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Bovine Spongiform Encephalopathy (Mad Cow Disease): Agricultural Issues for Congress

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SUMMARY

Most countries banned U.S. beef after the December 2003 report of BSE (bovine spongiform encephalopathy, or mad cow disease) in a Canadian-born cow found in Washington state. Several of these markets have partially reopened. However, Japan and Korea, which together had purchased about 60% of all U.S. beef exports in 2003, remain closed. Further progress was clouded by reports of BSE in the first U.S. native-born cow, initially tested in November 2004 but not confirmed until June 2005.

Japan says it is working to finalize its rules to admit U.S. beef, following an October 2004 framework agreement to restart trade. However, Administration and industry officials, and many members of the House and Senate, have expressed frustration with the pace of Japanese rulemaking to date. Bills (S. 1922/H.R. 4179) are pending which would impose $3.14 billion in retaliatory tariffs on Japanese imports if Japan does not lift the beef ban by December 15, 2005.

USDA said that total U.S. beef exports in 2004 reached only 17% of their 2003 level of about 2.5 billion pounds; 2006 exports are expected to be 639 million pounds. However, strong domestic demand and tight cattle supplies kept U.S. cattle prices relatively high throughout 2004 and much of 2005.

Canada's own first native BSE case was reported in May 2003. So far, a total of five native cases have been found in North America (one U.S.-born and four Canadian-born cattle). BSE-contaminated feed is considered the likely cause of infection in all cases.

Some Canadian beef has been permitted into the United States since August 2003. USDA published a final rule, on January 4, 2005, that is also now allowing younger live cattle and additional Canadian ruminant products to enter. A U.S. judge's March 2, 2005, preliminary injunction to block the rule was reversed by an appeals court on July 14, 2005.

In Congress, the Senate on March 3, 2005, passed a joint resolution (S.J.Res. 4) to overturn the Canada rule. However, a resolution must pass the House (where similar H.J.Res. 23 was introduced) and be signed by the President, which most observers believe is unlikely. Several other BSE-related measures have been introduced, including H.R. 187, H.R. 384, H.R. 1254, H.R. 1256, H.R. 2068, H.R. 3170, H.R. 3931, S. 73, S. 108, S. 294, S. 1300, S. 1331, S. 1333, and S. 1779.

USDA and other experts contend that the risk to human health from a few U.S. BSE cases is minimal. Nonetheless, closer scrutiny has been paid to the effectiveness of BSE safeguards, which now include import restrictions on countries with BSE; a ban on downer (nonambulatory) cattle from human food; keeping from the food supply additional higher-risk animal parts; a prohibition on feeding most mammalian protein to cattle; and extensive testing and research, among other things. After 74 weeks, more than 510,000 cattle had been tested, all but one negative for BSE, under an expanded surveillance program.

The Food and Drug Administration (FDA) on October 6, 2005, proposed long-awaited rules to further restrict the cattle parts which may be used in all animal feeds.

MOST RECENT DEVELOPMENTS

In early November, Japan's independent Food Safety Commission approved a draft report by its panel on BSE which addresses the safety of U.S. beef, opening up 28 days of public comments and hearings. This was a necessary step in the long process toward reopening Japan to imports of U.S. beef. Although Japanese officials claim that their regulatory process is nearing completion, some in the United States believe it could be weeks if not months before any U.S. beef again reaches Japan, once the top foreign buyer.

Amid growing U.S. frustration, a number of lawmakers have introduced bills (S. 1922/H.R. 4179) which would impose $3.14 billion in retaliatory tariffs on Japanese imports if Japan does not lift the beef ban by December 15, 2005.

Meanwhile, Congress has cleared for the President the USDA appropriation (H.R. 2744; H.Rept. 109-255), which provides approximately $66 million for USDA's BSE programs, as well as nearly $30 million for Food and Drug Administration activity in this area. The final measure does not include Senate floor amendments aimed at accelerating Japan's decision on U.S. beef imports, and at keeping all nonambulatory animals out of the food supply.

