U.S. EPA, or the U.S. National Toxicology Program.

	Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
41.	Doxylamine succinate	Antihistamine Anticholinergic 21 CFR 520.784 - "Not for use in horses intended for food."	Not to be combined with other antihistamines. Can cause multiple adverse side effects.
42.	Equine Influenza vaccine	Killed virus vaccine	Not intended for human use and no testing on human ingestion of this vaccine.
43.	Equine Rhinopneumonitis - Influenza vaccine	Killed virus vaccine Prestige II with Havlogren (vaccine) http://intervet.us.naccvp.com/?m=product_view&id=1047348	Not intended for human use and no testing on human ingestion of this vaccine.
44.	Estradiol	Female hormone for management of reproductive functions in horses, and for relief of menopausal symptoms in humans Estradiol Cypionate in Oil Estradiol enanthate; Estradiol benzoate	Risk of cancer is among the multiple potential negative side effects related to the unapproved and uncontrolled use of this synthetic female hormone. Other side effects include headaches, dizziness, breast pain, increased risk for yeast infections, flu-like symptoms, arthritic pain, hair loss, gastrointestinal problems including nausea or vomiting, and incidences of spotting in between periods or other menstrual irregularities. May be unsafe for people with blood disorders, heart disease, obesity, seizure disorders or certain allergies.
45.	Eucalyptus Oil	Scarlet Oil Wound Dressing http://www.drugs.com/vet/scarlet-oil.html Labeled "Not for use on animals intended for food."	Potential side effects include seizures, poisoning, drowsiness, morbidity in children, central nervous system, depression.
46.	Fenbendazole	Dewormer (Panacur) Equi-bits Panacur Paste Panacur Power Pac Panacur Suspension Safe-Guard Safe-Guard Power-Dose 21 CFR § 520.905a - "Do not use in horses intended	No human formulation, and adverse effects on humans who eat this dewormer, that directly affects the gastrointestinal tract, are unknown.

	Drug	Product/Type/Warnings for human consumption."	Potential problems from human ingestion of residue or metabolites
47.	Firocoxib	<p>Equioxx Non-steroidal anti-inflammatory drug (NSAID). 21 CFR § 520.930; 522.930</p> <ul style="list-style-type: none"> - Firocoxib paste. - "Do not use in horses intended for human consumption." <p>http://www.equioxx.com/</p>	<p>There is no approved use of this drug for humans and so any adverse effects on humans who ingest this drug are completely unknown.</p> <p>Firocoxib is one of the NSAIDs, all of which have extensive potential adverse side effects in humans including cardiovascular, gastrointestinal, kidney and eye problems. The NSAIDs can be dangerous for individuals with blood disorders. They are also contraindicated during pregnancy. They also present significant risk for people with a history of ulcers or gastrointestinal bleeding. Can cause nausea, abdominal pain, diarrhea, headaches, excitability, and nervous system problems.</p>
48.	Flunixin	<p><u>NSAID:</u> Banamine (solution or paste) (pain killer) Flunixin injectable Flu-nix D injection Flunixinamine 21 CFR § 520.970</p> <ul style="list-style-type: none"> - Granules - "Do not use in horses intended for human consumption." <p>21 CFR § 522.970</p> <ul style="list-style-type: none"> - Injectable - "Do not use in horses intended for human consumption." 	<p>Flunixin is one of the NSAIDs, all of which have extensive potential adverse side effects in humans including cardiovascular, gastrointestinal, kidney and eye problems. The NSAIDs can be dangerous for individuals with blood disorders. They are also contraindicated during pregnancy. They also present significant risk for people with a history of ulcers or gastrointestinal bleeding. Can cause nausea, abdominal pain, diarrhea, headaches, excitability, and nervous system problems.</p>
49.	Flunixin Meglumine	<p><u>NSAID:</u> Flunixin injectable Flu-nix D injection Flunixinamine</p> <p>Labeled: Not for use in horses intended for food. http://www.drugs.com/vet/flunixin-meglumine-injection.html http://www.drugs.com/vet/flunixin-injectable-solution.html http://www.drugs.com/vet/flu-nix-d-</p>	<p>This is also one of the NSAIDs, all of which have extensive potential adverse side effects in humans including cardiovascular, gastrointestinal, kidney and eye problems. The NSAIDs can be dangerous for individuals with blood disorders. They are also contraindicated during pregnancy. They also present significant risk for people with a history of ulcers or gastrointestinal bleeding. Can cause nausea, abdominal pain, diarrhea, headaches, excitability, and nervous system problems.</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
50. Furaltidone	<p>http://www.drugs.com/vet/flunixinamide.html</p> <p><u>Antibacterial</u> http://www.chemblink.com/MSDS/MSDSFiles/139-91-3_Sigma-Aldrich.pdf</p>	<p>May cause cancer in humans, but very little known about effect on humans because the drug has not been tested on humans and the potential side effects upon ingestion are unknown.</p>
51. Furazolidone	<p><u>Antibacterial:</u> Furall Furox Aerosol Powder Used in humans as an anti-diarrheal 21 CFR § 524.1005 - "Not for use in horses intended for food." http://msds.farnam.com/m000394.html http://www.drugs.com/vet/furazolidone-aerosol-powder.html Federal law prohibits the use of this product in food-producing animals.</p>	<p>Contains chemicals known to the state of California to cause cancer.</p> <p>Should only be taken under strict medical oversight; dangerous if taken with alcohol, when pregnant, or for individuals with certain blood disorders.</p> <p>Adverse effects include headache, stomach upset, nausea, vomiting, dizziness or weakness, fever, skin rash, itching, muscle aches, flushing, breathing trouble. This medication may cause the urine to turn brown in color.</p>
52. Furosemide	<p><u>Diuretic:</u> Lasix Used in humans and horses</p>	<p>May cause pancreatitis, jaundice, anorexia, paresthesias, ototoxicity, blood dyscrasias, dizziness, rash, urticaria, photosensitivity, fever, thrombophlebitis, restlessness. http://www.pdr.net/search/searchResult.aspx?searchCriteria=Furosemide</p>
53. Gentamicin sulfate solution	<p><u>Antibiotic:</u> Gentamicin solution Do not use for horses intended for human consumption. http://www.drugs.com/vet/gentamicin-sulfate-solution.html 21 CFR § 529.1044a - "Do not use in horses intended for human consumption."</p>	<p>Can cause severe hearing and kidney problems. May cause dizziness, vertigo, ringing in the ears, hearing loss, numbness, muscle twitching or weakness, difficulty breathing, decreased urination, rash, itching, or sore throat. Interaction and potential harm with other drugs can cause adverse reactions.</p>
54. Gentian violet	<p>Blue-Kote</p>	<p>Usually used topically on humans. Unknown side effects upon ingestion.</p>

	Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
55.	HCl	<p>Topical ointment, antiseptic, protective wound dressing.</p> <p>Not for use on food producing animals.</p> <p>http://www.drugs.com/vet/dr-navlor-blur-kote.html</p> <p>http://www.drnavlor.com/index.php?option=com_content&task=blogcategory&id=20&Itemid=47</p> <p>“Not for use on animals intended for food.”</p> <p>http://www.horsesuppliesplus.com/antiseptics.html</p>	<p>Very hazardous if touched; not fully tested on humans; may be fatal if inhaled or swallowed. Causes irritation and burning, ulceration, or perforation of the gastrointestinal tract and resultant peritonitis, gastric hemorrhage and infection. Can also cause nausea, vomiting (with “coffee ground” emesis), diarrhea, thirst, difficulty swallowing, salivation, chills, fever, uneasiness, shock, strictures and stenosis (esophageal, gastric, pyloric). May affect behavior (excitement), the cardiovascular system (weak rapid pulse, tachycardia), respiration (shallow respiration), and urinary system (kidneys- renal failure, nephritis). Acute exposure via inhalation or ingestion can also cause erosion of tooth enamel.</p>
56.	Hyaluronate sodium	<p>Arthritis treatment</p> <p>Legend</p> <p>Legend injectable</p> <p>21 CFR § 522.1145</p> <ul style="list-style-type: none"> - “Do not use in horses intended for human consumption.” - “Not for use in horses intended for food.” <p>http://www.bayerdvm.com/products/legend/legend.cfm</p> <p>http://www.drugs.com/vet/legend-multi-dose-hyaluronate-sodium-injectable-solution.html</p>	<p>May cause gastrointestinal tract irritation with nausea and vomiting. It may affect blood (normocytic anemia, change in leukocyte count), metabolism, behavior (ataxia, convulsions), respiration (respiratory stimulation), and urinary system. The toxicological properties of this substance have not been fully investigated.</p> <p>http://www.sciencelab.com/msds.php?msdsid=9924276</p>
57.	Hyaluronic acid sodium salt	<p>Polyglycan</p>	<p>May cause gastrointestinal irritation, affect blood, metabolism and behavior. The dangers upon ingestion by humans has not been fully investigated.</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
58. Hydroxyzine Pamoate	<p>For use only as a surgical lavage in animals not intended for food use. http://www.medi-vet.com/Polyglycan.aspx</p> <p>Also used in race horses prior to a race.</p> <p>Anti-anxiety in humans and preoperative sedation. Antihistamine, anti-itching and sedative in animals. http://www.drugsfostersmith.com/prod/uct/prod_display.cfm?peaid=20678</p>	<p>May impair mental and physical abilities in elderly, may potentiate other medications, and not for use by pregnant or nursing mothers. http://www.pdr.net/drugpages/concise/monograph.aspx?concise=1096</p>
59. Hyoscine butylbromide	<p>Buscopan Scopolamine Antispasmodic; colic pain relief. http://www.drugs.com/vet/buscopan-sterile-solution-can.html</p>	<p>Potential adverse effects include blurred vision, severe allergic reactions, confusion, urinary problems, and mood changes. www.drugs.com/sfx/scopolamine-side-effects.html</p>
60. Isoflurane	<p>Surgical anesthetic 21 CFR § 529.1186 - "Do not use in horses intended for human consumption."</p>	<p>MSDS reports no information on toxicity upon ingestion.</p>
61. Isoparaffinic Petroleum Solvent	<p>Fly Control: Farnam Bronco Gold (spray) Farnam Wipe http://msds.farnam.com/m001650.htm III http://msds.farnam.com/m000490.htm III</p>	<p>Unknown human toxicity and side effects after ingestion.</p>
62. Ivermectin	<p>Dewormers: Agri-mectin Paste Bimectin Paste Equell Paste</p>	<p>Can act for up to twelve months; carcinogenicity not studied; not recommended for pregnant women; distributes into breast milk. Adverse reactions include pruritus, edema, papular/pustular/frank urticarial rash, fever, axillary/cervical/inguinal lymphadenopathy, arthralgia/synovitis, limbitis, tachycardia, peripheral edema, leukopenia, eosinophilia</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites http://www.pdr.net/search/searchResult.aspx?searchCriteria=ivermectin
	<p>Equimax</p> <p>Farnam Ivercare</p> <p>Horse Health Ivermectin</p> <p>Ivercare paste</p> <p>ProMetin E™ Paste</p> <p>Zimecterin Gold</p> <p>Zimecterin Paste</p> <p>Also found in human anthelmintic compounds</p> <p>21 CFR § 520.1192</p> <ul style="list-style-type: none"> - Paste - "Do not use in horses intended for human consumption." <p>21 CFR § 1194</p> <ul style="list-style-type: none"> - Meal - "Do not use in horses intended for human consumption." <p>21 CFR § 1195</p> <ul style="list-style-type: none"> - Liquid - "Do not use in horses intended for human consumption." <p>21 CFR § 1198</p> <ul style="list-style-type: none"> - Ivermectin and praziquantel paste - "Do not use in horses intended for human consumption." <p>http://www.drugs.com/vet/agri-ivermectin-paste-1-87.html</p> <p>http://www.drugs.com/vet/agri-ivermectin-paste-1-87.html</p> <p>http://www.davisandlawrence.com/1-1-x-6-08-g.html</p> <p>http://www.horsehealthusa.com/detail/ls/Equell-Paste/37-105.html</p> <p>http://www.equinaxhorse.com/</p>	

	Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
63.	Ketoprofen	NSAID: Ketofen Used as NSAID in horses and humans. 21 CFR § 522.1225 - "Not for use in horses intended for food." http://www.drugs.com/vet/ketofen.html	Ketoprofen is one of the NSAIDs, all of which have extensive potential adverse side effects in humans including cardiovascular, gastrointestinal, kidney and eye problems. The NSAIDs can be dangerous for individuals with blood disorders. They are also contraindicated during pregnancy. They also present significant risk for people with a history of ulcers or gastrointestinal bleeding. Can cause nausea, abdominal pain, diarrhea, headaches, excitability, and nervous system problems.
64.	Levothyroxine Sodium	Thyro-L Thyroid replacement hormone. http://www.drugs.com/vet/thyro-l.htm	This artificial thyroid hormone can exacerbate thyroid and hypertension problems in susceptible individuals. http://www.pdr.net/search/searchResult.aspx?searchCriteria=Levothyroxine+Sodium
65.	Luprostiol	For control of reproductive cycles and inducing termination of pregnancy. 21 USC § 522.1290 - solution - "Do not use in horses intended for human consumption." - "Labeling shall bear the following statements: Warning: Women of child-bearing age, asthmatics, and persons with bronchial and other respiratory problems should exercise extreme caution when handling this product. In the early states, women may be unaware of their pregnancies..."	Dangerous for children, pregnant and lactating mothers, individuals with respiratory problems. Can cause hormonal effects when taken.
66.	Mepivacaine	Anesthetic 21 CFR § 522.1372 - "Not for use in horses intended for human consumption."	Because this is an injectable drug, studies have not been done on the dangers of ingestion.
67.	Methocarbamol	Robaxin Muscle relaxant in animals and humans.	Potential adverse reactions include lightheadedness, dizziness, drowsiness, nausea, urticaria, pruritus, rash, conjunctivitis, nasal congestion, blurred vision, headache, fever, seizures, syncope, flushing. http://www.pdr.net/search/searchResult.aspx?searchCriteria=Methocarbamol

