

Mad Cow Disease and U.S. Beef Trade

Charles E. Hanrahan and Geoffrey S. Becker Senior Specialist and Specialist in Agricultural Policy Resources, Science, and Industry Division

Summary

The 110th Congress is expected to monitor closely U.S. efforts to regain foreign markets that banned U.S. beef when a cow in Washington state tested positive for bovine spongiform encephalopathy (BSE, or mad cow disease) in December 2003. Rebuilding foreign confidence in the safety of U.S. beef and cattle has been impeded by two other confirmed U.S. cases of BSE, announced June 2005 and March 2006. The four major U.S. beef export markets, Canada, Mexico, Japan, and Korea, are again accepting U.S. product. Resumption of beef trade with Japan and Korea has not gone smoothly. Japan temporarily suspended all U.S. exports when prohibited materials were discovered in a shipment, but trade has now resumed. Korea rejected some shipments with bone fragments, but has not prohibited all export trade. This report will be updated.¹

U.S. Beef Trade

In 2003, the United States exported about 1.1 million metric tons (MMT) of beef, veal and beef variety meats, valued at \$3.9 billion. This was equivalent to approximately 10% of the farm value of U.S. cattle and calves. U.S. beef exports had grown rapidly during the decade beginning in 1992, increasing by 85%, while domestic beef consumption grew by just 14%.²

After USDA's 2003 BSE announcement, most countries banned or restricted some or all imports of U.S. beef and cattle products. These included Japan, South Korea, Mexico, and Canada, which together had purchased approximately 90% of U.S. beef

¹ For additional details and background see CRS Report RS22345, *BSE* ("*Mad Cow Disease:*): *A Brief Overview*, and CRS Report RL32199, *Bovine Spongiform Encephalopathy (BSE, or "Mad Cow Disease"): Current and Proposed Safeguards.*

² Trade data sources are primarily USDA, Foreign Agricultural Service (FAS), *World Markets and Trade: Dairy, Poultry and Livestock*, various issues; and FASonline's U.S. Trade Internet System at [http://www.fas.usda.gov/ustrade/]. Unless noted, other data are from the USDA Economic Research Service (ERS) website at [http://www.ers.usda.gov/features/bse/index.htm].

exports. Canada and Mexico resumed importing some U.S. beef in 2004. Japan and Korea reopened their markets in July and November 2006, respectively.³

In 2003, the United States was the world's third largest beef/veal exporter, claiming 18% of the world beef/veal market. Australia and Brazil ranked one and two, with 1.3 MMT and 1.2 MMT in exports, respectively. U.S. market share plummeted to 3% in 2004 (209,000 MT) and has climbed to 7% (523,000 MT) in 2006. Meanwhile, Brazil

has become the top beef/veal exporter in 2006 with 28% of the world market share, followed by Australia with 20%.

Imports have represented about 13% of total beef consumption in the United States, the largest world beef importer. Imports from Canada (and Mexico) reflected an integrated North American market. Prior to its own May 2003 BSE event, Canada was the United States' major source of beef and cattle imports. In 2002 Canada sent about 1.7 million cattle to the United States, where large feeding and slaughter capacity readily absorbed them.⁴ Live cattle imports from Canada in 2006



were more than 730,000 head (January-September).

U.S. Beef Exports to Japan

After months of negotiations, the United States and Japan announced on October 23, 2004, that the United States would establish, with Japanese concurrence, an interim marketing program — a modified version of its Beef Export Verification (BEV) Program — enabling a resumption of some U.S. exports to Japan. BEV would certify that only beef products from cattle of 20 months or younger are shipped. Also, the United States agreed to an expanded definition of cattle parts that have a higher risk of harboring the BSE agent. These "specified risk materials" (SRMs) include — for cattle of *all ages* — the entire head except tongues and cheek meat; tonsils; spinal cords; distal ileum; and part of the vertebral column. This is broader than the U.S. SRM definition, which applies mainly to cattle over 30 months old.

