

NAME THAT COW



U.S. BSE PRECAUTIONS AND TRADE WITH CANADA

Center for Science in the Public Interest

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EXECUTIVE SUMMARY

Despite the discovery of bovine spongiform encephalopathy (BSE) in four Canadian cattle, including one found in the United States, allowing young Canadian cattle to enter the United States does not pose a risk to consumers. In fact, Canada's national mandatory cattle identification system makes it much easier to track cattle between the farm of origin and the slaughter plant. The United States has no mandatory national system.

American cattle producers have enjoyed higher cattle prices since Canadian cattle were banned in May 2003, but public health concerns do not justify keeping the border closed to cattle age 30 months and younger. Instead, American producers should urge USDA to adopt a mandatory animal identification system that is at least as effective as Canada's system. That, together with a national tracking system, would mean that disease outbreaks can be quickly and effectively contained, consumer confidence can be sustained, and export markets successfully pursued. It would do far more to prevent infected cattle from ending up in the food or feed chain than banning young Canadian cattle from the United States.

The animal identification and tracking system in Canada has allowed that country to rapidly identify the origin of animals found to be infected with BSE, identify and test other animals that may have been exposed to the disease, and give timely status reports to the public.

To address BSE in North America:

- The United States should move quickly to implement a national mandatory system requiring all cattle to bear ear tags or other visible identification, indicating the farm of origin and the year of birth.
- The feed bans in place in both the United States and Canada should be strengthened to ban all high-risk cattle parts from being used in animal feed and pet food.
- The United States and Canada should prohibit spinal columns and neck bones from cattle of all ages—not just from those over 30 months—from machines used to separate meat from bone.
- Spinal cord should be banned from other human food.
- The United States should finalize, and Canada should implement, a ban on downer cattle entering the food supply.

INTRODUCTION

In May 2003, the Canadian government announced that it had found in Alberta, Canada its first native cow infected with BSE, or mad cow disease.¹ Immediately, the United States, like many other nations, closed its borders to Canadian beef and cattle exports. Those precautions were meant to protect the cattle and food supply in the United States. Similar steps had been taken against the United Kingdom, Japan, and other countries that had discovered BSE in their cattle herds.

In December 2003, the U.S. Department of Agriculture (USDA) announced the discovery of the first case of BSE in the United States. The cow was found in Washington state, but had been imported from Canada in 2001.² Other countries quickly closed their borders to U.S. beef and cattle imports.

After the first BSE-infected cow was discovered, the Canadian government announced a series of measures to protect the human food supply and animal feed, including a traceback of the infected cow's origin and a trace-forward to determine how its remains were rendered and processed.³ Later in 2003, the government announced that it would require the beef industry to remove specified risk materials (SRM), tissues that can carry the infectious agent for BSE, from cattle at slaughter.⁴ After the U.S. case was discovered, USDA also announced a ban on SRM in human food and other new precautions.⁵ (See Table 1.⁶)

Table 1: Timeline of BSE Safeguards in the U.S. and Canada
Italics indicate proposed safeguards

BSE Safeguards	U.S.	Canada
Import ban imposed on U.K. cattle	1989	1990
Import ban imposed on cattle from all countries where BSE has been detected in native cattle	1989	1994
Feed ban Mammalian protein banned from ruminant feed	1997	1997
Mandatory animal ID and tracking system	--	2001
Specified Risk Materials (SRM) removal		
From cattle at slaughter	2004	2003
From human food	2004	2003
<i>From animal food (strengthening of feed ban)</i>	--	<i>2004</i>
Enhanced BSE surveillance	2004	2004
"Downer" cattle banned from human food chain	2004	--

Until BSE changed the landscape of the beef trade in North America, cattle were freely traded between the United States and Canada. The United States was a major importer of both beef and cattle, mostly from Canada and Mexico.⁷ In 2002, the year before the border with Canada was closed, the United States imported nearly 1.7 million cattle from Canada.⁸

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Infected feed is considered the primary root of BSE transmission among cattle.⁹ If infected feed was produced in Canada in the mid-1990s, as most experts suspect, closing the border to Canadian cattle in 2003 came too late to prevent the transfer of the disease. Feed was also traded between the United States and Canada during this time period. Thus, cattle possibly exposed to BSE-infected feed have long been entering slaughter and rendering plants in the United States, with meat going into grocery stores and restaurants. The key to protecting the human food supply is through strong safeguards against high-risk cattle parts, like brain, spinal cord, and the distal ileum, entering meat products.

