

What the New European Union Requirements for Imported Equine Meat Will Mean to North America's Horse Industry March 2010

Introduction

This paper discusses Canada's planned compliance with the new European Commission (EC) measures for countries that export equine meat to Europe, and the impact they will have on North America's horses. While the new rules are a positive step towards a necessary identification system for our horses, there are several major deficiencies with the measures Canada plans to implement. Most notably, there are several medications not permitted for equines slaughtered for food, including Phenylbutazone or "Bute" – the horse industry's most widely used analgesic and anti-inflammatory medication. So commonly used, this drug alone precludes virtually all race and professional sport horses, as well as most pleasure horses, from entering the human food chain.

Canada's \$90 million horsemeat and live slaughter horse industry is at a turning point. The 2009 announcement from the EC concerning drug residues in slaughter horses (details below) will have an immediate impact on all aspects of the horse industry when it goes into effect at the end of July. It has been a long-term concern for horse welfare proponents, since horses ingest and are administered veterinary medical agents not intended for food animals, that horsemeat is unsafe for human consumption. For this reason, these new EC regulations are seen as beneficial concerning protection of the human food chain.

However, these new rules only address the concerns of the consumer, and don't take the welfare of the horses affected into account.

This paper will discuss the new regulations, as well as address the concerns of the horse welfare community related to the required quarantine of horses and the withdrawal of veterinary medical products for horses destined for slaughter. We will also discuss the obvious deficiencies and likely conditions that will develop as this new program evolves.

Canada's Compliance with European Commission (EC) Requirements

After the EC's first letter of notice to Canada in April 2009, the long-awaited announcement from the Canadian Food Inspection Agency (CFIA) regarding Canada's compliance came on January 29, 2010. CFIA - Important Changes for Equine Owners:

<http://www.inspection.gc.ca/english/corpaffr/newcom/2010/20100129e.shtml>

CFIA – Meat Hygiene Manual of Procedures:

<http://www.inspection.gc.ca/english/fssa/meavia/man/mane.shtml>

CFIA – Meat Hygiene Directive – Chapter 17 – Annex E – Equine Information Document (EID):

<http://www.inspection.gc.ca/english/fssa/meavia/man/direct/directe.shtml>

CFIA – List of Veterinary Drugs Not Permitted for Use in Equines Slaughtered For Food:
<http://www.inspection.gc.ca/english/fssa/meavia/man/ch17/annexee.shtml#e4>

A summary of the requirements are:

- All CFIA inspected horse slaughter plants must provide complete records for all horses (domestic and imported). Each horse's Equine Identification Document (EID) must include unique information including:
 - o Records of illness
 - o Records of medical treatments administered for the six months prior
 - o A signed declaration that no banned substances were administered in the horse's lifetime
 - o

The date of execution of these requirements is January 31, 2010, since July 31st (six months, or 180 days later) is the date of implementation of the EID system.

The EID is intended to accompany the equine at the time of ownership transfer, to the buyer. It requires a signed declaration by the owner as to its accuracy. This EID includes a detailed description of the horse and pictures must accompany the EID, illustrating all identifying markings (both sides, face, forelegs and hind legs). Alternatively, a veterinarian can complete a description illustration.

The Declaration includes:

- Date of possession
- Any drugs or vaccines since January 31, 2010, or the last 180 days. Details of illnesses to include dates of diagnosis and recovery.
- Substances that have been administered to the horse are to be named, including those from the table of named substances not permitted for use in food producing equines, since January 31, 2010, or the last 180 days, or during the time that the horse is owned.