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
68. Methyl Salicylate	<p>http://www.petplace.com/drug-library/methocarbamol-robaxin-v/page1.aspx</p> <p>Scarlet Oil</p> <p>Wound dressing for horses.</p> <p>Muscle and joint pain relief in humans.</p> <p>Not for use on animals intended for food.</p> <p>http://www.drugs.com/vet/scarlet-oil.html</p>	<p>“When ingested, the highly concentrated liquid methyl salicylate in the form of wintergreen oil, as with other volatile oils, can induce vomiting and is a notorious source for severe, often fatal poisonings.”</p> <p>http://www.drugs.com/npp/wintergreen.html</p> <p>Dangerous if used in conjunction with other analgesics, anticoagulants, steroids, NSAIDs, alcohol, and diuretics.</p> <p>http://www.pdr.net/search/searchResult.aspx?searchCriteria=Methyl+Salicylate</p>
69. Methylandrostenediol	<p>Methandriol</p> <p>Anabolic steroid</p> <p>Used as growth stimulator and steroid in horses and humans.</p> <p>http://www.drugs.com/international/methandriol.html</p>	<p>Can cause estrogenic (female hormone) and androgenic (male hormone) effects.</p> <p>Steroids should be taken under a doctor’s supervision and have multiple significant adverse effects including severe allergic reactions, hormonal changes, changes in menstrual functions, mental and mood changes, respiratory problems, nausea and vomiting, joint swelling, vision changes, and unusual weight gain.</p>
70. Methylprednisolone	<p>Human and horse steroid</p> <p>21 CFR § 522.1410</p> <p>- “Do not use in horses intended for human consumption.”</p>	<p>Steroids should be taken under a doctor’s supervision and have multiple significant adverse effects including severe allergic reactions, hormonal changes, changes in menstrual functions, mental and mood changes, respiratory problems, nausea and vomiting, joint swelling, vision changes, and unusual weight gain.</p>
71. Metronidazole	<p>Antibiotic in humans and horses (Flagyl)</p> <p>http://www.wedgewoodvetrx.com/learning-center/professional-monographs/metronidazole-for-veterinary-use-ab.html</p>	<p>This drug can cause gastrointestinal problems, serious allergic reactions in sensitive individuals, flu-like symptoms, seizures, encephalopathy, aseptic meningitis, peripheral neuropathy, nausea and vomiting, headache, anorexia and neutropenia.</p> <p>http://www.pdr.net/search/searchResult.aspx?searchCriteria=Metronidazole</p>
72. Moxidectin	<p>Quest Gel</p> <p>Quest Plus</p> <p>Antiparasitic (dewormers)</p> <p>Not for horses or ponies intended for human consumption.</p> <p>http://www.fda.gov/AnimalVeterinary/GuidanceComplianceEnforcement/</p>	<p>Very limited testing on humans – potential adverse effects still unknown.</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
	<p>ComplianceEnforcement/ucm108782.htm</p> <p>21 CFR § 520.1452; 520.1463</p> <ul style="list-style-type: none"> - Gel - "Not for use in horses and ponies intended for food." <p>http://www.drugs.com/vet/quest-plus-equine-oral-gel.html</p>	
73. N-(2-Ethylhexyl)-5-norbornene-2,3-dicarboximide	<p>Bug Block (fly control)</p> <p>http://absorbine.org/products/flycontrol/bug-block-insecticide-repellent</p> <p>http://www.stateinsectack.com/ContentFiles/Associated_Content/absorbinebugblockMDS.pdf</p>	<p>"Harmful if ingested." Bug Block fly control has multiple adverse effects if swallowed by humans.</p> <p>http://www.stateinsectack.com/ContentFiles/Associated_Content/absorbinebugblockMDS.pdf</p>
74. N-acetyl-D-glucosamine 10%	<p>Polyglycan</p> <p>Post-surgical lavage of joint compartments.</p> <p>"Do not administer to animals that are to be slaughtered for food."</p> <p>www.arthrodynamic.com/polyglycan/</p>	<p>Ingredient in Polyglycan, which includes warning: "For use only as a surgical lavage in animals not intended for food use."</p> <p>http://www.medi-vet.com/Polyglycan.aspx</p>
75. Neomycin Sulfate	<p>Animax ointment</p> <p>Human and animal antimicrobial, anti-fungal steroid drug</p>	<p>May cause nausea and vomiting, diarrhea, malabsorption syndrome, nephrotoxicity, ototoxicity, neuromuscular blockage, neurotoxicity, fetal harm. Especially dangerous for individuals with certain diseases of the muscles.</p> <p>http://www.pdr.net/drugpages/concise/monograph.aspx?concise=3174</p>
76. Nitrofurantoin	<p>Equifer</p> <p>Antibacterial for urinary tract infections in horses and humans.</p> <p>This drug is not to be administered to horses that are to be slaughtered for use in food.</p> <p>http://www.drugs.com/vet/equifer-can.html</p>	<p>Adverse effects include hypersensitivity reactions, pulmonary/hepatic/psychotic reactions, peripheral neuropathy, nausea and vomiting, anorexia, dizziness, exfoliative dermatitis, anaphylaxis, hematologic abnormalities, cyanosis, angioedema, asthenia.</p> <p>http://www.pdr.net/drugpages/concise/monograph.aspx?concise=383</p>

	Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
77.	Nitrofurazone	<p>Niderm Ointment</p> <p>Antibacterial ointment, burns, skin grafts.</p> <p>21 CFR § 524.1580b</p> <ul style="list-style-type: none"> - "Do not use in horses intended for human consumption." - "Federal law prohibits the use of this product in food-producing animals." <p>Federal law prohibits the administration of this preparation to animals that produce food or that are intended for consumption as food.</p> <p>http://www.drugs.com/vet/niderm-ointment-can.html</p>	<p>Very toxic to humans.</p> <p>http://www.vv-sciencelab.com/msds.php?msdsid=9926271</p>
78.	N-Octyl Bicycloheptene Dicarboximide	<p>Farnam Roll-On Repellent</p> <p>Fly spray</p> <p>http://msds.farnam.com/m000018.htm</p>	<p>According to the manufacturer, Farnam Roll-On Repellent is "harmful if swallowed."</p>
79.	Nystatin	<p>Antimicrobial, antifungal and steroid</p> <p>Animax ointment</p> <p>Mycostatin</p> <p>Bio-Statin</p> <p>For use in humans and horses with thrush.</p>	<p>Adverse reactions include oral irritation, sensitization, diarrhea, nausea and vomiting, gastrointestinal disturbances, rash, urticaria, Stevens-Johnson syndrome.</p> <p>http://www.pdr.net/search/searchResult.aspx?searchCriteria=Nystatin</p> <p>See also:</p> <p>http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0000767/</p> <p>http://www.nlm.nih.gov/medlineplus/druginfo/meds/682758.html</p>
80.	Omeprazole	<p>Treatment for ulcers in horses and humans.</p> <p>Gastrogard</p> <p>21 CFR § 520.1615</p> <ul style="list-style-type: none"> - "Do not use in horses intended for human consumption." <p>http://eastrogard.us.merial.com/faq.shtml</p>	<p>Adverse reactions include headache, diarrhea, abdominal pain, nausea and vomiting, fever, respiratory disorders, severe allergic reactions, irregular heartbeat, bruising and bleeding.</p> <p>http://www.pdr.net/search/searchResult.aspx?searchCriteria=Omeprazole</p>
81.	Oxibendazole	<p>Anthelmintic dewormer</p>	<p>"Do not allow product to enter drinking water supplies, waste water or soil."</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
	<p>21 CFR § 520.1638</p> <ul style="list-style-type: none"> - paste - "Not for use in horses intended for human consumption." <p>21 CFR § 520.1638</p> <ul style="list-style-type: none"> - Suspension - "Not for use in horses intended for human consumption." <p>Not for use in horses intended for human consumption.</p> <p>http://www.drugs.com/vet/anthelmicide-eg-equine-wormer-paste.html</p>	<p>http://www.segchem.com/safetysheet.php?SQIndex=SRP0124910</p>
82.	<p>Parachlorometaxylenol</p> <p>Scarlet Oil</p> <p>Not for use on animals intended for food.</p> <p>http://www.drugs.com/vet/scarlet-oil.html</p>	<p>May cause burning of mouth, throat and stomach, if ingested.</p> <p>http://surfactantsinc.com/pdf/Suricide%20PCMX-USP%20M.SDS.pdf</p>
83.	<p>Phenol</p> <p>Red-Kote</p> <p>Not for use on animals intended for food.</p> <p>http://www.drugs.com/vet/dr-naylot-red-kote.html</p>	<p>Phenol is considered to be quite toxic to humans via oral exposure. Anorexia, progressive weight loss, diarrhea, vertigo, salivation, a dark coloration of the urine, and blood and liver effects have been reported in chronically (long-term) exposed humans. Animal studies have reported reduced fetal body weights, growth retardation, and abnormal development in the offspring of animals exposed to phenol by the oral route.</p> <p>http://www.epa.gov/tm/atw/hlthef/phenol.html</p>
84.	<p>Phenylbutazone</p> <p><u>NSAID:</u></p> <p>Butazone 400</p> <p>Butazone 1000</p> <p>Butazone Concentrate</p> <p>Bute paste</p> <p>Butequine</p> <p>21 USC §520.1770a</p> <ul style="list-style-type: none"> - Tablets and boluses - Dogs and horses - "Do not use in horses intended for human consumption." <p>21 USC § 522.1720</p>	<p>Serious and fatal adverse effects have been reported from ingestion of Phenylbutazone, including bone marrow suppression and aplastic anemia. Banned in America for human use. Nicholas Dodman, Nicolas Blondell, Ann M. Marini, "Association of phenylbutazone usage with horses bought for slaughter: A public health risk", FOOD AND CHEMICAL TOXICOLOGY 48 (2010) 1270-74.</p> <p>"Phenylbutazone is known to induce blood dyscrasias, including aplastic anemia, leukopenia, agranulocytosis, thrombocytopenia and deaths. Hypersensitivity reactions of the serum-sickness type have also been reported. In addition, phenylbutazone is a carcinogen, as determined by the National Toxicology Program."</p> <p>http://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm124078.htm</p> <p>Phenylbutazone is especially problematic for patients with a history of asthma attacks, flares, or other allergic reactions to aspirin or other NSAIDs. It also should be avoided by patients with peptic ulcer disease or poor kidney function, since this medication</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
	<ul style="list-style-type: none"> - Injection - Dogs and horses - "Not for use in animals intended for food." http://horsebackmagazine.com/hb/arc_hives/13184 http://www.farmvet.com/pc-1500-163-butte-paste-12-gm.aspx http://www.drugs.com/vet/butequine-can.html http://ruesdavshorse.wordpress.com/tag/ctfa/ 	<p>can aggravate both conditions. Phenylbutazone is generally used with caution in patients taking blood thinning medications (anticoagulants), such as warfarin (Coumadin), because of an increased risk of bleeding. Patients taking lithium can develop toxic blood lithium levels. Additionally, patients taking cyclosporine (Sandimmune) can develop kidney toxicity.</p>
85.	<p>Piperonyl Butoxide</p> <p>Repel-XP Fly control Do not use on horses intended for human consumption. http://www.drugs.com/vet/repel-xp-emulsifiable-fly-spray.html</p>	<p>Potential dangers to humans are unknown: "Data are not available from accidental poisonings, occupational exposures, or epidemiological studies regarding the reproductive and developmental toxicity of piperonyl butoxide." http://nic.orst.edu/factsheets/pbotoxch.pdf</p> <p>Ingestion can cause vomiting and diarrhea. Pesticide Action Network North America. Piperonyl Butoxide. http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC33240</p> <p>The EPA classifies piperonyl butoxide as a group C carcinogen, a possible human carcinogen. Environmental Protection Agency. Reregistration Eligibility Decision for Piperonyl Butoxide. (June 2006). http://www.epa.gov/opp00001/reregistration/REDS/piperonyl_red.pdf</p>
86.	<p>Polysulfated Glycosaminoglycan</p> <p>Adequan Joint treatment. 21 USC § 522.1850 - "Do not use in horses intended for human consumption."</p>	<p>Data on human safety, pertaining to consumption of drug residues in food, were not required for approval of this supplemental new animal drug. The drug is approved for use only in horses that are not to be used for food and is to be labeled "Not for use in horses intended for food." http://www.fda.gov/AnimalVeterinary/Products/ApprovedAnimalDrugProducts/FOIADrugSummaries/ucm054846.htm</p> <p>Based on the formulation of the drug, humans could develop anaphylaxis or excessive bleeding as the sulfated proteoglycans are anticoagulants.</p>
87.	<p>Fonazuril</p> <p>Antiprotozoal Marquis paste; Marquis 21 CFR § 520.1855 - Horses only - "Not for use in horses intended</p>	<p>Unknown side effects and adverse reactions in humans ingesting Ponazuril. "Data on human safety, pertaining to consumption of drug residues in food, were not required for approval of this supplemental new animal drug. The drug is approved for use only in horses that are not to be used for food and is to be labeled 'Not for use in horses intended for food.'"</p> <p>Freedom of Information Summary, Original New Animal Drug Application, NADA</p>

	Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
		<p>for food.” “Not for use in horses intended for food.” http://www.drugs.com/vet/marquis-15-w-v-pozazuril-antiprotozoal-oral-paste.html</p>	<p>141-188 (Marquis), www.fda.gov/downloads/AnimalVeterinary/ucml17581.pdf</p>
88.	<p>Prallethrin</p>	<p>Insecticide Mosquito Halt Fly spray http://www.drugs.com/vet/mosquito-halt-repellent-spray-for-horses.html</p>	<p>Potential poisoning, headache, dizziness, nausea, and seizure. http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC35755 “Pyrethroid ingestion gives rise within minutes to a sore throat, nausea, vomiting and abdominal pain. There may be mouth ulceration, increased secretions and/or dysphagia. Systemic effects occur 4-48 hours after exposure. Dizziness, headache and fatigue are common, and palpitations, chest tightness and blurred vision less frequent. Coma and convulsions are the principal life-threatening features. Most patients recover within 6 days. . . .” S.M. Bradberry <i>et al.</i>, <i>Poisoning Due to Pyrethroids</i>, Toxicol Rev. 24(2):93-106 (2005) (quoting abstract).</p>
89.	<p>Praziquantel</p>	<p>Dewormer For horses and humans Equimax Quest Plus Zimecterin Gold http://www.equimaxhorse.com/ http://www.drugs.com/vet/quest-plus-equine-oral-gel.html “Not for use in humans.” (Zimecterin) http://www.zimecterin.com/ZimecterinGold/index.html?#50</p>	<p>Available by prescription only and to be taken only under the monitoring of a physician. Contraindicated for people with pre-existing conditions involving the liver, kidney, or heart. Praziquantel may cause side effects including headache, dizziness, stomach pain, nausea, fever, itching, hives (especially serious). http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0000474/ http://www.rxlist.com/biltricide-drug/patient-images-side-effects.htm</p>
90.	<p>Prednisone</p>	<p>Human and horse steroid 21 USC § 522.1890 - Horses, dogs and cats - “Not for use in horses intended for human consumption.”</p>	<p>Steroids should be taken under a doctor’s supervision and have multiple significant adverse effects including severe allergic reactions, hormonal changes, changes in menstrual functions, mental and mood changes, respiratory problems, nausea and vomiting, joint swelling, vision changes, and unusual weight gain.</p>
91.	<p>Prostaglandin</p>	<p>Lutalyse solution Horse and human use – regulation of</p>	<p>Can cause unknown and unwanted hormonal effects, including termination of pregnancy, to individuals who ingest without knowing.</p>

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
	<p>female reproduction and other uses.</p> <p>This drug is not to be administered to horses that are to be slaughtered for use in food.</p> <p>http://www.drugs.com/vet/litalyse-sterile-solution-can.html</p>	
92.	<p>Pseudoephedrine HCl</p> <p>Tri-Hist Granules</p> <p>Not for use in horses intended for food.</p> <p>http://www.drugs.com/vet/tri-hist-granules.html</p>	<p>Can cause central nervous stimulation, insomnia, anxiety, dizziness, blurred vision, colitis, and psychosis when combined with other drugs.</p>
93.	<p>Pyrantel Pamoate</p> <p>Exodus Paste</p> <p>Dewormer</p> <p>21 CFR § 520.2044</p> <ul style="list-style-type: none"> - Horses and ponies - "Do not use in horses intended for human consumption." <p>21 CFR § 520.2043</p> <ul style="list-style-type: none"> - Horses and ponies - "Do not use in horses intended for human consumption." <p>http://www.drugs.com/vet/exodus-paste.html</p>	<p>Adverse reactions include abdominal cramps, nausea and vomiting, diarrhea, headache, dizziness.</p> <p>http://www.pdr.net/drugpages/concisemonograph.aspx?concise=2985</p>
94.	<p>Pyridoxine HCl</p> <p>Liver 7 injection</p>	<p>Potential health effects after ingestion unknown.</p> <p>http://www.sciencelab.com/msds.php?msdsid=9924765</p>
95.	<p>Pyrilamine Maleate USP</p> <p>Tri-Hist Granules</p> <p>Antihistamine (human and horse use)</p> <p>21 CFR § 522.2063</p> <ul style="list-style-type: none"> - "Do not use in horses intended for food purposes." <p>Not for use in horses intended for food.</p> <p>http://www.drugs.com/vet/tri-hist-granules.html</p>	<p>Many individuals with identified health conditions have hypersensitivities to antihistamines and the use of antihistamines is contraindicated in that portion of the population.</p> <p>http://www.drugs.com/pro/poly-hist-pd.html</p>

	Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
96.	Rabies vaccination	Imovax Rabies Vaccine	The dangers of human ingestion are unknown.
97.	Ractopamine hydrochloride	Optaflexx 100 Premix Beta-agonist used for growth promotion purposes	A January 2012 article reported that ractopamine hydrochloride is "[f]led to an estimated 60 to 80 percent of pigs in the United States, [and has] sickened or killed more of them than any other livestock drug on the market." While the FDA has approved the drug for use in cows and pigs, many countries have banned it from food-producing animals, and the drug has never been tested on horses intended for human consumption. http://bottomline.msbc.msu.com/news/2012/01/25/10220221-dispute-over-drug-in-feed-limiting-us-meat-exports
98.	Rhinopneumonitis vaccine	5-way (vaccination) http://www.alpineanimal.net/page6263a3c5.html?inc=na	Unknown consequences for humans.
99.	Ronidazole	Antiprotozoal agent http://www.wedgewoodpetrx.com/filems/ronidazole-capsule.html	Does not appear to have any human applications. Dangerous side effects in animals. Toxicity information and potential health effects are unknown. https://www.reagenworld.com/products/msds2.asp?prodid_2=23072
100.	Selenium	Trace mineral supplement 21 USC § 522.2100 - "Do not use in horses intended for food."	Rare but potential side effects include nausea, vomiting, abdominal pain, hearing loss, fatigue, weight loss, muscle tenderness, heart failure, and allergic reactions.
101.	Stanozolol	Anabolic steroid Used in both animals and humans. 21 USC 522.2150 - "Not for use in horses intended for food." http://www.petplace.com/drug-library/stanozolol-winstrol/page1.aspx	Potential side effects of anabolic steroids are well-documented. Steroids should be taken under a doctor's supervision and have multiple significant adverse effects including severe allergic reactions, hormonal changes, changes in menstrual functions, mental and mood changes, respiratory problems, nausea and vomiting, joint swelling, vision changes, and unusual weight gain
102.	Stilbenes	Used in estrogen-related substances	Animals treated with these drugs are banned from meat production in the European Union. http://eur-lex.europa.eu/smartapi/cgi/sua_doc?smartapi:celexplus!prod!CELEXnumdoc&lg=EN&numdoc=32008L0097
103.	Strangles vaccine (Streptococcus Equi vaccine)	Vaccination for <i>streptococcus equi</i> http://www.aacp.org/strangles.htm Pinnacle I.N. (strangles)	Dangers of human ingestion unknown.

	Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
104.	<p>Sucralfate</p> <p>Used to aid in healing gastrointestinal tract, ulcers, for humans and animals.</p>	<p>http://www.drugs.com/vet/pinnaclear-i-n.html</p>	<p>Adverse reactions include constipation, diarrhea, nausea and vomiting, pruritus, rash, dizziness, insomnia, back pain, headache, dry mouth, flatulence, gastric discomfort, indigestion, sleepiness.</p> <p>http://www.pdr.net/search/searchResult.aspx?searchCriteria=Sucralfate</p>
105.	<p>Sulfadiazine</p> <p>Tribissen (oral) 400 paste</p> <p>21 CFR § 520.2215</p> <ul style="list-style-type: none"> - "Do not use in horses intended for human consumption." <p>21 CFR § 520.2260a</p> <ul style="list-style-type: none"> - "Do not use in horses intended for human consumption." <p>http://www.drugs.com/vet/tribissen-400-oral-paste.html</p>	<p>http://www.pdr.net/search/searchResult.aspx?searchCriteria=Sulfadiazine</p>	<p>Sulfadiazine has potential cross-sensitivity with other drugs in the same class. Some individuals will have blood cell destruction from the drug. It can also cause transient leukopenia, skin necrosis, skin discoloration, burning sensation, rash, interstitial nephritis, and other systemic reactions.</p>
106.	<p>Sulfamethoxazole Trimethoprim</p> <p>Antibacterial</p> <p>Bactrim, Septra</p>	<p>While these drugs are approved for human use, unnecessary ingestion of antibiotics is medically contraindicated. Additionally, adverse reactions include nausea and vomiting, anorexia, allergic skin reactions (e.g., rash, urticaria), agranulocytosis, aplastic anemia, hepatitis, renal failure, hyperkalemia, aseptic meningitis, arthralgia, convulsions, cough.</p>	<p>While sunscreens are used by humans, there is no substantial literature or studies on ingestion of sunscreens or their byproducts and metabolites.</p>
107.	<p>Sunscreens</p> <p>Components in various fly spray products</p> <p>http://www.horse.com/ContentFiles/Associated_Content/ultrashieldindexlab-el.pdf</p>	<p>The ingestion of male hormones, when not medically indicated, can create hormonal imbalances. Additionally, use may cause dangerous reactions in hypersensitive individuals or those with other illnesses. Can increase prostate and other problems in elderly men.</p> <p>Can also cause hormone-mediated reactions, fluid and electrolyte disturbances, nausea, cholestatic jaundice, alterations in liver function, headache, and anxiety. It is also designated as "not for use" in nursing mothers.</p>	<p>http://www.pdr.net/drugpages/ceftiofurmonograph.aspx?concise=2017</p> <p>Hazardous in case of ingestion.</p> <p>http://www.sciencelab.com/msds.php?msdsId=9925232</p>
108.	<p>Testosterone enanthate</p> <p>Uni-Bol</p> <p>Male sex hormone</p> <p>http://www.drugs.com/vet/uni-bol-can.html</p>	<p>Included in liver 7 injection</p> <p>http://www.drugs.com/vet/liver-7-injection.html</p>	
109.	<p>Thiamine HCl</p>		

Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
110. Thyrostats	Thyroid-related growth promotion Antithyroid agents for the purpose of growth promotion	Animals treated with these drugs are banned from meat production in the European Union. http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi:celexplus;prod:CELEXnumdoc&lg=EN&numdoc=32008L0097 .
111. Topazone Aerosol Powder	Antibacterial Topazone Furox http://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm137145.htm	Contains chemicals known to the state of California to cause cancer. Should only be taken under strict medical oversight; dangerous if taken with alcohol, when pregnant, or for individuals with certain blood disorders. Adverse effects include headache, stomach upset, nausea, vomiting, dizziness or weakness, fever, skin rash, itching, muscle aches, flushing, breathing trouble. This medication may cause the urine to turn brown in color.
112. Triamcinolone Acetonide	Component in Animax ointment Antimicrobial, anti-fungal, steroid (for thrush treatment) 21 CFR § 520.2483 - tablets - "Do not use in horses intended for human consumption." 21 CFR § 522.2483 - Suspension - "Do not use in horses intended for human consumption."	Steroids should be taken under a doctor's supervision and have multiple significant adverse effects including severe allergic reactions, hormonal changes, changes in menstrual functions, mental and mood changes, respiratory problems, nausea and vomiting, joint swelling, vision changes, and unusual weight gain.
113. Trimethoprim	Uniprim antibiotic Powder For treatment of <i>Streptococcus equi</i> ("Strangles") 21 CFR § 520.2611 - "Do not use in horses intended for human consumption." 21 CFR § 520.2613 - Trimethoprim and sulfadiazine powder - "Not for use in horses intended for food." "Do not use in horses intended for human consumption."	Trimethoprim is a strong antibiotic with multiple potential adverse reactions, adverse interactions with other drugs and hypersensitivities noted in individuals with various diseases and metabolic conditions. http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0000813/

	Drug	Product/Type/Warnings	Potential problems from human ingestion of residue or metabolites
		http://www.drugs.com/vet/tribrissen-400-oral-paste.html http://www.drugs.com/vet/uniprim-powder.html	
114.	West Nile virus	Recombitek West Nile Vaccine http://www.drugs.com/vet/recombitek-equine-west-nile-virus-can.html	This vaccine has only been approved for use in horses and no data exists with respect to the safety of humans eating it, or meat from animals who have received it.
115.	Xylazine	Sedative Anased 21 CFR § 522.2662 - "Not for use in horses intended for food." - "Do not use in domestic food-producing animals."	Xylazine poisoning causes hypotension, bradycardia, and respiratory depression. Ocular administration can cause sinus bradycardia, hypotension and decreased mental status. Velez LI, Shepherd G, Mills LD, Rivera W., <i>Systemic toxicity after an ocular exposure to xylazine hydrochloride</i> , J. EMERG. MED. 30(4):407-10 (2006).

DECLARATION OF SANDRA GROVER, D.V.M.

I, Sandra Grover, declare as follows:

1. I am a veterinarian and own and manage Exclusive Equine Dentistry and Chiropractic in Black Forest, Colorado. I have personal knowledge of the facts set forth in this declaration. The facts set forth are true to the best of my knowledge and recollection.
2. I am a 1999 graduate of Colorado State University School of Veterinary Medicine, and have been practicing veterinary medicine since my graduation.
3. My practice has always included a significant percentage of horses, and in the last seven years over ninety percent of my practice has involved the treatment of equines.
4. I see approximately thirty to forty horses each week in my practice, for an average of 1500 visits per year.
5. I have worked with and around horses all my life, and have been extensively involved in showing horses since I was a teenager.
6. In the course of my practice I prescribe medications needed by the horses I treat. I also visit the barns, tack rooms, and treatment areas in which my clients' horses live, and regularly observe the kinds of drugs, substances, and treatments my clients use for their horses, whether prescribed or acquired elsewhere.
7. I have reviewed Exhibit 1 to the Petition for Rulemaking submitted by Front Range Equine Rescue. I am familiar with the large majority of the drugs, treatments and other substances on Exhibit 1, which I have either prescribed myself or seen at the barns of and in use by my clients for their horses.
8. Many of the drugs on this list are harmful to humans.
9. The majority of drugs, treatments and substances on Exhibit 1 to the Petition are regularly and routinely used by owners of horses in the areas where I work, and I believe this practice to be common throughout the country.

10. Based on my training and experience, it is my professional opinion that an alarming majority of American horses who are sent to slaughter for human consumption may have been treated with a variety of drugs, treatments and substances that renders their flesh dangerous to people who eat horse meat and makes the horses' meat unsafe for human consumption.

I declare under penalty of perjury that the foregoing is true and correct, based on my own personal knowledge and experience.

Executed this 25 day of January 2013, in Elbert, CO.

Sandra Grover, DVM
Sandra Grover, D.V.M.

DECLARATION OF HOLLY COLELLA, D.V.M.

