



## **Claims and Assumptions Underpinning the Final USDA Minimal BSE Risk Rule: Are They Valid?**

**January 28, 2005**

### **Claim 1: *The Final Rule's designation of Canada as a "Minimal Risk Region" complies with international standards for a minimal BSE risk country.***

The World Organization for Animal Health (Office International des Epizooties or OIE), a disease standard-setting body recognized by the World Trade Organization (WTO), lists six conditions that countries must minimally meet in order to qualify as a "country with a minimal BSE risk." The Harvard Center for Risk Analysis study of the United States' robustness against the spread of BSE if it were to enter the United States concluded that one of these six conditions, a ban on the feeding of meat-and-bone meal (MBM) to cattle, was among the "measures in the U.S. that are most effective at reducing the spread of BSE."<sup>1</sup> The OIE requires that the MBM cattle feed ban must have been "effectively enforced for at least 8 years."<sup>2</sup> (This is commensurate with the 2- to 8-year incubation period of BSE.)

However, *Canada does not meet this OIE minimal requirement of an 8-year MBM cattle feed ban.* Canada implemented its feed ban in August of 1997, the same date the U.S. implemented its similar MBM cattle feed ban.<sup>3</sup>

USDA acknowledges in its Final Rule that Canada does not meet the OIE's MBM cattle feed ban requirement.<sup>4</sup> USDA had previously asked OIE scientists to determine whether OIE would agree to any relaxation of its BSE standards, but OIE refused, stating that, "One of the most important conclusions of the recent OIE expert group is that the scientific basis used in the present Code is still valid."<sup>5</sup> Nonetheless, USDA has continued to encourage the OIE to lower the minimal feed ban standard from 8 years to only 5 years,<sup>6</sup> and has claimed that "the duration of the feed ban in Canada [7 years] adequately addresses the expected BSE incubation period."<sup>7</sup> Now the discovery of a six-year old cow with BSE in Canada on January 11, 2005 – a cow born seven months *after* Canada implemented its feed ban<sup>8</sup> - shows the prudence of OIE's standard and refutes with data USDA's claim that the requirement of an 8-year feed ban is unnecessary.

Canada's failure to completely destroy the BSE-infected cow detected on May 20, 2003, as required by the OIE,<sup>9</sup> and reports of Canadian non-compliance with its own MBM feed ban<sup>10</sup> drive additional wedges between USDA's optimistic assurances and reality.

**Conclusion:** Canada does not meet the most basic of international standards established for a minimal risk country. The Final Rule's designation of Canada as a minimal risk region contradicts established, international science-based policies. The latest case of BSE in Canada suggests that the Canadian MBM cattle feed ban has not been "effectively enforced" and that Canada will remain ineligible for the OIE classification of a minimal risk region until at least March 2006 (8 years following the birth of the fourth confirmed BSE-positive cow).

**Question for Decision Makers:** Can USDA demonstrate that an effectively enforced meat-and-bone meal feed ban for a minimum of 8 years is not an essential criterion for a country to present a minimal risk of BSE?

**Claim 2: The Final Rule requires the removal of specified risk materials (SRMs) from cattle when they reach the age where such materials begin to present a risk of BSE infection.**

The Final Rule requires Canada to meet OIE-recommended removal standards for countries that have already met OIE's standards for minimal risk, which Canada does not. The Final Rule does not require Canada to meet OIE-recommended risk mitigation measures for countries with Canada's characteristics, including the removal of specified risk materials (SRMs) from all cattle over 6 months of age.<sup>11</sup> Instead, the Final Rule only requires Canada to remove SRMs in cattle over 30 months of age (with the exception of tonsils and small intestines). By contrast, the 17 BSE-affected countries in the European Union all require that SRMs be removed from cattle over 12 months of age,<sup>12</sup> as does Israel.<sup>13</sup> The United Kingdom requires the removal of SRMs in cattle over 6 months of age.<sup>14</sup> Switzerland requires some SRMs be removed beginning at 6 months of age.<sup>15</sup> And, Japan requires SRMs to be removed from cattle of all ages.<sup>16</sup>

The effect of the Final Rule will be that, of the 23 countries in the world including the UK that are known to be affected by BSE, Canada will be the *only* one not required to remove SRMs until cattle have reached the age of 30 months, making its products the most hazardous in the world from the standpoint of BSE risk management (with the possible exception of Liechtenstein, for which information is unavailable).