List of Veterinary Drugs Not Permitted for Use in Equines Slaughtered for Food

- Phenylbutazone –Analgesic and anti-inflammatory medication
- Clenbuterol – A beta-agonist used for the treatment of respiratory disease
- Ventipulmin Syrup – Bronchodilator for the treatment of respiratory disease
- Boldenone or Equipoise – Anabolic steroid growth hormone
- Oestradiol or Estradiol – A steroidal hormone
- Banamine – Pain relief medication
- Stanozolol or Winstrol – An anabolic steroid
- Progesterone –Steroid hormone
- Testosterone –Steroid hormone
- Acepromazine or Atravet – Tranquilizer
- Propofol or Rapinevet – Used for sedation
- Ephedrine – Used for hypotension or respiratory stimulation
- Caninsulin – For treatment of diabetes in dogs and cats
- Fungal infection agents and shampoos
- Commonly used de-worming agents
- Various antibiotics intended for livestock and pets

What are not included on the list of drugs not permitted are the commonly used de-worming agents such as Fenbendazole, Ivermectin, Moxidectin, Praziquantel, Pyrantel Pamoate and Pyrantel Tartrate. These drugs are not for use in horses intended for food, yet they are widely used for most horses.

The EID paper will serve as a foundation in which an electronic database will be established for the purpose of identification, movement tracking throughout a horse's life, health tracking, and drug administration necessary to satisfy security requirements for the livestock traceability program to be implemented in Canada by 2013. The CFIA characterizes these new requirements as "the first step in the development of a comprehensive food safety and traceability program for the Canadian equine industry." This coincides with previous announcements from Agriculture and Agri-food Canada (AAFC) that outline the Government of Canada's commitment to the development of a national livestock traceability system for Canada by 2013.

Each horse will have an electronic passport specifying complete ownership history, export/import activity, and record of all key veterinary treatment products used. Many horses will be disqualified for receiving therapeutic, analgesic, growth enhancing and sedative agents. A vast number of horses will be disqualified because of Phenylbutazone usage, including virtually all former race horses.

Canada's Horse Slaughter Industry

The number of horses slaughtered in Canada, and annual revenues for the last four years (data provided by Agriculture and Agri-Food Canada):

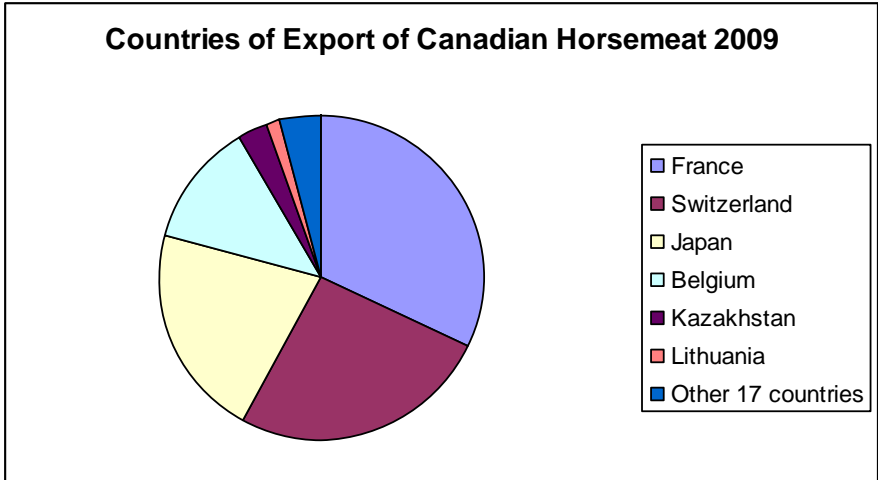
Year	Number of Horses	Annual Revenue
2006	50,242	\$20.4 million
2007	79,613	\$77 million
2008	112,957	\$109.4 million
2009	93,812	\$86.9 million

U.S. export percentages have increased since the 2007 closure of its last horse slaughter plant. In 2006, 35.6% of horses slaughtered in Canada were U.S. imports. In 2009, the percentage grew to over half the horses slaughtered in Canada, at 56%.