The United States also agreed to permit Japanese beef into its market following relevant domestic rule-making. USDA's Animal and Plant Health Inspection Service (APHIS) published a final rule on December 14, 2005, permitting such imports (whole

³ For the latest list and specifics on country bans, see the USDA/APHIS trade ban status website at [http://www.aphis.usda.gov/newsroom/hot_issues/bse/bse_trade_ban_status.shtml].

⁴Center for Agricultural and Rural Development, *Iowa Ag Review*, summer 2003, at [http://www. card.iastate.edu/iowa_ag_review/summer_03/article4.aspx]. Canadian cattle imports resumed in 2005; see "Canada Situation."

boneless beef cuts under specified conditions).⁵ Prior to imposition of a U.S. ban on Japanese beef imports due to animal disease (including BSE) outbreaks there, that country exported an annual average of less than 9 tons of primarily specialty beef (Kobe and other Wagyu).

Japan did not finalize its decision to permit U.S. beef imports until December 2005, following a final report from its independent Food Safety Commission (FSC) certifying the adequacy of U.S. safeguards, at which point shipments resumed. However, the Japanese abruptly halted imports from all U.S. importers again on January 20, 2006, after they found vertebral column bones in several boxes of veal from one U.S. processor. Following Japan's review of the eligibility of U.S. slaughter facilities to export beef to Japan, the market reopened for U.S. beef on July 27, 2006.

Recapturing more of the Japanese market for U.S. beef will not be easy. U.S. beef exports to Japan confront several constraints: consumer beef safety concerns, strict port scrutiny of U.S. shipments, currently high U.S. offer prices, uncertainty about supplies of specific cuts under the BEV system, a shift in consumer choice of protein from beef to pork, and competition for the Japanese market from Australia, a BSE-free exporter.⁶ Australia currently provides about 88% of Japanese imports of chilled and frozen beef. Another potential constraint to expanding U.S. beef exports to Japan is potential imposition of the beef import safeguard (a 50% tariff) should imports in 2007 exceed trigger levels.⁷

In Congress. During the 109th Congress, many Members expressed deep frustration with the Japanese situation. Introduced in March 2005 were H.Res. 137 and S.Res. 87, calling for economic sanctions against Japan if it does not permit U.S. beef. Also, S. 1922/H.R. 4179, introduced in October 2005, would have imposed \$3.14 billion in retaliatory tariffs on Japanese imports if Japan did not lift the beef ban by December 15, 2005. Elsewhere, a Senate floor amendment to the FY2006 USDA appropriation (H.R. 2744), which would have blocked a new U.S. rule to permit some Japanese beef imports unless Japan lifted its own ban, was deleted from the final conference agreement (H.Rept. 109-255, P.L. 109-97). Legislative initiatives in the 110th Congress will depend in large part on the pace of resumption of U.S. beef imports by Japan.

U.S. Beef Exports to Korea

Korea's prohibition on U.S. beef, which had been in place since December 2003, was lifted on September 11, 2006. Resumption of U.S. beef exports to Korea, the United States second largest export destination for beef in 2003, is expected to proceed slowly for the same reasons that will slow Japan's resumption of beef imports. Strict quarantine inspection requirements in Korean ports have already resulted in the rejection of three shipments of U.S. beef because of the presence of bone fragments.

⁵ 70 *Federal Register*, pp. 48494-484500 and pp. 73905-73919.

⁶ See U.S. Dept. of Agriculture, Foreign Agricultural Service, *Japan: Livestock and Products Annual Report 2006* at [http://www.fas.usda.gov/gainfiles/200608/146208801.pdf].

⁷ Ibid, p. 4.