BACKGROUND AND ANALYSIS

What Is BSE?[1]

Bovine spongiform encephalopathy (BSE), widely known as mad cow disease, is a degenerative, fatal disease affecting the nervous system in cattle. The predominant scientific theory is that a "proteinaceous infectious particle" or "prion," causes BSE, which is believed to be transmitted to other cattle through feed containing BSE-infected protein by-products. No treatment or preventive vaccine exists.

Worldwide, BSE has been found in 187,000 animals, 183,000 of them in Great Britain, where it was first detected in 1986. Most of the rest occurred elsewhere in Europe. Reported cases of BSE have declined steeply since 1992, when they reached an annual peak of 37,000 in Great Britain.

A rare but fatal human disease, Creutzfeldt-Jakob disease (CJD), also is known to occur in the United States, where it normally strikes about one in one million people yearly. Following the British BSE outbreak, a new-variant CJD (vCJD) emerged that is believed to infect humans mainly through consumption of BSE-contaminated meat. About 160 people have been diagnosed with vCJD since 1986, most of them in Great Britain.

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[1] Except where noted, sources primarily are USDA daily briefings and backgrounders on BSE, which are available through the USDA website at [http://www.usda.gov].

BSE in North America

In North America, five native cases of BSE have been reported, all between May 2003 and June 2005. Four were born in Canada; the fifth animal was U.S.-born. Other BSE-like animal diseases, collectively called transmissible spongiform encephalopathies (TSE), have long been present here. They include scrapie in sheep and chronic wasting disease (CWD) in deer and elk. However, neither BSE nor these other TSE diseases have posed any significant threat to public health, according to U.S. and Canadian authorities.

Canadian Cases. Canadian officials announced on May 20, 2003, that they had discovered BSE in an Alberta cow, born in Saskatchewan or Alberta in early 1997, making it the first North American case documented in a native cow. The disease likely originated when the animal consumed feed containing added protein from a BSE-infected animal imported from Great Britain at some earlier time, according to the Canadian Food Inspection Agency (CFIA). (In 1993, Canada had reported BSE in an animal imported in 1987 from Great Britain in 1987, but this was counted a non-native case.)

Canada confirmed a second BSE case on January 2, 2005, in an Alberta dairy cow born in 1996. On January 11, 2005, CFIA announced its third confirmed case, in an Alberta beef cow born in March 1998 — six months after a Canadian ban on feeding most mammalian protein back to cattle was published. (The ban is similar to a U.S. rule; see below.)

U.S. Cases. In the first U.S. case, USDA announced on December 23, 2003, that brain samples taken from a Holstein cow in a 4,000-cow herd in Washington State had tested positive for BSE. U.S. officials initiated standing BSE response plans including an extensive investigation that eventually led to the precautionary killing of about 700 cattle and the testing for BSE of 250 of them. No other cases were found during this investigation, led by USDA's animal health agency, the Animal and Plant Health Inspection Service (APHIS). Officials traced the BSE cow to its birthplace in an Alberta, Canada herd in April 1997. It is believed to have entered the United States with 80 other dairy cattle from the same Alberta herd in September 2001. The cow likely was infected in Canada by eating contaminated feed before the 1997 ban there became effective, according to APHIS.

The second U.S. case, but the first in a U.S.-born animal, was announced by USDA on June 24, 2005. The Secretary of Agriculture said screening tests had first been conducted on this cow in November 2004, and at that time were reported as "inconclusive" (i.e., possibly positive) for BSE. Later in November 2004, a follow-up analysis of tissue samples, using the so-called "IHC" or immunohistochemistry test method, returned a negative test, the Secretary explained. Then, in early June 2005, after prodding by USDA's Office of Inspector General (OIG), the department retested a sample from the cow using a different confirmatory test, the so-called "Western blot." The retested sample showed a positive reaction for BSE. Both the IHC and Western blot tests are recognized by the international organization for animal health, known by its French acronym, OIE. Brain tissue was then taken for final confirmatory testing at the BSE World Reference Laboratory in Weybridge, England. The Secretary's June 24 announcement was based on the results of the Weybridge testing, plus follow-up testing by USDA's Ames laboratory.