The largest importers of Canadian horsemeat in 2009 were:

- France \$27.8 million (similar to 2008)
- Switzerland \$22.4 million (down \$3 million from 2008)
- Japan \$18.5 million (similar to 2008)
- Belgium \$10.8 million (down over 50% from approximately \$15 million in 2008)

In 2006, Canada exported horsemeat to 12 countries, primarily France, Switzerland and Japan. The number has increased significantly to 24 countries by 2009, with France, Switzerland, Japan and Belgium making up 92% of the exports.



The number of live horses shipped for slaughter in other countries has decreased significantly since 2006. In that year, over 9,600 live horses were shipped overseas for slaughter, mostly to Japan. In 2009, that number declined to 931 horses (80% to Japan) – a 90% overall decrease. In 2009, the value of live horses shipped for slaughter was \$3.1 million.

Horse Slaughter Plants in Canada

There are currently six federally registered horse slaughter plants in Canada:

- Viande-Richelieu Inc. – Quebec
- Les Viandes de la Petite-Nation Inc. – Quebec
- Norval Meats – Ontario
- Bouvry Export Calgary Ltd. – Alberta
- Canadian Premium Meats Inc. – Alberta
- Aicha International Meat Corp. (formerly Medallion Meats) – B.C.

There are no statistics that show the number of horses slaughtered at each facility. Data does show however, that the large majority of horses imported from the U.S. to slaughter (56%), flow through Ontario. Alberta and Quebec are a distant second and third for provinces receiving U.S. horses for slaughter.

Bouvry Exports in Alberta is Canada’s largest horse slaughter plant. Large horse feedlots exist in Alberta and Manitoba. Many horses slaughtered at Bouvry’s are young horses that are byproducts (victims) of the PMU industry. Manitoba has approximately 5,600 mares contracted out for Pfizer on PMU farms, for the production of the hormone replacement drug called Premarin which is derived from horse urine.

To obtain the hormone-laden urine, the mares must be pregnant, so every year there are thousands of foals born, and many of which go to slaughter. Horses are also raised for slaughter in Alberta, by kill buyers contracted out by Bouvry, and others are owned by Bouvry, including horses at the Shelby Feedlot in Shelby, Montana. Conjugated Equine Estrogens (CEE) is associated with an increase risk of breast cancer, stroke, total cancer, venous thromboembolism (Prentice et al., 2009) and dementia (Shumaker et al., 2003).

Viande Richelieu in Quebec is also Bouvry owned. Most of the horses slaughtered at this, and the La Petite Nation plant in Quebec, originate from auctions in Quebec, Ontario and the U.S. Ontario has always been the leading province for importing horses from the U.S. for slaughter, even when no Ontario slaughterhouse existed. Ontario is obviously the flow-through point for horses coming from the U.S., and most of them go through to Quebec for slaughter.

Norval Meats in Ontario was federally licensed to slaughter horses in 2008, and is a small facility. Its operations were suspended in February 2010 due to a fire. It is not known when it will re-open. Horses slaughtered at Norval Meats originated from Ontario auctions and from the U.S.

Canadian Premium Meats in Alberta is a specialty processor and is a small scale butcher of horses. Aicha International in B.C. (formerly Medallion Meats) has recently changed owners, and they've advised that they will no longer be slaughtering horses. We should see their name off the list of approved facilities soon.

How Canada Plans to Comply with the New EU Regulations

In a response letter to the European Commission on October 23, 2009, Richard Arsenault, Director, Meat Programs Division of the CFIA, provided a list of measures that Canada has implemented, or is in the process of implementing, in order to enhance its equine meat hygiene inspection system, and meet the EC's minimum measures.

The following control measures will be implemented during the 3-year transitional period:

- Equine animals intended for food production should be identified and a system of identity verification will be established.
 - o Starting on July 31, 2010, every equine presented for slaughter will be accompanied by an Equine Information Document (EID). This document is an owner's declaration containing a visual description and a description of medications known to have been administered in the six months preceding slaughter.
 - o Beginning July 30, 2010, all horses received at slaughterhouses must be accompanied by an EID, which will be verified by the operator of the establishment.
 - o The CFIA will provide oversight of the operator's verification procedure.
 - o The long-term strategy for Canadian horses involves implementation of a lifetime traceability system. The CanEQUID program will require the identification of horses at birth or as soon as they travel or otherwise require veterinary care. The proposed program meets or exceeds all current European standards and incorporates a unique equine life number. The Government of Canada has committed to a mandatory comprehensive national traceability system for livestock by 2011.
 - o The CanEQUID program will identify horses by visual description, movement tracking, and documenting horse health records including medications that would potentially impact the safety of horsemeat.