**Conclusion:** The Final Rule does not require SRM removal until Canadian cattle reach the age of 30 months, more than twice the age limit allowed in any other BSE-affected country, despite international scientific standards that recognize the outset of undue risk for BSE-affected countries like Canada at 6 months of age.

**Questions for Decision Makers:** Are the OIE, the UK, and the other 21 countries affected by BSE wrong to require the removal of SRMs in cattle less than 30 months old? Should U.S. citizens receive less protection than citizens in other countries (including Canada, which requires that imports from the U.S. be held to a higher standard than USDA proposes for imports into the U.S. from Canada?) What is the scientific rationale for exposing U.S. citizens to risks from a maximum age limit for SRM removal that is more than twice as great as anywhere else in the world?

**Claim 3: Canada's BSE testing program meets or exceeds international scientific recommendations and is equal to or superior to the BSE testing programs practiced by every other country affected by BSE.**

The OIE recommends that BSE-affected countries should establish surveillance programs commensurate with risk assessment outcomes. However, Canada relied upon the United States' Harvard Center for Risk Analysis study as the basis for its risk assessment,<sup>17</sup> and this risk assessment did not address the specifics of Canada's data and situation. OIE further recommended that countries target the various subpopulations of cattle, including that population of cattle in which BSE is detectable by testing before any clinical signs appear, i.e., cattle subject to normal slaughter.<sup>18</sup> OIE states, "In countries not free from BSE, sampling at routine slaughter is a means of monitoring the progress of the epizootic and the efficacy of control measures applied."<sup>19</sup>

But, *Canada has not been testing cattle at routine slaughter.* Canada's surveillance program targets animals believed to be at highest risk of being infected by BSE: those cattle exhibiting clinical signs of BSE and cattle over 30 months old that are found dead, dying, diseased, or down (non-ambulatory or "Downer Cows").<sup>20</sup> The Final Rule does not require Canada to test any more than the minimum number of cattle fitting only the subpopulation characteristics of high-risk cattle. USDA claims that if BSE is not detected in high-risk cattle, there is no benefit to testing other cattle populations<sup>21</sup> and states that Canada tested 15,800 cattle in 2004, all with negative results for BSE. This reasoning might be appropriate if Canada were still determining *whether* BSE is present in its herd. It is not appropriate for testing and monitoring prevalence after four cases have been confirmed.

The statistical rationale needs to shift from testing for presence of BSE (hypothesis-testing) to quantitative estimation and monitoring of prevalence. For this purpose, OIE recommendations and international recommendations from countries experienced with BSE call for testing cattle at routine slaughter. For example, the EU continues to test *all* cattle over 30 months of age entering the food chain in addition to mandatory testing of animals over a certain age.<sup>22</sup> Japan, tests *all* cattle entering their food chain.<sup>23</sup> Switzerland tests all high-risk cattle over 30 months of age along with 7000 cattle entering the food chain under normal slaughter.<sup>24</sup> Israel requires testing of *all* slaughtered cattle over 30 months of age.<sup>25</sup> Thus Canada's testing program falls far short in all respects to the testing programs of every other country in the world that is known to be affected by BSE (with the possible exception of Liechtenstein, for which information is unavailable).

**Conclusion:** Canada's BSE testing program does not meet the minimal testing recommendation of the OIE and is inferior to all testing programs of all countries affected with BSE. As a result, Canada is taking no steps to prevent BSE-diseased cattle from entering the human food chain, even though testing can detect this invariably fatal disease several months before cattle show any visible signs of the disease.<sup>26</sup> USDA appears to be praising Canada's testing program on the grounds that it will help to detect BSE if there is any. But this is no longer a relevant issue: presence of BSE has already been established. Now a testing program for quantifying and monitoring the prevalence of BSE is needed. Canada's testing program is inadequate and

inferior to all other BSE-affected countries for this purpose, which is the one that should matter for policy-making.