Department officials have stated that the cow in question was a 12-year-old Brahma cross beef cow from a Texas ranch, initially reported to be nonambulatory. The animal was

sampled at a plant that renders dead, dying, diseased, or disabled animals for non-human uses such as pet food, USDA said, adding that no material from the cow entered the food or feed supply.

Harvard Risk Analysis. A USDA-funded study issued in November 2001 by the Harvard Center for Risk Analysis had stated in part that BSE was extremely unlikely to become established in the United States and, if a spontaneous case occurred, there would be little spread. Reexamining this risk assessment after the May 2003 BSE case in Canada, Harvard concluded that although "the possible introduction of BSE into the U.S. from Canada cannot be dismissed," the likelihood is very low, and U.S. protective measures by now would have contained any possible spread. (The Harvard study is based on a computer simulation, which several critics indicate could rely on arguable assumptions.) However, the Harvard reassessment also acknowledged that if BSE-infected cattle from the UK had been imported and their parts were rendered into cattle feed ingredients, then infectivity could have entered North American feed supplies before 1997 feed control rules were implemented in both countries. Harvard noted that the U.S. and Canadian cattle and beef industries have been interconnected; prior to the BSE outbreak, the United States on average imported over 1.2 million cattle and 185,000 tons of feed annually from Canada.[2]

International Review Team. After the U.S. BSE discovery in December 2003, USDA asked a panel of experts to examine the government's response, and its findings were released on February 4, 2004. Although the infected animal may be the only one from the 81-cow herd that survived to adulthood, and its birth cohorts "do not represent significant risk," the panel concluded, "it is probable that other infected animals have been imported from Canada and possibly also from Europe," opening the way for indigenous infection here. The panel concluded that USDA's epidemiological investigation and the tracing and recall of meat and byproducts had conformed to international standards insofar as possible. However, it also recommended that a number of existing BSE safeguards, including the feed ban and the testing program, be strengthened.[3]

Industry Economic and Trade Implications

Cattle production is the largest single segment of U.S. agriculture (accounting for 20% of U.S. farm sales annually). Exports of U.S. beef and other cattle products are viewed as critical to long-term market growth. The value of beef and beef variety meat exports was estimated by USDA to be $3.1 billion in 2003 (or about 10% of farm value for cattle/calves). Four countries bought approximately 90% of these exports: Japan (37%), South Korea (24%), Mexico (20%), and Canada (10%).

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[2] Joshua Cohen and George M. Gray, *Evaluation of the Potential Spread of BSE in Cattle and Possible Human Exposure Following Introduction of Infectivity into the United States from Canada*, pp. 1-2 (undated 2003 report), Harvard Center for Risk Analysis, School of Public Health, [http://www.aphis.usda.gov/lpa/issues/bse/harvard_10-3/text_wrefs.pdf]. The Harvard risk analysis considered import as well as domestic practices in its assessment.

[3] *Report on Measures Relating to Bovine Spongiform Encephalopathy (BSE) in the United States*, at [http://www.aphis.usda.gov/lpa/issues/bse/US_BSE_Report.pdf].

Most importing countries halted imports of U.S. beef and cattle soon after the December 23, 2003 U.S. BSE announcement. Mexico and Canada are among a number of countries again accepting some U.S. beef and veal. Others including Japan and Korea remain closed. USDA estimates that U.S. beef and veal exports globally reached 461 million pounds in 2004, or 17% of the 2003 level of 2.523 billion pounds. USDA has predicted that exports likely would reach only 639 million pounds in 2005. The U.S. share of the world market for beef/veal exports has declined to 3%, from 18% in 2003.