In late 2004, the USDA declared plans to reinstate U.S. trade in beef and cattle with Canada. The agency had developed a new policy for designating “minimal-risk regions” for BSE, and Canada was the first country deemed to meet those criteria.¹⁰ Government officials in both countries announced that U.S.-Canada beef trade would resume in early March 2005.

Immediately after, however, the Canadian Food Inspection Agency (CFIA) confirmed two new cases of BSE, one in a cow born in 1998, after Canada’s feed ban had been implemented.¹¹ Canadian officials believe that that animal probably became infected through feed that was produced before the feed ban took effect.¹²

This new case, however, raised concerns among some in the U.S. cattle industry and their supporters in Congress about the wisdom of re-opening the border to Canadian cattle. Some industry and non-profit groups even claimed that resuming beef trade with Canada would endanger public health.¹³ Heavy news coverage of mad cow disease has raised the profile of the new import policy and contributed to the perception that young cattle coming from Canada could somehow endanger American consumers.

While the new BSE cases are troubling, they are not unexpected. If these cases were caused by contaminated feed circulating in North America in the 1990’s, then many cattle were likely exposed to it during the same time

period. While most cattle are slaughtered when they are young and before the infection spreads, dairy cows and other older animals are just reaching the age when the infection could appear. USDA's February 2005 technical assessment supports the Canadian position that these cases are related to consuming infected feed produced prior to 1997 and do not reflect an on-going problem.¹⁴ The United Nations' Food and Agriculture Organization (FAO) agreed that the recent cases were "isolated incidents" that should not alarm consumers.¹⁵

It is fortunate that, despite the free trade in cattle across North America, most of the infected cows have been discovered in Canada, where an animal tracking system had been instituted before BSE was discovered. The Canadian system for animal identification allows Canada to easily trace the history of cattle infected with BSE. Indeed, the Canadian system for mandatory identification and traceability is far superior to the preliminary steps taken by the U.S. government toward establishing a system that is only voluntary.

BANNING CANADIAN CATTLE UNDER 30 MONTHS OF AGE HAS NO MEANINGFUL IMPACT ON PUBLIC HEALTH

USDA's new "minimal risk" policy would allow into the United States only

Canadian cattle

(and beef from cattle) 2.5 years of age or younger.¹⁶

The vast majority of cases, including all of those found in North America, have occurred in much older cattle—at least 6 years old.¹⁷ Also, Canadian cows coming into the United States under the new rule were

born long after the 1997 Canadian feed ban was put in place. (See Table 2.)

Table 2: Comparison between the Ages of the BSE-Positive Cattle and the Ages of Cattle Eligible for Importation into the U.S. from Canada

Confirmed BSE Cases	Date of Birth	Age
May 20, 2003; Alberta, Canada	March 1997	6 years
Dec 23, 2003; Washington State, U.S. (imported from Alberta, Canada in 2001)	Apr 9, 1997	6.7 years
Jan 2, 2005; Alberta, Canada	Oct 5, 1996	8 years
Jan 11, 2005; Alberta, Canada	Mar 21, 1998	6.75 years
Cattle eligible for importation into the U.S. from Canada	After Oct 2002	2.5 years or less

Under the new policy, only Canadian cattle born in 2002 or later would be eligible for importation to the United States. There is little chance that those younger cattle would be exposed to contaminated feed. After 1997, animal

What is the likely risk to human health?