I, Holly Colella, declare as follows:

1. I am a veterinarian and own and manage a solo mobile veterinary practice. I have personal knowledge of the facts set forth in this declaration. The facts set forth are true to the best of my knowledge and recollection.
2. I am a 2001 graduate of Colorado State University School of Veterinary Medicine, and have been practicing veterinary medicine for twelve years. After graduation from veterinary school, I began working with a veterinary practice and have specialized in general equine medicine for my entire career. Prior to admission to veterinary school, I worked as a veterinary assistant/technician for approximately 6 years, mostly focused on the equine industry.
3. My veterinary practice focuses almost exclusively on the care of companion horses, rodeo horses, hunter-jumper competition horses, and ranch horses.
4. I see more than 100 horses per month and 1200 horses per year, and have done so throughout the course of my career, as part of my practice.
5. I have always been around horses, since I was a young girl, and have used horses for pleasure, including trail riding, during that time.
6. In the course of my practice I prescribe medications needed by the horses I treat. I also visit the barns, tack rooms, and treatment areas in which my clients' horses live, and regularly observe the kinds of drugs, substances, and treatments my clients use for their horses, whether prescribed or acquired elsewhere.
7. I have reviewed Exhibit 1 to the Petition for Rulemaking submitted by Front Range Equine Rescue. I am familiar with the large majority of the drugs, treatments and other substances on Exhibit 1, which I have either prescribed myself or seen at the barns of and in use by my clients for their horses.

8. The majority of drugs, treatments and substances on Exhibit 1 to the Petition are regularly and routinely used by owners of horses in the areas where I work, and I believe this practice to be common throughout the country.

9. Based on my training and experience, it is my professional opinion that an alarming majority of American horses who are sent to slaughter for human consumption may have been treated with a variety of drugs, treatments and substances that renders their flesh dangerous to people who eat horse meat and makes the horses' meat unsafe for human consumption.

I declare under penalty of perjury that the foregoing is true and correct, based on my own personal knowledge and experience.

Executed this 10th day of February, 2013, in Cole Springs.


Holly Colella, D.V.M.

DECLARATION OF SHIRLEY S. HOFFMAN

I, Shirley S. Hoffman, declare as follows:

1. I am the owner of HiView Acres of Longmont, Colorado, and also the founder of Horses Forever, a 501(c)(3) nonprofit corporation of Colorado, dedicated to the rescue of horses in need. The facts set forth are true to the best of my knowledge and recollection. If called, I could and would testify to these facts in a court of law.
2. I have been a horse owner for over thirty years, and have been actively involved in the breeding and showing of American Saddlebred Horses.
3. I have had as many as 100 horses at a time when I was involved in breeding and showing horses. I currently have approximately thirty horses.
4. The horses that Horses Forever rescues come from a variety of sources, including victims of animal cruelty cases and discarded horses from the horse training and competition industry.
5. I was involved in owning and showing American Saddlebred Horses in the 1980s and 1990s. The American Saddlebred Registry is the oldest horse registry in the United States and the breed is popular in the horse show world as well as the world of equine versatility. I was an active participant in shows and competitions involving American Saddlebred horses until the 1990s, when I discovered, from the inside, that trainers were giving these horses many types of prohibited drugs, including acepromazine and phenylbutazone.
6. I started the Rocky Mountain Horse Expo, a well-known equine educational event under the auspices of the Colorado Horse Council, a horse industry group.
7. I have been involved with hundreds of horses over the course of my experience with the show world and the rescue group. I am very familiar with the medications and other drugs given to horses in the performance and private sectors.
8. I have reviewed Exhibit 1 to the Petition for Rulemaking submitted by Front Range Equine Rescue, and have consulted with the veterinarian who cares for my horses. Almost all of

the drugs on the list, which I understand federal law states are not to be used in horses "intended for food," were or are given to some of my horses. Several of the drugs on the list, which I understand federal law states are not to be used in horses "intended for food," were or are given to 90 per cent or more of my horses, and I understand that usage to be common among other horse owners.

I declare under penalty of perjury that the foregoing is true and correct, based on my own personal knowledge and experience.

Executed this 17th day of January, 2013, in Boulder County, Colorado


Shirley S. Hoffman

DECLARATION OF GAIL VACCA

I, Gail Vacca, declare as follows:

1. I have personal knowledge of the facts set forth in this declaration. The facts set forth are true to the best of my knowledge and recollection. If called, I could and would testify to these facts in a court of law.
2. I have been a licensed trainer of horses for competition and shows since 1984. I have an extensive background in the horse racing industry, as further established below. I am also intimately aware of the way in which racehorses are treated, on and off the racetrack.
3. I am currently the President of the Illinois Equine Humane Center ("ILEHC"), a 501(c)(3) nonprofit organization that provides humane treatment and shelter while working as a clearinghouse to seek adoptive homes for Illinois' unwanted equines, and also provides public education to raise awareness about responsible equine ownership so that less horses end up in crisis. ILEHC has been involved with the rescue of hundreds of horses on their way to slaughter over the years, and ninety per cent of those horses were former racehorses.
4. I became a professional horsewoman almost thirty years ago. I have been a nationally licensed thoroughbred trainer, and have been involved with top level show horses, in both the hunter and jumper categories. I am also a licensed owner of racehorses.
5. I was actively involved in the horseracing industry, as a trainer and owner of horses, from the 1980s until 2002, after which I focused my efforts on rescue and rehabilitation of equine welfare issues. As a trainer I was at the track every day, working long hours. I worked with an average of ten horses at a time, and provided therapies and treatments and medications to the horses. I was also familiar with the practices of other trainers at the track, and so am fully aware of the kinds of substances, drugs and treatments most racehorses receive.
6. In the 1980s, trainers used phenylbutazone indiscriminately, and there was no restriction on the amount of phenylbutazone they administered or that the horses received. There

are more significant restrictions on the use of phenylbutazone now, but it is still frequently used on racehorses.

7. Based on my personal observation, racehorses involved in the breeding process, while they are in production, are given large amounts of hormones and antibiotics and anti-inflammatory drugs. These drugs are used to treat the normal medical and metabolic consequences and sequelae of multiple inseminations, pregnancies, and births.

8. From personal experience and observation, I know that many racehorses go from the racetrack to "kill buyers" who sell them for slaughter. These include horses who are injured in a race or are no longer top performers.

9. I was directly involved in a television production for a piece on Real Sports with Bryant Gumbel, which accurately portrayed the path of many racehorses to slaughter for food production.

10. I have been visiting auctions where horses are being sold for slaughter for approximately thirty years. Based on the information I have obtained in connection with that extensive experience, as well as with the television production and my professional career, I am informed and believe that approximately ten to fifteen percent of American horses that go to slaughter are former racehorses. I am informed and believe that more than 20,000 American racehorses go to slaughter each year.

11. When I have observed the pens at auctions of horses heading to slaughter, there are always thoroughbreds seen in virtually every pen.

12. I have reviewed the chart attached to this declaration. I am familiar with the vast majority of the drugs listed on the chart, in connection with their use on horses both by myself and by others who I have observed over the course of the last three decades.

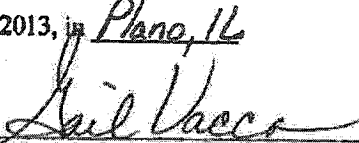
13. Over the course of the time I have owned horses, my veterinarians and/or I have given most of the drugs on the chart to the horses I have owned, cared for, and trained.