Domestic cattle and beef prices had reached record highs in 2003 due to a tight supply-demand situation. Immediately after the first U.S. BSE case in December 2003, these prices dropped sharply, but recovered substantially after January 2004. A decline in U.S. cattle inventories due in part to widespread drought conditions in cattle country, along with strong domestic demand for beef, kept farm prices relatively high during much of 2004.

USDA has reported that annual average U.S. fed steer (i.e., slaughter-ready cattle) of $84.75 in 2004, near the lower end of a USDA forecast, made just before the BSE case, of $84-$91 per cwt. The 2005 price forecast (made October 2005) was about $85, and the 2006 forecast was $76-83.

In April 2005, Kansas State University (KSU) issued a study on the impact of the BSE situation on the U.S. beef industry. Based on a trade model it developed, KSU estimated that total U.S. beef industry losses due to the loss of beef and offal exports in 2004 ranged from $3.2 billion to $4.7 billion.[4] The U.S. Meat Export Federation (USMEF) has estimated that lost export premiums on the top 10 cuts exported were costing the beef industry about $100 per head or more than $2.8 billion annually.[5]

U.S. BSE Safeguards

Scientific uncertainty about BSE's cause and transmission spurred a series of U.S. precautionary actions over the past decade or more aimed at confirming BSE's continued absence and preventing imports of livestock or animal products that could carry it. These actions are now being modified in light of evolving information about the disease and its appearance in North America.[6]

Import Restrictions. APHIS since 1989 has imposed a series of increasingly restrictive import controls on live ruminants (cows, sheep, goats) and their products. In effect, no establishments in countries where any BSE has been found could ship beef to the United States. In 2003, the agency began a policy to accept lower risk products from BSE countries — the first being Canada — with effective controls. This approach parallels new

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[4] *The Economic Impact of BSE on the U.S. Beef Industry: Product Value Losses, Regulatory Costs, and Consumer Reactions*. (See also CRS Report RS21709, *Mad Cow Disease and U.S. Beef Trade*.)

[5] The NCBA figures were used at the House's March 1, 2005, hearing on BSE. Also, USDA held a roundtable on "The Safety of North American Beef and the Economic Effects of BSE on the U.S. Beef Industry," on June 9, 2005, in St. Paul. For more information, see the USDA website at [http://www.usda.gov].

[6] For more detail on this section, see CRS Report RL32199, *Bovine Spongiform Encephalopathy (BSE, or "Mad Cow Disease"): Current and Proposed Safeguards*.

BSE guidance supported by the United States and adopted in May 2005 by the World Organization for Animal Health (OIE for its French acronym).[7]

Targeted Domestic Surveillance. USDA inspectors in the mid-1990s began testing some brains of suspicious cattle — mainly downer or nonambulatory and dead animals, and those exhibiting neurological problems. Testing had grown steadily from a few thousand animals annually to about 20,000 cattle in each of FY2002 and FY2003, out of about 35 million slaughtered each year.

In June 2004 USDA began 12-18 month effort to determine the extent, if any, of BSE in higher-risk cattle, which it had estimated to number 446,000. Samples are collected from higher-risk cattle at slaughter establishments, on farms, at rendering facilities, cattle marketing sites, and veterinary and public health laboratories, and are screened using rapid tests. Any rapid test not negative for BSE ("inconclusive" in USDA parlance) is sent to the national reference laboratory in Ames for confirmatory testing, which takes longer but is considered more reliable. After 74 weeks of testing through October 30, 2005, more than 510,000 cattle had been tested, all but one negative for BSE. The department is expected to end this program soon and then determine what types of routine testing should be conducted in the future.[8]

Cattle Feed Rules. Because scientists believe that BSE is spread primarily through the consumption of BSE-infected tissue, they consider feed controls to be the single most important safeguard. The U.S. Food and Drug Administration (FDA), which regulates animal feed ingredients, banned most mammalian proteins from cattle feed on August 4, 1997.[9] Exceptions have existed for blood and blood products; gelatin; restaurant plate waste; milk products; and pork and equine proteins. Also, most mammalian proteins can still be fed to other animals such as pigs, poultry, and pets. FDA oversight includes education as well as inspections of the estimated 264 renderers (firms that prepare animal parts not destined for human food), and of all known feed mills (as many as 9,240 or more, according to the agency). On October 6, 2005, FDA published a proposal to strengthen its feed controls by prohibiting use of certain higher-risk cattle parts in any type of animal feed (see "Feed Rule Criticisms").