The risk of Americans developing vCJD due to occasional BSE-infected cattle entering the food supply, based on the British experience appears to be minuscule. Though no U.S.-born and only four Canadian infected cows have been discovered, let's assume that 100 infected animals got into the U.S. food supply. That's one animal per 3 million people. In the United Kingdom, 3.3 million animals infected with BSE were consumed by the population of 60 million people, or about one animal per 18 people. Thus, British consumers may have been exposed to meat from BSE-infected cattle 164,000 times more frequently than American consumers.

The far heavier British exposure has led to about 160 deaths. If risk is proportional to exposure, then the minimal (if any) exposure in the United States means the public health risk is truly minute.

While precautions are important when it comes to protecting the food supply from BSE, that foodborne threat pales in comparison to *Salmonella*, which each year sickens an estimated 1.3 million Americans and kills some 550, according to the Centers for Disease Control and Prevention, let alone the tens of thousands of people who die prematurely from heart disease linked to the saturated fat in beef.

feed was required by law to have labeling indicating whether it was intended for consumption by cattle and other ruminants. Feed with bovine material in Canada was specifically labeled, "Do not feed to cattle, sheep, deer or other ruminants."¹⁸ In addition, feed produced prior to 1997 would likely have been used up or spoiled in the intervening years.

The Canadian government recently proposed further tightening of its feed ban, including prohibiting all SRM in animal feed and pet food, in order to diminish the potential for cross-contamination of animal feeds in the production and distribution chains.¹⁹

The Canadian government should take that additional step, as should the U.S. government. But consumers should remember that the risk of contracting the human form of BSE is exceedingly small. (See box.²⁰) In Britain, where 180,000 cattle were diagnosed with BSE and beef-eating consumers were likely exposed to an estimated 3.3 million BSE-infected cattle which entered the human food supply,²¹ only about 160 people contracted the human form of the disease called Variant Creutzfeldt-Jakob Disease (vCJD).²² While the disease is horrible and inevitably fatal, it

is nevertheless quite rare, even in Britain. In North America, BSE is a much greater threat to the cattle and beef industries than to human health. The current controversy about importing cattle is much more about economics and trade than health.

Although opponents of reopening the borders with Canada have so far been successful in both the courts and with Congress, this policy is not providing additional public health protection from BSE. The Ranchers-Cattlemen Action Legal Fund, United Stockgrowers of America (R-CALF-USA) filed a lawsuit in January against USDA to keep the U.S.-Canadian border closed.²³ R-CALF, which represents U.S. cattle producers in domestic and international trade and marketing issues, has opposed the resumption of beef and cattle imports from Canada, on the grounds that it would “expose U.S. consumers to increased risk of an invariably fatal disease associated with consumption of BSE-contaminated meat, will increase the risk of invariably fatal BSE infection in cattle in the United States, and will expose U.S. cattle producers to severe economic hardship.”²⁴ On March 2, 2005, the court stopped USDA from opening the border as planned.

Meat processors have filed their own lawsuits. In December 2004, their trade association, the American Meat Institute (AMI), filed a lawsuit against the USDA to completely reopen the beef trade between the United States and Canada.²⁵ While self-interest is a motivation in the AMI’s position (AMI members benefit from beef imports and lower beef prices), the group has buttressed its claims with data from mainstream science journals and studies.²⁶ Nonetheless, the court recently rejected the AMI suit.

The U.S. Senate on March 3, 2005 approved a resolution to block USDA’s plan to resume cattle imports from Canada in part to regain access to the Japanese market.²⁷ However, the Japanese government has reportedly indicated that this Congressional action, initiated by R-CALF, could delay the reopening of Japan to U.S. beef.²⁸ Japanese consumers see the Canadian and U.S. cattle and beef industries as highly integrated and the debate here has raised their anxiety about beef from this region, according to Japanese officials.