**Question for Decision Makers:** Does USDA believe that U.S. consumers do not require the added protection that testing at routine slaughter provides (by allowing BSE-infected cattle that may enter the food chain to be detected and removed before they exhibit clinical symptoms for BSE)?

**Claim 4: The United States must re-introduce cattle and beef from Canada in order to re-open export markets and to maintain domestic and international consumer confidence in the U.S. beef supply in the event that a native case of BSE is ever detected in the native U.S. cattle herd.**

This claim is illogical and counterintuitive. Before BSE was detected in a Canadian-origin cow in May 2003, USDA assured Congress and the public that U.S. Government actions had played an important role in excluding BSE from the United States. USDA stated, “Since 1989 APHIS has prohibited the importation of live ruminants from countries where BSE is known to exist in native cattle.”<sup>27</sup> After the May 2003 detection of the BSE-positive cow in Canada, and even after the December 23, 2003 detection of yet another native Canadian BSE-diseased cow (this time in Washington state), USDA continued to assure Congress and the public that the prohibition against the importation of live ruminants and most ruminant products from countries where BSE is known to exist continued to be an important safeguard to protect U.S. consumers from the BSE agent.<sup>28</sup>

The Final Rule will relax this very critical BSE disease safeguard that USDA continually explained as a very important, science-based safeguard to protect consumers from BSE. In addition to eliminating this critical BSE disease safeguard, and as discussed in USDA Claims #1 through #3 above, the Final Rule substitutes this critical BSE safeguard with standards below internationally recognized, science-based safeguards and below the applied safeguards practiced by all other BSE-affected countries.

**Conclusion:** The Final Rule allows the re-introduction of Canadian cattle and beef into the United States under standards that clearly fail to meet either minimal scientific recommendations or standards practiced by all other countries affected by BSE. Many of these critical BSE disease standards are scientifically proven to reduce the incidence of BSE. As a result, if the U.S. were to ever detect a case of BSE in its native herd, every country in the world would have multiple, legitimate WTO-sanctioned reasons to ban all U.S. beef imports (only the adoption of international standards warrants the presumption of scientific justification). American consumers will wonder why the USDA and Congress failed to protect American consumers by requiring Canada to meet even minimal established scientific standards.

**Question for Decision Makers:** Because recent events of December 2003 clearly demonstrate that pre-existing BSE regulations did not prevent introduction of a Canadian-born BSE-diseased cow into Washington state, wouldn't keeping and strengthening the pre-existing regulations, (e.g., with new safeguards implemented by the Food Safety Inspection Service (FSIS) in 2004, such as SRM removal) be likely to do far more than relaxing these protections to maximize both

domestic and international consumer confidence in the safety of the U.S. beef supply? Would not strengthening, rather than weakening, our safeguards be more likely to bolster domestic and international confidence even if a native case of BSE were to be discovered in the United States?

**Claim 5: The United States MBM cattle feed ban provides complete protection against the amplification of BSE in the United States even if BSE-infected cattle are imported from Canada into the United States.**

This claim appears to be wishful thinking, not science. There is a well-known gap in the MBM feed ban, caused by feeding ruminant protein to poultry and then feeding poultry litter to cattle. Bringing Canadian cattle into the United States for slaughter increases the potential for the spread of BSE in the U.S. herd through that route. Again, the OIE identifies SRMs in cattle over 6 months old when cattle originate from a country with Canada's BSE risk characteristics. Notwithstanding OIE's recommendation, SRMs removed from Canadian cattle over 6 months of age in U.S. slaughterhouses can be used in the manufacture of poultry feed. So long as the MBM feed ban allows ruminant protein to be used in poultry food, introducing Canadian cattle into U.S. slaughtering facilities increases the risk of BSE in the U.S. herd through that route. Indeed, the International Review Team convened by the Secretary of Agriculture following the discovery of a BSE-infected Canadian-born cow in Washington state reported, ". . . the partial ruminant to ruminant feed ban that is currently in place is insufficient to prevent exposure of cattle to the BSE agent."<sup>29</sup>

**Conclusion:** The United States MBM cattle feed ban is insufficient to prevent exposure of U.S. cattle to BSE from imported Canadian cattle.