Meat Inspection Changes. USDA's Food Safety and Inspection Service (FSIS) oversees the safety of most meat for human consumption.[10] FSIS published in the January 12, 2004, *Federal Register* a number of regulatory changes affecting practices in plants where cattle are slaughtered and processed. These changes include (1) prohibiting nonambulatory ("downer" cattle from being slaughtered for food, though they still can go to rendering plants for other uses; (2) declaring the skull, brain, trigeminal ganglia, eyes, vertebral column, spinal cord, and dorsal root ganglia of cattle over 30 months, and part of

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[7] The OIE website is at [http://www.oie.int/eng/info/en_statesb.htm].

[8] The other U.S. case (December 2003) emerged during routine BSE testing prior to this intensive surveillance program. Test results are posted at [http://www.aphis.usda.gov/lpa/issues/bse_testing/].

[9] See *CVM and Ruminant Feed (BSE) Inspections*, at [http://www.fda.gov/cvm/RuminantFeed Inspections.htm].

[10] See CRS Report RL32922, *Meat and Poultry Inspection: Background and Selected Issues*.

the small intestine of cattle of all ages to be "SRM" or specified risk material, and thus not fit for human food;[11] (3) banning the use of advanced meat recovery (AMR) systems, which mechanically remove muscle tissue from bone, in cattle 30 months and older; and (4) banning air-injection stunning, to ensure that brain pieces are not dislocated into carcass tissues during slaughter.

Funding. The FY2006 USDA appropriation (H.R. 2744; H.Rept. 109-255) generally covers the Administration's request of $66 million for USDA's BSE-related activities, including $33 million to continue work on an animal ID program, $21 million for BSE testing/surveillance, and $12 million for research. It also covers a request of nearly $30 million for FDA's BSE programs such as administration of the feed rules.

Selected Issues for Congress

Japan Situation. On October 23, 2004, U.S. and Japanese negotiators jointly announced plans for restarting two-way beef trade. Included was a commitment that the United States would certify that only beef from cattle of 20 months or younger are shipped, and that all SRM, covering cattle of *all ages*, will be removed. In addition, the United States said it would institute rulemaking on the conditions for resuming U.S. imports of Japanese beef, mainly specialty products like Kobe, which have been banned here since September 2001 (Japan's universal testing program has reported about 20 of its own BSE cases).

Japan has not yet completed its own regulatory changes, fueling growing frustration in Congress. These changes have involved many steps and a number of different agencies, including review by Japan's independent Food Safety Commission (FSC). An FSC subcommittee did not agree on a report on the safety of U.S. beef until October 31, 2005. Shortly afterward, the FSC approved the draft report, and says it is considering public comments on it during November. A government rule on U.S. beef is anticipated sometime after that. However, many Japanese consumers (and some officials there) reportedly remain opposed to resuming U.S. imports. Moreover, though Japan implemented its own policy change on August 1, 2005, that only cattle over 20 months of age must be tested, all local governments continue universal testing. Whether U.S. beef will be able to enter Japan before the end of 2005 is in doubt; some industry observers predict early 2006 to be more likely.

Meanwhile, USDA had published in the August 18, 2005 *Federal Register* a proposed rule to permit the importation of whole cuts of boneless beef from Japan, under specified conditions. USDA said the proposal is in accord with OIE guidelines and is based on a risk analysis indicating that such cuts could be safely imported. Some Members of Congress have complained that the United States appeared to be acceding to the Japanese without a concurrent move by Japan, where the BSE problem has been more pronounced. On September 20, 2005, the Senate adopted a floor amendment to the FY2006 USDA appropriation (H.R. 2744) to bar implementation of the proposed rule unless the President certifies to Congress that Japan has granted open access to Japanese markets for U.S. beef and beef products. However, this provision was removed from the final conference report (H.Rept. 109-255).