R-CALF stated that the resumption of beef and cattle imports from Canada will “expose U.S. consumers to increased risk of an invariably fatal disease associated with consumption of BSE-contaminated meat, will increase the risk of invariably fatal BSE infection in cattle in the United States, and will expose U.S. cattle producers to severe economic hardship.”

CANADA’S ANIMAL IDENTIFICATION AND TRACKING POLICIES PROVIDE BETTER PROTECTION WHEN BSE IS DISCOVERED

Arguments against reopening the U.S. border to Canadian imports are often based on the assumption that the U.S. regulatory system for BSE protection measures is superior to the Canadian system.²⁹ That assumption is off-base,

particularly when it comes to tracking the history of infected cattle. Canada's national animal identification and tracking system was introduced in 2001, before the first native case of BSE was found. It has enabled officials there to quickly and thoroughly trace the history and movements of infected animals.

Cattle in the United States are not subject to any identification requirements, making traceback difficult and sometimes impossible. The USDA investigation that followed the discovery of a BSE-positive cow in December 2003 was frustrated by the lack of a national identification system. The USDA was able to account for only 28 of the 80 head of cattle that came into the United States from Canada with the infected cow.³⁰

In Canada, however, where the two recent cases were confirmed earlier this year, officials were able to quickly identify the birth cohorts of the affected animals (cattle born on the farm of origin the 12 months before and after the birth of the affected animal) and trace and test surviving cattle. In the case confirmed on January 2, 2005, 135 animals were determined to have been in the birth cohort. Only nine of those cattle were still living, and all tested negative for BSE. In the most recent case of BSE, confirmed on January 11, 2005, 41 animals from the birth cohort were confirmed to be alive. All those cattle were slaughtered and tested for BSE, all with negative results.³¹ (See Table 3.³²)

Table 3: Proportion of Birth Cohort Herd Identified for Each of the Confirmed BSE Cases

Birth cohort includes cattle born on the farm of origin within 12 months before and 12 months after the birth of the affected animal.

Confirmed BSE Cases	Birth Cohort Size	Proportion of Birth Cohort Identified
May 20, 2003; Alberta, Canada	undetermined	undetermined
Dec 23, 2003; Washington State, United States Birth herd in Alberta, Canada Herd imported to United States in 2001 Animals imported & also from birth herd	57 81* 25	55 out of 57 29 out of 81 14 out of 25
Jan 2, 2005; Alberta, Canada	135	135 out of 135
Jan 11, 2005; Alberta, Canada	349	349 out of 349

* Eighty other animals were imported into the United States from Canada in 2001 along with the cow later found to be infected with BSE. Twenty-five of these 81 animals in that shipment were identified as originating from the Alberta, Canada birth herd of the BSE case. Of these 25 animals that entered the United States from the birth herd in Alberta, Canada, only 14 were definitively identified by USDA.

An International Review Team convened by USDA that investigated the BSE case in Washington state urged the United States to implement a national identification system. The committee noted that the absence of such a system “necessitated a more extensive tracing exercise than would otherwise have been necessary in order to identify cattle to be culled in accordance with international standards.”³³ Difficulties in traceback also forced the unnecessary destruction of all 449 bull calves at a U.S. feedlot, because one male offspring of the BSE-infected cow that had been sold to that feedlot could not be identified.³⁴ Although USDA is in the process of establishing a national livestock identification program in the United States, the program is entirely voluntary.³⁵

In contrast, Canada has a mandatory national cattle identification system that was put in place on January 1, 2001, with full enforcement since 2002.³⁶ Cattle have to be fitted with a Canadian Cattle Identification Agency (CCIA) ear tag, including a visible unique number, bar code, and CCIA logo by the time they leave their herd of origin. If a health or safety problem with an animal arises, authorities can trace both forward from its herd of origin and backward from the last location of the animal. While the program was developed by the industry, the CFIA is responsible for enforcing it.