Canada Situation

After Canada's first BSE-infected cow (from Alberta) was announced in May 2003, USDA published an interim final rule banning all Canadian ruminant and product imports. In August 2003, USDA partially lifted the ban by permitting (without publishing a rule) imports of boneless beef from animals 30 months or younger, among other products. On November 4, 2003, USDA published a proposed rule to permit other Canadian ruminant imports, including younger live cattle. However, USDA already had been expanding the types of Canadian beef permitted without formal rulemaking. In April 2004, in response to a lawsuit by Ranchers-Cattlemen Action Legal Fund USA (R-CALF), a federal judge blocked this expansion, citing concerns about food safety and improper rulemaking procedures. Further expansion in Canadian imports (beyond products announced August 2003) was halted until the October 2003 rule was finalized.⁸

APHIS's final rule in the January 4, 2005 *Federal Register* permits, among other things, imports of live cattle under 30 months old. Specifically, the rule creates a new category of "minimal risk" BSE regions — including those in which BSE-infected animals have been diagnosed but where sufficient regulatory measures have been in place to ensure that the introduction of BSE into the United States is unlikely. The rule further classifies Canada in this category, the first such region to qualify, based on what USDA declared was "a thorough risk analysis."

Five days before the March 7, 2005, effective date for the rule, a Montana federal judge ordered a delay until he could hold a trial on the merits of a new R-CALF lawsuit, charging that USDA had made several procedural and substantive mistakes in this rulemaking. A federal appeals court overruled the Montana judge's decision in July 2005, and cattle imports from Canada soon resumed (see below).

USDA had unveiled the final rule as Canada (in early January 2005) confirmed it had two more BSE cases, in an Alberta dairy cow born before a 1997 ban on feeding most ruminant materials back to ruminants was published, and in an Alberta beef cow born in March 1998 after the feed ban. Another case was reported by Canada in January 2006, in an Alberta crossbreed cow born in 2000, also after the feed ban. Canadian officials said use of contaminated feed was the most likely cause in all cases. Canadian and U.S. government teams had each conducted a review of the Canadian feed ban, and in March 2005 both reported that the ban was effective. Still, critics have questioned those assessments, given that several Canadian cases were born and contracted the disease after the feed ban.

A number of producers and others continue to oppose the entry of Canadian beef and particularly live cattle. Many say they remain worried about the impact on U.S. farm prices as large numbers of cattle again cross the border from Canada, which has reported eight BSE cases, five of them in 2006. Some also argue that opening the border to what they believe are potentially risky Canadian animals undermines efforts to regain the Japanese and Korean markets. Others counter that moving forward with the Canada rule was necessary for the United States to convince other countries that North American beef

⁸ See also CRS Report RL32932, Bovine Spongiform Encephalopathy (BSE, or "Mad Cow Disease") in North America: A Chronology of Selected Events.

is safe, that U.S. and Canadian safeguards are sound, and that all countries should, like the United States, base their import policies on thorough, scientific risk assessments.

Canada historically has exported around 60% of its beef production, and the United States has taken 80%-90% of such exports. Canadian fed steer (slaughter-ready steer) prices had declined substantially from the high US\$70s per cwt. before the May 2003 BSE announcement to the mid-US\$30s shortly afterward. Canadian producers were losing between \$100 and \$200, and in some cases, \$300 per head, according to Cattle-Fax, a marketing information service associated with the industry. Cattle prices climbed through fall 2003, but generally were in the US\$50-\$60 per cwt. range during much of 2004. They reached US\$70s per cwt. during 2005.

Canadian cattle inventory numbers had increased after May 2003, because producers were not permitted to export live animals to the United States and lacked adequate capacity to slaughter them, Cattle-Fax and USDA had observed. Canada then added 30,000 head per week to its total slaughter capacity, a 22% increase in 2004 alone, two meat industry officials told the House Agriculture Committee at a March 1, 2005, hearing. This increase is likely to be permanent and place U.S.-based packers at a competitive disadvantage, because they will not have access to the cattle that Canada will kill rather than export to their plants, meat industry and USDA officials argued.

After the ban on younger Canadian cattle was lifted in July, the United States imported 558,000 head in 2005. A recent report (September 2006) by the FAS agricultural attache in Canada has estimated that 2006 live cattle imports would be 910,000 head — lower than earlier forecast, due partly to increased slaughter capacity in Canada and partly to weaker demand in the United States.

In 2006, USDA has been preparing a proposed rule to permit imports of Canadian cattle over 30 months old. This so-called "Minimal Risk Rule #2" purportedly was slowed while USDA reviewed Canada's latest BSE case, which occurred in a cow born long after Canada's own 1997 "feed ban." Increased Canadian access to U.S. markets for live, older cattle would seem to depend in part on adoption of this rule. Expanded exports of live cattle that would ensue from this rule change could result in additional declines in Canadian slaughter rates.