**Question for Decision Makers:** Why hasn't the USDA first taken steps to strengthen the MBM cattle feed ban before proposing to subject the United States to an increased risk of introducing BSE into the United States from Canada?

**Claim 6: The latest BSE case discovered in Canada in a cow born after the 1997 feed ban is an anomaly: It is most likely that each of the previous three cases contracted BSE before Canada implemented its 1997 feed ban.**

USDA concluded that Canada did not need to adopt the OIE recommended 8-year feed ban requirement because of the variability in the incubation period for BSE.<sup>30</sup> Citing the Harvard-Tuskegee Study, USDA posited a mean incubation period of 4.2 years.<sup>31</sup> This is the rationale for USDA's 2003 petition to the OIE to reduce the minimum duration of the feed ban from 8 years to 5 years.<sup>32</sup> However, *each* of the four Canadian animals infected with BSE probably contracted the BSE agent *after* Canada implemented its 1997 feed ban. The first case was detected approximately 5 years and 9 months after the feed ban; the second case approximately 6 years and 4 months after the feed ban; and the third and fourth cases were detected approximately 7.5 years after the feed ban, which USDA says is the 97.5<sup>th</sup> percentile value, making it highly unlikely they contracted BSE before the feed ban (this is incontrovertible in the latest BSE case as the BSE-positive cow was born after the 1997 feed ban).

**Conclusion:** Based on USDA's own modeling and assumptions, each of the four Canadian animals detected with BSE beginning in 2003 probably contracted the disease after the implementation of the Canadian MBM feed ban, suggesting insufficient compliance with the feed ban, or that the feed ban is not a complete barrier to inter-animal transmission, or that USDA's modeling assumptions are flawed.

**Question for Decision Makers:** Given that each of the BSE-positive Canadian cattle was probably infected after the implementation of the Canadian feed ban, isn't it prudent to block the Final Rule since it is fundamentally based on modeling assumptions – especially that the minimum 8-year duration of the feed ban is non-essential to the determination of minimal risk – that have now been refuted by real-world data?

**Claim 7: The BSE threat has been overblown, and the risk to human health is too miniscule to warrant significant concern.**

As of December 2004, BSE has been confirmed in 21 head of cattle under 30 months old, including 13 head of cattle that were 24 months of age or younger.<sup>33</sup> There is uncertainty regarding the exact age under which BSE is detectable in infected cattle. USDA, in its negotiations with Japan, has conceded that the agency does not know the risk to human health associated with central nervous system (CNS) tissues from cattle that carry the BSE disease, but are too young for BSE to be detected using current testing methods. This admission strongly suggests that any exposure to beef from younger cattle originating in a country where BSE is known to exist presents an *unknown risk to consumers*. "Unknown" is not the same as "miniscule," "negligible," or "de minimis." The Japan-United States BSE Working Group comprised of experts and working-level officials reported:

Japan and the U.S. agree that accumulated abnormal prion protein in younger animals is unlikely to be detected using current testing methods. Japan and the U.S. agree that at present any relationship of such undetectable levels of abnormal prion protein in CNS tissues to consumers' risk is unclear.<sup>34</sup>

The Final Rule ignores this unknown risk to consumers and requires no mitigation measures other than the removal of the small intestine and tonsils from cattle less than 30 months old, thereby subjecting U.S. and international consumers to whatever risk scientists later determine is presented by the remaining CNS tissues of younger cattle.

Both the presumption that the BSE infectious agent resides only in SRMs, and the implicit assumption that SRMs can be removed from the carcass without exposing any of the remaining meat to contamination with the BSE infectious agent, are further unjustified if BSE can be transmitted through blood.

Although EU countries have had years to adjust to a BSE epidemic, statistics indicate that current control systems are *not* sufficient to prevent SRMs from entering domestic or imported meat products. For example, Table 1 shows statistics on 139 detected cases of SRMs entering the UK in imported beef during 2004. The Final Rule should have included the probable failure rate of SRM import controls, but it did not. The Final Rule also did not justify treating Canadian

and U.S. import control measures as more reliable than those in the UK. As a result, SRM restrictions may be viewed as a means of reducing the risk of contamination by SRMs, but not as a means of eliminating it.