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Canada’s program is monitored and upgraded periodically to take advantage of technological advances. For example, the CCIA has allowed the use of Radio Frequency Identification (RFID) ear tags.³⁷ According to the CCIA, the use of RFID will speed data collection and the agency’s ability to transfer information quickly and accurately.³⁸ The CFIA is also improving the program by instituting stronger enforcement and improved linkages with provinces, territories, the cattle industry, and their trading partners.³⁹

Canada’s modern animal tracking program was crucial to the government’s successful efforts to quickly identify and test cattle that might have been exposed to animals infected with BSE or infectious feed.⁴⁰ Sporadic new cases of BSE in North America underscore the importance of having an effective system that can track backwards in time.

USDA’s decision to reopen the U.S. market to Canadian cattle and beef should have no adverse impact on public health. Instead, consumer concern

should focus on the absence of a comparable national program for animal identification in the United States. Not only does this create greater risk to the public, it undermines the utility of Canada's traceback system, as it opens the door to U.S. farmers to remove the ear tags from Canadian cattle to increase marketability. A Missouri cattleman, for example, recently found himself in possession of a "mystery herd."⁴¹ He had bought the cattle, which originally came from Canada, in Iowa, but they were delivered without their Canadian ear tags or health certificates. Following a USDA investigation, the seller and a veterinarian who removed the ear tags were both fined. That situation could have been avoided if the United States had had a comprehensive, mandatory identification system in place.

MANY OTHER COUNTRIES HAVE IMPLEMENTED ANIMAL IDENTIFICATION SYSTEMS

Responding to Animal Diseases ...

National animal identification systems are often implemented to protect against the spread of animal diseases, some of which also affect human health. Foot and mouth disease and bovine tuberculosis outbreaks have historically been controlled through the geographical containment and controlled movement of livestock, and sometimes the destruction of infected animals.

BSE is a relatively new animal disease. Since it was first identified in the United Kingdom in 1986, BSE has also spread to other European countries, such as Ireland, France, Germany, Portugal and Spain, as well as to Japan, through export of BSE-infected animals and/or BSE-contaminated feed ingredients.⁴²

In response to animal-disease outbreaks, including BSE and foot and mouth disease, both the British government and the European Commission (the executive body of the European Union) have instituted mandatory

In Britain, where such a system was put in place in 1998, Defra can trace an animal to its birth herd "in a matter of seconds."

identification and tracking systems. In Britain, where such a system was put in place in 1998, the Department of Environment, Food and Rural Affairs (Defra) can trace an animal to its birth herd "in a matter of seconds."⁴³ The UK Cattle Tracing System program is funded almost entirely by the government; the only direct cost to producers is the ear tags.⁴⁴ The European Union (EU)

has its own identification and registration system to enhance consumer confidence in the safety of ruminant livestock, to protect public health, and to

reinforce stability in the livestock market.⁴⁵ Shortly after birth, cattle, sheep, and goats are issued individual “passports” with their identification tag number, birth date, sex, breed or color, parents’ tag numbers, farm of birth, and a list of all farms on which the animal has been kept.⁴⁶ Those passports must accompany animals whenever they are moved.

In Japan, where the first case of BSE was confirmed in 2001, the government implemented a mandatory traceability program in 2003.⁴⁷ The program was started as part of an emergency project to address a decline in beef consumption following disease outbreaks and food-labeling scandals. Eventually, Japanese farmers will bear the costs of tagging.⁴⁸

...And Meeting the Demands of the Global Markets

New Zealand implemented a mandatory animal identification system in 1999, with full implementation by 2001, to help control the movement of cattle from regions with bovine tuberculosis.⁴⁹ The system has also proven important in

New Zealand Ear Tags

The diagram illustrates the New Zealand Ear Tag system, divided into Primary Tags and Secondary Tags.

PRIMARY TAGS

These are two-piece tags. Only the front piece shows here – it must be yellow and have a barcode.

Three examples of primary tags are shown:

- Tag 1 (AHB):** Features the AHB logo, a year code (optional) '1234567', an AHB herd number, a barcode, and an animal number '528'.
- Tag 2 (LIC):** Features the LIC logo, an LIC participant code 'BCDF', and an animal number '99523'.
- Tag 3 (LIC):** Features the LIC logo and an animal number '1678'.