- There will be a prohibition on the administration of anabolic steroids for growth promotion purposes for all equines.

- Treatments with veterinary medicinal products should be recorded on a document linked to and accompanying the identified animal when moving from one premise to another or to the slaughterhouse
- Treatments with veterinary medicinal products will be recorded on the EID which will have to accompany every equine presented for slaughter in an establishment inspected by the CFIA. Planned for July 30, 2010.
- The long-term strategy for Canadian equines is for veterinary treatment records to be part of the CanEQUID traceability system that will be implemented by 2011. Each horse in Canada will have an electronic passport/identity document that is updated throughout the life of the horse.
 - o The document will contain complete ownership history, export/import activity and a record of all key veterinary treatment products (e.g. therapeutic, analgesic, growth enhancing and sedative agents). Animals that receive therapy that disqualifies them as food animals will have an entry in their record excluding them from slaughter for human consumption.
- At the time of moving the animals to the slaughterhouse, the competent authority should be able to guarantee, at least for a period of not less than six months prior to slaughter, that the required withdrawal periods have been met.
 - o Beginning July 30, 2010, prior to slaughter, the operator of the abattoir will review the list of treatments listed on the EID of each equine, and verify that withdrawal period are met.
 - o Equines for which an EID has not been provided to the operator shall not be slaughtered for edible purposes. The CFIA will provide oversight of the Operator's EID review.

Uncertainty Surrounding Implementation of the Program

Prohibited Drugs Already Listed

Before these new regulations were announced, the CFIA already had in place rules for prohibited substances for animals destined for slaughter.

Section B.01.048(1) of the ***Food and Drug Regulations*** prohibits the sale, for food, of animals that have been treated with certain drugs, specifically:

- a. the antibiotic chloramphenicol ("Chloromycetin");
- b. nitrofurans compounds ("Nitrofurazone");
- c. clenbuterol bronchodilator ("Ventipulmin");
- d. nitroimidazole compounds ("Flagyl"); and
- e. diethylstilbestrol and other stilbene compounds (synthetic estrogen).

While these drugs have been banned for food animals all along, it is only now that they will be tested for horses. It is well known in the horse community that some or all of these drugs are commonly used for equines, yet the CFIA had made no attempt to test horses for these drugs. Until the new EU regulations, the CFIA only tested horsemeat for trichinosis (roundworms). We believe this past record of deficient testing practices sets a poor precedent for future meat testing by the CFIA. Also, it has been a known fact that Phenylbutazone has been unsafe for human consumption for years, yet the CFIA did not have it listed until these new regulations were announced.

U.S. Based Horses



We know that at least 50% of the horses slaughtered in Canada originate from the U.S. There is no such program in place in the U.S. to meet the EU standards. A January 21, 2010 article in the Western Producer indicated that the USDA was cooperating with the CFIA. When contacted on January 28th to determine how the USDA was cooperating, Dr. Cordes, National Equine Coordinator, stated that compliance was Canada's responsibility.

So we know that 50% or more of the horses slaughtered in Canada (from the U.S.) will not meet the EU standards. The significance of this point cannot be overstated. Those 47,000 horses from the U.S. going to slaughter in Canada in 2010 will originate from livestock auctions where horses all have virtually unknown history. There is no information from the CFIA stating how U.S. based horses will be checked. This is an incredible omission by the CFIA. Under the current circumstances there appears to be no possible way Canada can continue to receive U.S. horses, and still meet the criteria.