**Table 1: Finds of specified risk material in imported beef and sheep meat in the UK, 2004, 23 January 2004 – 31 December 2004**

Date of discovery	Place of discovery	Finding	Abattoir(s)(unless stated)	Intervention coldstore (where applicable)
128) 23 January 2004 Intervention of beef Date of Slaughter: May 2001	Wholesale Meat Supply Ltd. Wood Street Great Harwood Blackburn	Spinal cord found in 3 forequarters of beef in a consignment of 318 quarters	Incarsa Carnicas Castellanas (Incarsa) Poligono De Villalonquejar Burgos Spain 10.00205/BU	Caserfri S.A. P.I. Montenuuevo Valdorros Burgos Spain 10.17790/BU
129) 5 February 2004 Intervention beef Date of Slaughter: May 2001	Wholesale Meat Supply Ltd. Wood Street Great Harwood Blackburn	Spinal cord found in 1 hindquarter of beef in a consignment of 211 quarters	Dehesa Grande S.A Crta.- Moronta, K.M. 13 Vitigudino Salamanca Spain 10.05832/SA	Caserfri S.A. P.I. Montenuuevo Valdorros Burgos Spain 10.17790/BU
130) 12 February 2004 Intervention beef Date of Slaughter: April 2001	Wholesale Meat Supply Ltd. Wood Street Great Harwood Blackburn	Spinal cord found in 1 hindquarter of beef in a consignment of 191 quarters	Montes De Toledo S. C. Ltda Ctra. Toledo-Piedrabuena KM 22 Pulgar Toledo Spain 10.08036/TO	Caserfri S.A. P.I. Montenuuevo Valdorros Burgos Spain 10.17790/BU
131) 23 February 2004 Intervention beef Date of Slaughter: May 2001	Wholesale Meat Supply Ltd. Wood Street Great Harwood Blackburn	Spinal cord found in 1 hindquarter of beef in a consignment of 191 quarters	Incarsa Carnicas Castellanas (Incarsa) Poligono De Villalonquejar Burgos Spain 10.00205/BU	Caserfri S.A. P.I. Montenuuevo Valdorros Burgos Spain 10.17790/BU
132) 23 February 2004 Intervention beef Date of Slaughter: June 2001	Wholesale Meat Supply Ltd. Wood Street Great Harwood Blackburn	Spinal cord found in 6 forequarters of beef in a consignment of 382 quarters	Arhus Slagtehus A/S Jaergardsgade 152-154 8000 Arhus C Denmark DK 034	Esbjerg Frysehus I/S Britanniavej 10 6700 Esbjerg Denmark DK 110
133) 01 March 2004 Intervention beef Date of Slaughter: April 2001	Wholesale Meat Supply Ltd. Wood Street Great Harwood Blackburn	Spinal cord found in 2 hindquarter of beef in a consignment of 213 quarters	Matadero Frigorifico De Avila, S.L Pol.Ind, Las Hervencias Avila Spain 10.05708/AV Montes De Toledo S.C. Ltda Ctra. Toledo Piedrabuena KM.22 Pulgar Toledo Spain 10.08036/TO	Caserfri, S.A. P.I. Montenuuevo Valdorros Burgos Spain 10.17790/BU
134) 03 March 2004 Intervention beef Date of Slaughter: July 2001	Wholesale Meat Supply Ltd Wood Street Great Harwood Blackburn BB6 7UD	Spinal cord found in 5 forequarters of beef in a consignment of 278 quarters	SOCOPA Z.I. Graces B.P. 166 22200 Graces France F22-067-01 EEC Societe Gallais Viande 19, Rue Chaerles le Tellier 56300 Le Sourn France F56-246-05 EEC Sic De Vendee – SCOPA LA ROCHE Rte de Cholet 85015 La Roche sur Yon France F85-191-04 EEC	Souigel Rue Guynemer 22190 Plerin France F22-187-46 EEC
135) 17 May 2004	Anglo Dutch Meats UK Arkwright Road Highfield Industrial estate Eastbourne East Sussex BN23 6QQ	Spinal cord in one forequarter out of a consignment of 238 fresh beef quarters	Zaklad Przemyslu Miesnego 'Biernacki' Ubojnia Zwierzat Rzeznymch Golina ul. Dworcowa 47 d 63-200 Jarocin PL Poland	
136) 21 June 2004	Kesbury Ltd, Glastonbury,	SRM in 21 forequarters and 3 hindquarters of fresh beef	Skup Uboj zwierzat - Handel Miesem Waldermar Podniesinski, Poland	