SECONDARY TAGS

Secondary tags can be different colours. Yellow primary tags can also be used as secondary tags.

Three examples of secondary tags are shown:

- A green circular tag with the year code '1234567'.
- A yellow plastic tag.
- An official brass tag, available only for the LIC MINDA service.

The farmers attach ear tags to each animal, including a primary one with a barcode, visible animal number, and herd or participant code. A secondary tag is used in the other ear to identify the herd or participant code. Cattle can be sent to slaughter with only a primary tag.

audits of New Zealand’s food-safety program by U.S. and EU officials. For example, New Zealand and other beef exporters must be able to identify cattle treated with hormones, as meat from those animals is allowed into the United

States but barred from the European Union. Farmers pay for the tags and must identify cattle before they leave the farm. The government audits sale barns to ensure that all cattle moving through them have ear tags.

Australia, the world's largest beef exporter, is also implementing a comprehensive National Livestock Identification System to facilitate market access, allay consumer concerns about food safety, and minimize the impact of disease outbreaks and residue incidents.⁵⁰ The producer pays for the tags and applicators to fasten them on the animals.⁵¹



Brazil, another major beef exporter, has sought to position itself as an exporter of high-quality “natural” grass-fed beef.⁵² In April 2004, the Brazilian Ministry of Agriculture and its livestock export certification agency, seeking to meet European import requirements, contracted with a technology company to develop a national food safety tracing program for livestock.⁵³ Brazil is aiming to have its entire herd registered by December 2007.

Argentina has established an Export Cattle Identification System that requires mandatory identification of every animal produced for export. Because outbreaks of animal diseases, such as foot and mouth disease, have been major problems in Argentina, it would not be surprising to see the government broaden its traceability program to all cattle.⁵⁴ Even Uruguay, wanting access to the EU market, is moving toward a mandatory cattle identification system.⁵⁵

U.S. CONSUMERS SHOULD ALSO REAP THE BENEFITS OF MANDATORY IDENTIFICATION AND TRACKING SYSTEMS

As several beef-producing countries have realized, one of the most important measures governments can take to ensure consumer confidence in their beef and access to global markets is to implement a mandatory system of livestock identification and tracking. The U.S. government should follow their lead. Although USDA has been developing a National Animal Identification System (NAIS) for years, it has so far been viewed only as a voluntary program.

The goal of NAIS is to identify all animals and premises that have had contact with a foreign or domestic animal or disease within 48 hours after discovery

of a disease.⁵⁶ However, if animal identification is not made mandatory, the system will not be enforceable and a significant number of potentially infected animals could escape identification.

A mandatory system also makes sense in light of the bioterrorism threat. As former Health and Human Services Secretary Tommy Thompson observed just before his departure, the U.S. food supply is vulnerable to attack on a range of fronts. The FDA pointed out in an October 2003 report to Congress that “sources of food contamination are as numerous and varied as the potential contaminants.”⁵⁷ Animal diseases such as foot and mouth disease are among those potential threats. In a 2003 report on food security, Secretary Veneman cited agricultural production as USDA’s top priority in protecting our country from terrorism.⁵⁸

The U.S. beef industry likely would be the biggest beneficiary of an identification and traceback system. Since the 2003 discovery of BSE in the United States as well as the several Canadian cases, exports have plummeted, and the U.S. beef trade deficit has soared.⁵⁹ The economic impact of the BSE case on the U.S. industry could have been substantially mitigated if a mandatory identification system had been in place in 2003. Most of the economic damage to the industry has resulted from the ban on U.S. beef imports to Japan and Korea. Japan had been the largest importer of U.S. beef. While Japan has expressed a willingness to resume importing U.S. beef from cattle under 20 months of age, the negotiations are stymied because, without a mandatory identification system, exporters cannot prove which cattle are eligible.⁶⁰ Instead, the United States determines the age of cattle by certain dental or bone features that appear when the cattle are about 30 months old. If the United States had a mandatory identification system, younger cattle could be easily identified and exported.

