

HISTORIC AND PRESENT BSE RISK: GREATER IN CANADA THAN IN THE U.S.

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Although APHIS estimates that BSE prevalence in Canada is about 6.8 or more times greater than in the United States (0.68 vs. 0.1 per million),¹ this does not adjust for the important fact that the first BSE case in the United States was imported from Canada. Beginning with the initial discovery of Bovine Spongiform Encephalopathy (BSE) in a cow in the United Kingdom in 1986, the United States took aggressive, proactive steps to protect the U.S. cattle herd and U.S. consumers from the introduction of the disease. The preventive steps taken by the U.S. far exceeded those taken by Canada, which now finds itself with a persistent BSE problem. Canada's historic and present BSE risk is far greater than the historic and present BSE risk of the United States, the following discussion demonstrates.

A. Canada's history of inadequate measures.

From the outset, Canada has lagged far behind the United States in taking appropriate measures to protect against the spread of BSE. The U.S. made BSE a reportable disease in 1986,² the same year BSE was first detected.³ Canada waited several years, until November 1990, to make BSE a reportable disease.⁴ The U.S. then prohibited the importation of ruminants and most ruminant products from all BSE-affected countries in 1989.⁵ Canada first instituted its ban on only live cattle from the UK in 1990, after importing 14 head of cattle and 6 head of sheep from the UK that year.⁶ Canada did not institute a ban on cattle from all countries where BSE had been diagnosed in native cattle until 1994.⁷ And, it was not until 1998 that Canada instituted a ban on the importation of sheep and goats, and it did so at that time in order to harmonize its import policies with that of the United States.⁸

¹ Federal Register, Vol. 72, No. 5, January 9, 2007, hereinafter referred to as "72 Federal Register," at 1108.

² See Evaluation of the Potential for Bovine Spongiform Encephalopathy in the United States, Harvard Risk Assessment, 2003, Administrative Record, attached hereto as Attachment A, at AR003740.

³ See Federal Register, Vol. 70, No. 2, January 4, 2005, Administrative Record, attached hereto as Attachment A, hereafter referred to as "70 Federal Register," at AR008045.

⁴ See Risk Assessment on Bovine Spongiform Encephalopathy in Cattle in Canada, Canadian Food Inspection Agency, December 2002, Administrative Record, attached hereto as Attachment A, at AR002665.

⁵ See Evaluation of the Potential for Bovine Spongiform Encephalopathy in the United States, Harvard Risk Assessment, 2003, Administrative Record, attached hereto as Attachment A, at AR003740; See also Bovine Spongiform Encephalopathy and Variant Creutzfeldt-Jakob Disease, Brown, et al., Administrative Record, attached hereto as Attachment A, at AR011647.

⁶ See Risk Assessment on Bovine Spongiform Encephalopathy in Cattle in Canada, Canadian Food Inspection Agency, December 2002, Administrative Record, attached hereto as Attachment A, at AR002558, 2664; See also 70 Federal Register, Administrative Record, attached hereto as Attachment A, at AR008051.

⁷ See Risk Assessment on Bovine Spongiform Encephalopathy in Cattle in Canada, Canadian Food Inspection Agency, December 2002, Administrative Record, attached hereto as Attachment A, at AR002665.

⁸ See *Id.* at AR002666.

The U.S. implemented a BSE surveillance program in 1990.⁹ Canada did not begin its surveillance program until 1992.¹⁰ Canada discovered its first case of BSE in December 1993, in a cow imported from the UK,¹¹ after having “potentially rendered” 68 cattle imported from the UK prior to that discovery.¹² Ten of these cattle were known to originate from BSE-infected farms in the UK, two of which were also known to be herd mates of the BSE-infected cow discovered in 1993.¹³ The Harvard Center for Risk Analysis states that while the U.S. may have rendered 173 cattle imported from the UK prior to 1989, “none came from a birth cohort [same birth farm and year] in which a BSE case is known to have developed.”¹⁴

From 1996 through September 20, 2006, the U.S. tested 851,427 U.S. cattle considered to be of highest risk for BSE (included, also, were 21,216 cattle considered healthy slaughter cattle). Although three positive cases were detected from this sample, one was known to be a Canadian-born cow imported from Canada, and the two considered to be of native origin were both over 10 years of age and considered infected by “atypical” BSE, which has a different phenotype than the “classical” BSE cases diagnosed in the UK, Europe, and Canada.¹⁵ From 1996 through February 23, 2007, Canada tested only 158,838 cattle considered of highest-risk for BSE, and 10 Canadian-born BSE-infected cows have been detected from among this sample (including the 2003 Canadian-born cow detected within the United States).¹⁶ In 2004, the year immediately following the United States’ discovery of an imported cow with BSE, the U.S. increased its BSE testing from 20,543 cattle to over 176,460 cattle.¹⁷ The year immediately following Canada’s discovery of an imported cow with BSE, Canada decreased its BSE testing from 645 cattle to 426 cattle.¹⁸

The U.S. had its feed ban in place for over 6 years prior to detecting BSE in even an imported animal (August 1997 to December 2003). Canada, however, did not implement its feed ban until over 3 years had lapsed following its discovery of BSE in an imported cow (December

⁹ See Evaluation of the Potential for Bovine Spongiform Encephalopathy in the United States, Harvard Risk Assessment, 2003, Administrative Record, attached hereto as Attachment A, at AR003740.