137) 15 July 2004	Kesbury Ltd., Beckery Road, Glastonbury	SRM found in 2 quarters in a consignment of 268 fresh beef quarters	Sokolów S.A. Oddzial Zaklady Miesne Jaroslaw Filia Tarnów, Poland.	
138) 17 June 2004	London Central Markets, 24 Gee & Webb Ltd., Smithfields, London	SRM found in 7 whole goat carcasses out of a consignment of 30 carcasses.	BV Islam Centrum, Maren Kessel, Zuid, Netherlands	
139) 3 Nov 2004		Spinal cord in 6 hindquarters; 11 hindquarters with gross contamination; 181 hindquarters not health marked; 183 hindquarters in total detained.	Polish plant: Kabanos Kojs Miroslaw I Jaonna Koljs, Kowalceyk SOP.J, 34-480 Jablonka, UL., Spoldzielcow 1 Poland	
December 2004 – None				

**One hundred and thirty nine SRM imports controls breaches involving EU Member States.**

**Source:** <http://www.food.gov.uk/bse/facts/srmimports2004>

**Conclusion:** There is great uncertainty about the human health risks associated with BSE; there is also a lack of evidence regarding the efficacy of currently practiced risk mitigation measures; and there is statistical evidence from the UK that shows SRM import controls are not failsafe.

**Question for Decision Makers:** Given the uncertain human health risks from BSE, shouldn't the Final Rule seek to prevent increasing the United States' exposure to BSE?

## End Notes

<sup>1</sup> Evaluation of the Potential for Bovine Spongiform Encephalopathy in the United States, Harvard Center for Risk Analysis, Harvard School of Public Health, November 26, 2001, at i.

<sup>2</sup> Terrestrial Animal Health Code, 12<sup>th</sup> edition – 2004, Office International des Epizooties, Chapter 2.3.13, Article 2.3.13.5.

<sup>3</sup> Federal Register, Vol. 70, No. 2, Tuesday, January 4, 2005, Rules and Regulations, at 512.

<sup>4</sup> Federal Register, Vol. 70, No. 2, Tuesday, January 4, 2005, Rules and Regulations, at 470.

<sup>5</sup> OIE Addresses Demands on Clarification of BSE Standards, OIE Press Release, October 2003, available at [http://www.oie.int/eng/press/en\\_031002.htm](http://www.oie.int/eng/press/en_031002.htm).

<sup>6</sup> Federal Register, Vol. 70, No. 2, Tuesday, January 4, 2005, Rules and Regulations, at 474.

<sup>7</sup> Federal Register, Vol. 70, No. 2, Tuesday, January 4, 2005, Rules and Regulations, at 470.

<sup>8</sup> Disease Information, Office International des Epizooties, Vol. 18, No. 3, January 21, 2005, available at [http://www.oie.int/eng/info/hebdo/AIS\\_09.HTM#Sec0](http://www.oie.int/eng/info/hebdo/AIS_09.HTM#Sec0).

<sup>9</sup> See R-CALF USA comments in APHIS Docket No. 03-080-1, December 9, 2004, at 3-5, available at [www.r-calfusa.com](http://www.r-calfusa.com).

<sup>10</sup> See R-CALF USA comments in APHIS Docket No. 03-080-1, December 27, 2004, at 4, available at [www.r-calfusa.com](http://www.r-calfusa.com).