Banned Substances and Their Implications

The list of 55 veterinary drugs not permitted for use in equines in their lifetime include commonly used antibiotics, beta-agonists, nitrofurans, oestradiol, phenylbutazone (Bute), stanozolol, stilbenes and steroid hormones. Of particular note is the non-steroidal anti-inflammatory drug (NSAID) Bute which is used widely in professional sport and show horses. Many or most race and competition horses will be banned from the human food chain. The implications of this have not yet been felt in the horse industry. No longer will sport and competition horses be disposable due to the widespread use of Bute. We will have to see if breed associations, horse federations and race groups adapt to these rules by implementing new programs that will help transition horses out of their professional careers.

The list of medications permitted with a six-month withdrawal period include 71 common sedation, anti-hypotensive, analgesic, muscle relaxant, local anaesthetic, cardiovascular, gastrointestinal, respiratory, ophthalmic, and anti-fungal drugs.

When an owner completes the declaration on the EID, they are asked, "Has the animal identified on this document **to your knowledge** been treated with a substance listed under the table named substances not permitted for use in food producing equines...". The key words here are "to your knowledge". All a person has to do is sign that *to their knowledge* the horse has not received any banned substances. To any unscrupulous people selling horses for slaughter, or others wanting to dispose of horses by circumventing the rules, this is like a "get out of jail free card" – their way of getting around the rules. Only by vigilant testing practices by the CFIA will horsemeat truly be safe to eat. Also, it is common that horses change owners regularly, so how will current owners of horses truly know the past history of horses they've purchased? They can honestly complete the EID, not knowing that their horse(s) may have received any number of banned substances.

It is difficult to believe however that the CFIA will satisfy the EU requirements for safe horsemeat. On March 5, 2010, Canada's Department of Finance announced its 2010 federal budget. As part of a three point plan to balance the \$53.8 billion deficit it was announced the Government will restrain spending through targeted measures in order to balance the budget by 2015. Towards achieving this objective, Budget 2010 proposes \$17.6 billion in savings over five years. Also, the Government will undertake a comprehensive review of government administrative functions and overhead costs in order to identify opportunities for additional savings and improve service delivery. This news gives way for great concern for the overall success of this complex and costly program.

Quarantine Requirements

While the CFIA has outlined a comprehensive system to be implemented for identifying horses and their medical history, there is no mention of a required quarantine structure. It is merely implied that quarantines will be required for horses that have received substances listed that require a six-month withdrawal period.

For horses going to slaughter that have proper EID records and have received one of these drugs in the last six months, they will need to be kept in quarantine. Anyone who is keeping herds of horses for slaughter will have quite a task on their hands, identifying and managing herds, and keeping them healthy for six months without the choice of administering any of these agents to the horses.

Feedlot management will be very difficult. Horses that are kept in feedlot environments are highly susceptible to disease. The stress associated with living under feedlot conditions also will put many horses at further risk. There will be increased cases of Strangles, the debilitating and highly contagious infectious disease that causes inflammation of the mucosa of the head and throat, with extensive swelling and rupture of the lymph nodes. No horses will be allowed medication. Quite clearly, the welfare of the horses affected has not been taken into consideration.

Due to the very high risk of injury and sickness in these situations, the CFIA must go further and mandate a registered feedlot system that is monitored for the protection of the horses. Only with this scenario will the CFIA ensure that horses meet the banned substances requirements, while overseeing protection of the horses.

Many Unanswered Questions

This new system is a huge undertaking. How does the CFIA plan to monitor and enforce the new regulations? Has there been a new budget to address the obvious costs associated with generating this new multi-tiered program?

While the program is a constructive step towards identifying horses eligible and ineligible for slaughter, it is based on trust. How will the CFIA know, without extensive testing on every horse slaughtered, that signed declarations are accurate? Unless kill buyers quarantine all their horses for six months, how will they possibly be able to verify the accuracy of the information for horses they have just purchased at auction? If a horse bought by a kill buyer has had multiple horse owners, how can the kill buyer verify or be certain that the horse didn't receive banned drugs in its life? According to the new rules, he will only have to sign that to the best of his knowledge, the horse has been drug free.