In Congress. In the 109th Congress, the Senate passed a resolution (S.J.Res. 4) to disapprove the 2005 Canada import rule, by a vote of 52-46. A related resolution (H.J.Res. 23) did not reach the House floor for a vote in 2005. Other bills addressing the 2005 rule included H.R. 187, to prohibit the rule "unless United States access to major markets for United States exports of cattle and beef products is equivalent or better than the access status accorded such exports as of January 1, 2003"; and H.R. 384/S. 108, to prohibit the Canada rule unless mandatory retail country-of-origin labeling (COOL) is implemented. The current statutorily set deadline for COOL for fresh meats is September 30, 2008 (see CRS Report 97-508, *Country-of-Origin Labeling for Foods*). S. 294 would have prohibited imports (from a minimal risk region like Canada) of meat, meat byproducts, and meat food products from bovines over 30 months old unless the Secretary reports to Congress that the region "is in full compliance with a ruminant feed ban and other [BSE] safeguards." New bills are possible in the 100th Congress.

Related U.S. Price and Trade Impacts⁹

Industry analysts believe that the BSE experience has been much less devastating economically in the United States than it has been in other countries. One reason is that the United States, learning from Europe, was able to put BSE safeguards into place prior to its own first case. Also, the U.S. beef industry is much less dependent on export demand than the Canadians, cushioning the price effects. Before the BSE events, Canada exported 37% of its beef production, whereas the United States exported 9%.

In 2003, the U.S. ban on Canadian beef and cattle, coupled with already tight U.S. supplies and strong demand, had driven up U.S. beef and cattle prices substantially. After the December 2003 BSE case was announced, cattle prices fell. However, they had stabilized by early January 2004. Industry analysts reported that U.S. domestic demand (both retail and restaurant, including fast-food hamburger sales) appeared to be holding steady. That, combined with lower U.S. cattle inventories due in part to widespread drought in cattle country, kept cattle and beef prices high during 2004, helping to offset the effects of the BSE-related foreign bans. USDA reported that average U.S. fed steer (i.e., slaughter-ready cattle) prices were nearly \$85 per cwt. for all of 2004, compared with average fed steer prices of \$85 in 2003 and \$67 in 2002.

Nonetheless, foreign import bans mean the domestic market had to absorb some 23 million more pounds of beef weekly or 1.2 billion pounds annually due to lost exports, according to Cattle-Fax. Exports of by-products like collagen, sausage casings, brains, other organs, tongue, tails, and tendons (all adding value to each animal) also were affected by the bans on U.S. beef products. In Japan, as noted, other countries, particularly Australia, have filled U.S. lost market share.

A study by researchers at Kansas State University of the impact that BSE has had on the U.S. beef industry found that average U.S. wholesale boxed beef prices during 2004 were 12 to 17 cents per pound lower than they would have been if all the export markets had been open. The loss of beef export markets also meant that by-product prices were lower than they would have been. The total estimated U.S. beef industry losses attributable to the loss of beef and by-product exports in 2004 ranged from \$3.2 to \$4.7 billion, according to the study.¹⁰

USDA's November 2006 outlook and situation reports estimate that U.S. beef and veal exports have climbed from 209,000 MT and 3% of world market share in 2004, to 523,000 MT and 7% of world market share in 2006. Cattle prices averaged more than \$85 per cwt. in 2006, and were predicted to be \$82-\$88 per cwt. in 2007.

⁹ Sources for this section include USDA/ERS, *Livestock, Dairy, and Poultry Outlook*, various issues, the ERS website (see footnote 2), and ERS, *U.S. 2003 and 2004 Livestock and Poultry Trade Influenced by Animal Disease and Trade Restrictions* (LDPM-120-01), July 2004.

¹⁰ The Kansas State study can be found at [http://www.agmanager.info/livestock/marketing/bulletins%5F2/industry/demand/EconomicImpactofBSEonUSBeefIndustry.pdf].