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- <sup>11</sup> Terrestrial Animal Health Code, 12<sup>th</sup> edition – 2004, Office International des Epizooties, Chapter 2.3.13, Article 2.3.13.15(4).
- <sup>12</sup> BSE-New State of Play, Activities of the European Union, Regulation (EC) No. 999/2001, available at: <http://europa.eu.int/scadplus/leg/en/lvb/f83002.htm>.
- <sup>13</sup> Emergency Report, The Director General, OIE, June 6, 2002, available at: <http://agri3.huji.ac.il/%7Eyakobson/bseEN/bseOIE020604EN.htm>.
- <sup>14</sup> BSE Public Health Issues – Specified Risk Materials, Department for Environment, Food and Rural Affairs, United Kingdom, available at: <http://www.defra.gov.uk/animalh/bse/publichealth/srm.html>.
- <sup>15</sup> Control Measures in Cattle, SFVO Control Measures, BVET, OVF, UFV, available at: <http://www.bvet.admin.ch/tiergesundheits/00199/00200/00665/index.html?lang=en>
- <sup>16</sup> Final Report, Japan-United States BSE Working Group, July 22, 2004.
- <sup>17</sup> Federal Register, Vol. 70, No. 2, Tuesday, January 4, 2005, Rules and Regulations, at 506.
- <sup>18</sup> Terrestrial Animal Health Code, 12<sup>th</sup> edition – 2004, Office International des Epizooties, Appendix 3.8.4., Article 3.8.4.1.
- <sup>19</sup> *Id.*, Article 3.8.4.3.
- <sup>20</sup> Surveillance Objectives, BSE Enhanced Surveillance Program, Canadian Food Inspection Agency, available at: <http://www.inspection.gc.ca/english/anima/heasan/diseases/bseesb/surv/infoe.shtml#ris>.
- <sup>21</sup> Federal Register, Vol. 70, No. 2, Tuesday, January 4, 2005, Rules and Regulations, at 484.
- <sup>22</sup> BSE-New State of Play, Activities of the European Union, Regulation (EC) No. 999/2001, available at: <http://europa.eu.int/scadplus/leg/en/lvb/f83002.htm>.
- <sup>23</sup> Final Report, Japan-United States BSE Working Group, July 22, 2004.
- <sup>24</sup> Control Measures in Cattle, SFVO Control Measures, BVET, OVF, UFV, available at: <http://www.bvet.admin.ch/tiergesundheits/00199/00200/00665/index.html?lang=en>
- <sup>25</sup> Emergency Report, The Director General, OIE, June 6, 2002, available at: <http://agri3.huji.ac.il/%7Eyakobson/bseEN/bseOIE020604EN.htm>.
- <sup>26</sup> Federal Register, Vol. 70, No. 2, Tuesday, January 4, 2005, Rules and Regulations, at 475.
- <sup>27</sup> Animal Disease Risk Assessment, Prevention, and Control Act of 2001, (PL 107-9), Federal Inter-agency Working Group, Final Report, January 2003, at iii.
- <sup>28</sup> Transcript, Agriculture Secretary Ann M. Veneman Announcing Additional Protection Measures to Guard Against BSE, Release No. 0450.03, December 30, 2003.
- <sup>29</sup> Report of an international panel of experts appointed by the Secretary of Agriculture to review U.S. BSE response actions and make recommendations on the U.S. national program, Report on Measures Relating to Bovine Spongiform Encephalopathy (BSE) in the United States, February 2004, at 5.
- <sup>30</sup> Federal Register, Vol. 70, No. 2, Tuesday, January 4, 2005, Rules and Regulations, at 470.
- <sup>31</sup> Federal Register, Vol. 70, No. 2, Tuesday, January 4, 2005, Rules and Regulations, at 474.
- <sup>32</sup> *Id.*
- <sup>33</sup> Statistics – Youngest and oldest cases by year of onset – GB (Passive Surveillance Only), Department of Environment, Food and Rural Affairs, United Kingdom, as of October 1, 2004, available at: <http://www.defra.gov.uk/animalh/bse/statistics/bse/yng-old.html>.
- <sup>34</sup> Final Report, Japan-United States BSE Working Group, July 22, 2004.