[11] Tonsils of all cattle already had been declared as SRM.

Several Members have joined in introducing S. 1922/H.R. 4179, which would impose $3.14 billion in retaliatory tariffs on Japanese imports if Japan does not lift the U.S. beef ban by December 15, 2005. Pending H.Res. 137, introduced earlier in 2005 in the House, calls for economic sanctions against Japan if it does not permit U.S. beef.

Canada Situation. The BSE situation in Canada has weighed heavily on U.S. trade considerations. Some argue that too hastily expanding U.S. imports of beef and cattle from Canada, where four BSE cattle were born, will endanger the U.S. cattle herd and undermine negotiations with the Japanese. Others counter that USDA's steps to reopen the border for Canada has demonstrated to other countries that the United States bases its trade decisions on sound science — and that others should do likewise. They also noted that Canadian plant capacity was expanding rapidly to process cattle that otherwise would have moved south, placing U.S. packing plants that relied on such cattle at a competitive disadvantage.

In August 2003, APHIS began to ease its three-month-old ban on Canadian ruminant imports when it announced that it would accept applications for permits to import selected products, notably boneless beef from cattle under 30 months old. On November 4, 2003, APHIS published in the *Federal Register* a proposed rule to formalize its actions and to expand the types of imports to include, among other things, younger live cattle for slaughter.

After Ranchers-Cattlemen Action Legal Fund, United Stockgrowers of America (R-CALF USA), a Montana-based group, filed a lawsuit claiming that USDA had not followed proper rulemaking procedures, a federal judge on April 26, 2004, issued a temporary restraining order that led USDA to agree to limit Canadian product types until a final rule on imports was published.[12] USDA-APHIS published this final rule in the January 4, 2005, *Federal Register*, to take effect March 7, 2005. R-CALF again sued, and the same federal judge halted the rule, agreeing that it had "numerous procedural and substantive shortcomings."[13]

The U.S. Court of Appeals for the Ninth Circuit, in July 2005, reversed the lower court's ban. The three-judge appeals panel rejected each of the major grounds for the district judge's findings.[14] Subsequently, the first load of Canadian cattle since May 2003 entered the United States on July 18, 2005.

In a February 2005 audit, USDA's OIG concluded that the department's actions on the border opening were sometimes arbitrary and undocumented; policy decisions were poorly communicated to the public and between APHIS and FSIS; and controls over the regulatory process were inadequate. USDA agreed with and promised to implement most of the report's findings.[15]

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[12] *Ranchers Cattlemen Action Legal Fund USA vs. USDA* (CV-04-51-BLG-RFC).

[13] *Ranchers Cattlemen Action Legal Fund USA vs. USDA* (CV-05-06-BLG-RFC).

[14] *Ranchers Cattlemen Action Legal Fund USA vs. USDA* (No. 05-35264, DC No. CV05-006RFC).

[15] USDA, OIG. *Animal and Plant Health Inspection Service Oversight of the Importation of Beef Products from Canada*, on the web at [http://www.usda.gov/oig/webdocs/33601-01-HY.pdf].

On March 3, 2005, the Senate approved a resolution of disapproval of the rule (S.J.Res. 4) by a vote of 52-46. However, a related resolution (H.J.Res. 23) has not won needed House passage. Other bills containing various restrictive conditions for resumption of Canadian imports include H.R. 187, S. 294, and H.R. 384/S. 108. [See also CRS Report RL32932, *Bovine Spongiform Encephalopathy (BSE, or 'Mad Cow Disease') in North America: A Chronology of Selected Events*.]