¹⁰ See 70 Federal Register, Administrative Record, attached hereto as Attachment A, at AR008052.

¹¹ See Risk Assessment on Bovine Spongiform Encephalopathy in Cattle in Canada, Canadian Food Inspection Agency, December 2002, Administrative Record, attached hereto as Attachment A, at AR002665.

¹² See Risk Assessment on Bovine Spongiform Encephalopathy in Cattle in Canada, December 2002, Administrative Record, attached hereto as Attachment A, at AR002561.

¹³ *Ibid.*

¹⁴ See Evaluation of the Potential for Bovine Spongiform Encephalopathy in the United States, Harvard Risk Assessment, 2003, Administrative Record, attached hereto as Attachment A, at AR003720.

¹⁵ See Texas BSE Investigation, Final Epidemiology Report, U. S. Department of Agriculture, Animal and Plant Health Inspection Service, August 2005, attached hereto as Attachment B; see also Alabama BSE Investigation, Final Epidemiology Report, U.S. Department of Agriculture, Animal and Plant Health Inspection Service, May 2, 2006, attached hereto as Attachment C; see also Hueston et al. Declaration, R-CALF USA v USDA, June 7, 2005, attached hereto as Attachment D, at 31; see also On the Question of Sporadic or Atypical Bovine Spongiform Encephalopathy and Creutzfeldt-Jakob Disease, Paul Brown, et al., *Emerging Infectious Diseases*, Vol. 12, No. 12, December 2006, 1816-1821, attached hereto as Attachment E; see also A New Form of Mad Cow? Dennis Normile, *Science*, Vol. 303, February 27, 2004, attached hereto as Attachment F.

¹⁶ See Hueston et al. Declaration, R-CALF USA v USDA, June 7, 2005, attached hereto as Attachment D, at 31; see also BSE Enhanced Surveillance Program, Canadian Food Inspection Agency, attached hereto as Attachment G.

¹⁷ See Hueston et al. Declaration, R-CALF USA v USDA, June 7, 2005, attached hereto as Attachment D, at 31.

¹⁸ See Risk Assessment on Bovine Spongiform Encephalopathy in Cattle in Canada, Canadian Food Inspection Agency, December 2002, Part B, Administrative Record, at AR002622.

1993 to August 1997). Note, however, that the Canadian Risk Assessment completed in 2002 states that Canada's August 4, 1997 feed ban was "[i]mplemented in October of 1997."¹⁹

APHIS has found that Canada's history of exposure now encompasses several generations of BSE infectivity. According to APHIS, the Canadian Food Inspection Agency (CFIA) has postulated that Canada's exposure was the result of two generations of the disease:

The first introduction of BSE would have been cattle imported from the early part of the UK epidemic (approximately 1986 to 1988). These animals would have reached a likely age to express the disease (three to six years) in the early 1990s during a period of lower surveillance testing. They would have then entered the rendering process and subsequently be re-fed back to ruminants. This second generation would have then been old enough to express the disease at about the time of the feed ban in 1997. The current third generation cases would have been infected by MBM from the second generation of infectivity in 1997 and would be expected to express the disease in 2002 to 2005.²⁰

B. Canada's current BSE-positive cases.

Given Canada's history of inadequate responses to BSE risk, it is not surprising that Canada continues to suffer BSE cases even as other, previously infected countries have not. Contrary to APHIS' three-generation postulate, six new BSE cases were detected in Canadian cattle in 2006 and 2007.²¹ Far from the end of a BSE infection cycle, these cases demonstrate additional BSE infectivity that is just now expressing itself in the Canadian cattle herd. The Proposed OTM Rule, however, contains assumptions that contradict this finding.

In the face of this irrefutable evidence of new BSE infection, the Proposed OTM Rule's risk assessment reports that the CFIA believes (incorrectly) that Canada's recent BSE cases "represent the second generation (or amplification cycle) in that country."²² The evidence therefore undermines the reasonableness of relying on CFIA conclusions about these new cases. Moreover, the heightened level of BSE-exposure in Canada is unprecedented anywhere else in North America. By contrast, the United States' history of BSE exposure – with one case detected in an imported cow of Canadian-birth in December 2003, and two atypical cases detected in cattle over 10 years of age in 2005 and 2006, respectively, pales next to Canada's multi-generation exposure and ongoing disease expression. Accordingly, the Proposed OTM Rule's relaxation of cattle and ruminant-product importation from Canada at time when Canada's BSE infection rate is defying hemispheric trends is unreasonable.

¹⁹ *Id.* at AR002665.

²⁰ U.S. Department of Agriculture's Summary of the Epidemiological Findings of North American Bovine Spongiform Encephalopathy Positive Cattle, U.S. Department of Agriculture, April 2005, attached hereto as Attachment H, at 24.

²¹ See 72 Federal Register at 1108. (Five of these six cases were detected prior to publication of the Proposed OTM Rule, with three of these cases born years after the feed ban – in the years 2000 and 2002, the latest, sixth case, was reported after the rule's publication on February 7, 2007.)

²² Assessment of Bovine Spongiform Encephalopathy (BSE) Risks Associated with the Importation of Certain Commodities from BSE Minimal Risk Regions (Canada), U.S. Department of Agriculture, Animal and Plant Health Inspection Service, October 27, 2006, at 12.