14. Every item on the attached chart is either commonly found in racetrack and racehorse barns and other barns housing horses, and is used on those horses, or is found in

catalogues and supply stores, for sale to private horse owners in America or available with a veterinarian's prescription. I am personally familiar with and use or have used at least 98 of the substances on that list, and am informed and believe that all of those substances are used regularly on racehorses, companion, pleasure and recreation, and competition/show horses.

I declare under penalty of perjury that the foregoing is true and correct, based on my own personal knowledge and experience.

Executed this 16th day of January, 2013, in Piano, IL



Gail Vacca

DECLARATION OF CYNTHIA NEWBERRY

I, Cynthia Newberry, declare as follows:

1. I have personal knowledge of the facts set forth in this declaration. The facts set forth are true to the best of my knowledge and recollection. If called, I could and would testify to these facts in a court of law.
2. I am the owner and head trainer at Corgi Glen Farm in Beallsville, Maryland. I have over forty years of experience with horses, including extensive training and judging. I have been riding and caring for horses since I was six years old, and have shown horses nationally.
3. I am a graduate of Virginia Intermont College, where I obtained a degree in Equine Studies and Business Management, while continuing to ride on the intercollegiate riding team. I have also served as an officer with several equestrian organizations in the past ten years.
4. In my work as a trainer at Corgi Glen Farm, I deal on a regular basis with approximately thirty horses, about half of which are owned by clients and the other half by Corgi Glen Farms. I have trained approximately 100 horses over the past thirty-two years.
5. I have also been involved in the breeding of horses for over three decades.
6. With my horses and the horses I have trained and kept for clients, I have provided maintenance doses of various drugs, over the course of their lives, that keep them healthy.
7. I have reviewed the chart attached to this declaration. I am familiar with eighty per cent of the drugs listed on the chart, in connection with their use on horses both by myself and by others who I have observed over the course of the last three decades.
8. Over the course of the time I have owned horses, my veterinarians, other owners and/or I have given nearly seventy percent of the drugs on the chart to the horses I have owned, cared for, and trained.
9. Almost every item on the attached list is either commonly found in barns housing horses, and is used on those horses, or is found in catalogues and supply stores, for sale to private horse owners in America or available with a veterinarian's prescription. I am personally familiar

DECLARATION OF MICHELLE CONNER

I, Michelle Conner, declare as follows:

1. I have personal knowledge of the facts set forth in this declaration. The facts set forth are true to the best of my knowledge and recollection. If called, I could and would testify to these facts in a court of law.
2. I have owned horses for twenty-three years, and have been training horses professionally for the last eleven years. I currently run a training and boarding facility. Through that experience, I have come to learn about the drugs, medications and treatments that the owners of American horses give to their horses.
3. From 2002 through 2007 I worked closely with the Bureau of Land Management, working with foals who were between six and eighteen months of age, and trying to prepare them to make them more adoptable. In the course of that work, each of the foals was injected with a number of vaccines and dewormed with products that are found on the list attached to this declaration.
4. I have also been regularly involved with local horse shows and with 4-H Clubs using horses and so I am very familiar with the drugs and medications given to companion and show horses.
5. I have reviewed the chart attached to this declaration. I am familiar with most of the drugs listed on the chart, in connection with their use on horses both by myself and by others who I have observed over the course of the last three decades.
6. Over the course of the time I have owned horses, my veterinarians, other owners and/or I have given more than eighty percent of the drugs on the chart to the horses I have owned, cared for, and trained.
7. Almost every item on the attached list is either commonly found in barns housing horses, and is used on those horses, or is found in catalogues and supply stores, for sale to private horse owners in America or available with a veterinarian's prescription. I am personally familiar

with and use or have used at least eighty percent of the substances on that list, and am informed and believe that all of those substances are used regularly on American horses.

I declare under penalty of perjury that the foregoing is true and correct, based on my own personal knowledge and experience.

Executed this 15 day of January, 2013, in Canon, CO.



Michelle Conner

DECLARATION OF RONALD T. FITCH

I, Ronald T. Fitch, declare as follows:


1. I have personal knowledge of the facts set forth in this declaration. The facts set forth are true to the best of my knowledge and recollection. If called, I could and would testify to these facts in a court of law.
2. I am a Health Environment and Safety Engineer for Chevron, where I ensure the safety and proper conditions for thousands of workers.
3. I have been involved with the rescue and rehabilitation of horses in need for approximately two decades. I am the author of the book Straight From the Horse's Heart, and I also provide a daily web-based educational forum that thousands of people rely on daily, disseminating information about issues related to the welfare and preservation of American horses. In that blog I address wild horses, domestic horses, horse racing, and horse slaughter.
4. I have been a foster or adoptive parent for horses for nearly two decades. In those roles, I consult with veterinarians who help me decide what medications the horses under my care should and do receive.
5. As part of my work with the horses I have rescued, fostered and adopted, I have become a student of horse nutrition and medication, and have learned much about these issues from a local veterinarian.
6. I have reviewed the chart attached to this declaration. I am familiar with most of the drugs listed on the chart, in connection with their use on horses both by myself and by others who I have observed over the course of the last three decades.
7. Over the course of the time I have owned horses, my veterinarians, other owners and/or I have given more than eighty percent of the drugs on the chart to the horses I have owned, cared for, and trained.
8. Almost every item on the attached list is either commonly found in barns housing horses, and is used on those horses, or is found in catalogues and supply stores, for sale to private

horse owners in America or available with a veterinarian's prescription. I am personally familiar with and use or have used at least sixty percent of the substances on that list, and am informed and believe that all of those substances are used regularly on American horses.

9. Every item on the attached list is either commonly found in barns housing horses, and is used on those horses, or is found in catalogues and supply stores, for sale to private horse owners in America or available with a veterinarian's prescription. I am personally familiar with and use or have used at least sixty percent of the substances on that list, and am informed and believe that all of those substances are used regularly on companion, pleasure and recreation, and competition/show horses.

I declare under penalty of perjury that the foregoing is true and correct, based on my own personal knowledge and experience.

Executed this ~~16th~~ day of January, 2013, in Myrtle, Tx.


Ronald T. Fitch

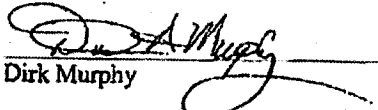
DECLARATION OF DIRK MURPHY

I, Dirk Murphy, declare as follows:

1. I have personal knowledge of the facts set forth in this declaration. The facts set forth are true to the best of my knowledge and recollection. If called, I could and might testify to these facts in a court of law.
2. I am 49 years old and was raised around horses, and have raised and trained horses from my youth till present. I have observed horses in all stages of development, from birth to breeding to old age. I have worked with horses as labor animals in my cattle-raising capacity, ridden horses in the rodeo, and had them as companions.
3. I have either trained or owned an estimated 100 horses over the course of my life.
4. For the most part, I use an all natural program of medical care on my horses, and so do not use many of the drugs and medications that others may use on their horses.
5. My horses do periodically receive phenylbutazone. They also get, from time to time, banamine, furizalidone, bronco fly spray, and aspirin.

I declare under penalty of perjury that the foregoing is true and correct, based on my own personal knowledge and experience.

Executed this 28 day of January, 2013, in Kewanee Co.


Dirk Murphy