Feed Rule Criticisms. The Government Accountability Office (GAO) has been among those critical of FDA's enforcement of its feed rule. Most recently, a February 2005 GAO report concluded that FDA had made improvements in its management of the feed ban, but that program weaknesses continued to limit its effectiveness, placing U.S. cattle at risk of spreading BSE. Both the GAO and Harvard (see above) have observed that noncompliance with the feed ban could occur at many points in the feed chain. Moreover, FDA does not actually test the feed for prohibited material. FDA had promised in January 2004 that it would strengthen its feed controls, saying among other things that it intended to ban from ruminant feed the following materials: ruminant blood and blood products, poultry litter (which can contain spilled feed that may contain ruminant material), and restaurant plate waste.

Instead, FDA published, in the October 6, 2005, *Federal Register* (pp. 58570-58601), a proposed rule that would prohibit use of the following cattle parts in any type of animal feed: brains and spinal cords of cattle 30 months and older and of any cattle not inspected and passed for human consumption; entire cattle carcasses not passed for human consumption if the brains and spinal cords have not been removed; tallow derived from prohibited materials if it has more than 0.15% insoluble impurities; and mechanically separated beef derived from prohibited materials.

Currently, ruminants might still consume high-risk material because of its presence in non-ruminant feeds, making it possible for cross-contamination to occur during rendering, manufacturing, or on farms, FDA stated. The proposal would continue to permit in non-ruminant feed some of the SRMs that are now banned from human food (e.g., distal ileum, tonsils, other nervous tissue). It also would continue to permit, in ruminant feeds, the use of cattle blood and blood products, plate waste, and poultry litter.

Critics have argued that the FDA proposal therefore contains gaps that could still expose cattle, and ultimately humans, to unnecessary BSE risks. They note that Canada's own proposal to tighten animal feed regulations, now being finalized, would be more restrictive than the U.S. plan. FDA, relying on scientific risk assessments, said that brains and spinal cords alone account for 90% of BSE infectivity in cattle. So, ensuring their removal will greatly reduce risks at an acceptable burden to the rendering, feed, and related industries. (In the 109th Congress, S. 73 would explicitly define and ban SRMs from all animal feeds.)

Testing Issues. BSE testing has been the focus of much congressional scrutiny. At a joint hearing on July 14, 2004, before the House Government Reform and Agriculture Committees, USDA's Inspector General (IG) testified on a draft OIG report which cites a number of statistical sampling problems with the department's expanded surveillance plan. USDA officials at the same hearing defended their testing, noting among other things that the OIG observations were based on the plan before it was implemented and that many of the report's recommendations have been addressed.

Also, after it was widely reported that USDA had failed to test a suspicious cow in Texas in late April 2004, the department announced revisions in its BSE sampling procedures. In a review of the Texas case, OIG found that officials had erred — but did not engage in intentional misconduct or knowingly provide misleading information — in failing to test the suspicious Texas cow. OIG reached similar conclusions about how the department in December 2003 had characterized the Washington BSE cow (as being nonambulatory when a plant worker claimed it was not).

It was OIG that in spring 2005 had urged USDA to retest samples from a cow that was first suspected of BSE in a screening test in November 2004, but that later tested negative when USDA applied its so-called "gold standard," or IHC test method. After its IHC test came back negative for BSE, USDA did not run the other internationally recognized confirmatory test, the Western blot. This OIG-requested retesting in early June 2005 was done using the Western blot. When this test showed the presence of BSE, USDA and the World Reference Laboratory in England ran additional confirmatory tests, including the IHC, where BSE was confirmed. Authorities explained that IHC test procedures can differ, which was why the first U.S. IHC confirmatory test was negative but the Weybridge IHC test positive.[16]

The varying test results provoked skepticism among consumer groups and several Members of Congress about the adequacy of USDA's testing, as well as about department officials' communication of the results. APHIS has since revised its testing protocol: for any future inconclusives, USDA will run both an IHC and Western blot confirmatory test. If results from either one are positive, the sample will be considered positive for BSE.