How will U.S. horses be regulated under this program, when over 50% currently come from the States? Horses bound for slaughter come to Canada on sealed loads. Will U.S. auctions continue conducting their sales the same way, with horses going through the ring with a number to identify it, and nothing else? How will Canadian auctions adjust to the rules? Horses currently go through livestock auctions with nothing more than a number also.

Most horse owners do not intend to send their horses to slaughter, as they unknowingly end up in the slaughter pipeline when sold to unscrupulous buyers or are taken to auctions where they are purchased by kill buyers. Will people keep accurate records of their horses' medical history, knowing they have no intention of selling their horse for slaughter? Circumstances can change for people and their horses. Many slaughter bound horses have had multiple owners, and without a previous tracking system, it is impossible to guarantee that the horses have not been given prohibited substances. And what about horse owners who do wish to sell their horses to slaughter? Will they keep meticulous history of the drugs given to their horses? Most, if not all, domestic horses need to be dewormed every 3-4 months. The most common drug for deworming is Ivermectin. Ivermectin is a banned drug and cannot be given to horses destined for the food chain.

Conclusion

It is therefore evident that U.S. horses will not be in compliance with the new rules. For example, an estimated 98% of all U.S. race horses are "run on bute", meaning that they receive the drug Phenylbutazone as a performance enhancing measure before races. This is not limited to Thoroughbreds, but includes Standardbreds, and even a large number of Quarterhorses. Bute is also widely used in Canada, so it is safe to say that the majority of North American horses are not in compliance, due to the extensive use of this one single drug.

So widespread is the usage of drugs in U.S. sporting horses that equine rescues often note that they "crash" when taken off these drugs, often losing hundreds of pounds in the weeks after arriving at a rescue.

Some U.S. based kill buyers have bragged openly that they are not concerned about the new regulations and some have gone as far as to say they intend to simply falsify the required EID paperwork.

This attitude is not surprising as it is merely an extension of the way Coggins test certificates and 30 day holding requirements have routinely been falsified in the past. It is not uncommon for horses to come from slaughter auctions with such papers that do not match their sex, breed or colour.

What happens in July will be determined by how seriously the CFIA treats enforcement and whether the EU regulators verify compliance with routine testing. If any serious effort at enforcement is put in place, the flow of horses from the U.S. to Canada for slaughter will be greatly reduced.

If the Canadian horse slaughter industry survives the changes, in the future we may likely see two distinct types of horses. Those bred for slaughter and those that cannot be part of the human food chain. The biggest question is how will the horse industry – that is currently resisting change – adjust to this new model? The coming months and years will see a shift – a necessary shift – from the accepted practice of allowing horses to be disposable, with no concern where they go when their usefulness ceases to exist. Like it or not, resistant horse groups and associations will have to find new solutions. Responsible ownership and planning for the entire life of the horse must be the standard going forward.

References

Prentice RL, Manson JE, Langer RD, Anderson GL, Pettinger M, Jackson RD, Johnson KC, Kuller LH, Lane DS, Wactawski-Wende J, Brzyski R, Allison M, Ockene J, Sarto G, Rossouw JE. 2009 Benefits and risks of postmenopausal hormone therapy when it is initiated soon after menopause. *Am J Epidemiol* 170(1):24-28.

Shumaker SA, Legault C, Rapp SR, Thal L, Wallace RB, Ockene JK, Hendrix SL, Jones BN 3rd, Assaf AR, Jackson RD, Kotchen JM, Wassertheil-Smoller S, Wactawski-Wende J; WHIMS Investigators. 2003 Estrogen plus progestin and the incidence of dementia and mild cognitive impairment in postmenopausal women: the Women's Health Initiative Memory Study: a randomized controlled trial. *JAMA*. 289(20):2651-2662.