Animal Identification (ID). Some have argued that lack of a nationwide animal ID program hindered the investigations into the origin and any possible spread of BSE. Then-Secretary Veneman announced in January 2004 that USDA would accelerate implementation of national animal ID. A government-industry committee already had been working on the framework for a system, and it earlier had anticipated that states would have individual IDs in place for cattle for interstate movement by July 2005. In August 2004, USDA announced it was signing cooperative agreements with 29 states and tribal agencies to receive $11.64 million to register premises, collect data, and test ID technologies. In June 2005, USDA announced that it would disburse another $14.3 million to continue premises registration efforts. APHIS now projects that all states should have the capability to register individual premises (but not yet animals) by this year, and that individual animal numbers will also become available this year. But a national system may not be fully in place until 2009.[17]

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[16] Transcript of media conference, June 24, 2005, at [http://www.usda.gov/wps/portal/usdahome]. For an explanation of the two OIE-approved tests, see the June 2005 APHIS factsheet at [http://www.aphis.usda.gov/lpa/pubs/fsheet_faq_notice/faq_BSE_confirmtests.pdf].

[17] For updates on USDA's animal ID activities, including information on its strategic plan for an ID program, see [http://animalid.aphis.usda.gov/nais/index.shtml]. Also see CRS Report RL32012, *Animal Identification and Meat Traceability*.

Some argue that USDA, which has embarked on an all-farm species approach, is progressing too slowly; the National Cattlemen's Beef Association (NCBA), for example, is now proposing to establish a privately operated system that could be fully operational by October 2006. USDA now apparently agrees that a privately-managed system could be implemented, but may not be willing to fund it.

In Congress, H.R. 1254 would require the establishment of a nationwide electronic animal identification system. H.R. 1256 deals with protecting the information provided by producers from unauthorized scrutiny and use. Additional animal ID bills are anticipated. H.R. 3170 would create a "Livestock Identification Board" with voting members from industry to oversee a national program, and the House Agriculture Committee has held hearings on the issue, including a privately-held system.

Country of Origin Labeling (COOL). The 2002 farm bill (P.L. 107-171) required many retailers to provide COOL for fresh and ground meats, among other specified commodities, by September 30, 2004. In subsequent appropriations acts, Congress has twice delayed this deadline, now set at September 30, 2008. A pending bill by the House Agriculture Committee chairman (H.R. 2068) would make COOL voluntary for meats; at least two Senate bills (S. 1300; S. 1333) also would make COOL voluntary. S. 1331 would accelerate the implementation date to January 30, 2006. (See CRS Report 97-508, *Country-of-Origin Labeling for Foods*, by Geoffrey S. Becker.)

Downed Animals. The FSIS downer ban has been among the most controversial changes for producers, who say they incur large losses when they cannot sell cattle for human food even if they are unable to walk for reasons unrelated to BSE (e.g., a broken leg). Those who oppose such restrictions also have expressed concern about the integrity of BSE surveillance if these animals are no longer brought to slaughter, and have questioned the scientific basis of the ban, in light of its economic impacts.

Others counter that downer animals do pose numerous food safety hazards, including but not limited to BSE, and have urged that a ban be written into the statute. Such legislation has been introduced as H.R. 3931 and S. 1779. During floor debate on H.R. 2744, USDA's FY2006 appropriation, the Senate approved an amendment by Senator Akaka to prohibit downers from being used for human food. The Akaka amendment would have applied not only to cattle, but also to any sheep, swine, goats, horses, mules or other equines unable to stand or walk unassisted at inspection. However, conferees deleted the amendment from the final version. Instead, the conference report directs the Secretary of Agriculture to "notify and closely confer with" Congress before taking "any actions that would weaken" the existing safeguard, i.e., the USDA regulatory prohibition on the slaughter for human food of nonambulatory cattle only. They also encourage the Secretary to initiate an Advance Notice of Proposed Rulemaking on the subject.