While Japan has expressed a willingness to resume importing U.S. beef from cattle under 20 months of age, the negotiations are stymied because, without a mandatory identification system, exporters cannot prove which cattle are eligible.

However, resistance from some industry groups has delayed implementation of such a system. Congress debated traceability both in the context of country-of-origin food-labeling legislation—in which a mandatory identification system was specifically prohibited⁶¹—and the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (the Bioterrorism Act). In both of those debates, the cattle industry expressed concern about mandatory regulation.⁶² In a recent poll of subscribers to Meatingplace.com, a website that covers issues of concern to the meat and

poultry industries, a mandatory national animal identification regulation was rated the number-one concern for 2005.⁶³

There appears to be growing support for animal identification and traceability among a diverse industry coalition, including small farmers and huge global food companies.

- Robin Giles, a Texas rancher who has been tagging his herd for years, told the *San Antonio Express-News* in January, “If the consumer does not have confidence in the food source, as far as I’m concerned, we’re going to be out of business.”⁶⁴
- Oren Smith, president of the Washington (PA) County Cattlemen’s Association and owner of a 100-head beef herd, told the *Pittsburgh Post-Gazette* in 2004, “I am in favor of following every animal through the system.”⁶⁵
- “With any of these outbreaks, the quicker we get a traceback, the better off we’re going to be,” Washington rancher Dick Coon told *The Seattle Times* last December. “From my point of view, it’s just absolutely necessary to protect our industry.”⁶⁶
- The AMI, which represents packers and processors of beef and other meat products, has come out firmly for mandatory livestock identification as soon as possible. “Indeed, a mandatory program is essential given the potential damage that could occur if rapid traceback was not possible during an animal disease outbreak,” the group said in September 2004 in its comments on proposed measures to mitigate BSE risks.⁶⁷ “Moreover, the burdens that, at least conceptually, have been articulated about a mandatory system, e.g., potential product liability and confidentiality, pale in comparison to the risks the entire animal agriculture system faces in the absence of a mandatory system and the benefits to animal agriculture if such a system was in place, particularly in the event of an animal disease outbreak.”
- Perhaps most significant, in terms of its potential impact on the industry, was McDonald’s Corporation’s public position in favor of full identification and traceback. John Hayes, the giant restaurant company’s senior director of U.S. food and packaging, told an industry conference in September 2004 that “animal identification is a core competency the industry has to develop.”⁶⁸ McDonald’s set a goal for traceback of 10 percent of its beef by the end of 2004, a goal that was

“If the consumer does not have confidence in the food source, as far as I’m concerned, we’re going to be out of business.”

-Robin Giles,
Texas rancher

exceeded by early October of that year.⁶⁹ The company has a “global goal” of 100 percent traceability, but has not yet announced a target date for meeting it.⁷⁰

The timely establishment of a mandatory system could limit the economic impact of future disease outbreaks. It also makes economic sense on the individual level. As Washington rancher Dick Coon told *The Seattle Times*, he expects to profit from the tagging system he is using in a USDA-sponsored pilot project because it will be easier for him to gather and analyze information about his herd.⁷¹ It would be worthwhile—for the cattle industry, meat processors and consumers—for the United States to adopt such a system.

CONCLUSION

There is no public health rationale for banning the importation of Canadian cattle that are 30 months and younger. The arguments against that policy are largely grounded in trade concerns: American cattle ranchers are getting a higher price for their cattle while the border remains closed.

The real danger to American consumers comes from the absence of a national system requiring that animals be individually identified. When a true food-safety problem arises, be it from BSE, *Salmonella*, or life-threatening *E. Coli* bacteria, it can be traced back to its source. Without this, the United States will not regain all of its export markets for beef products.

Aside from the animal identification and tracking issues, both the United States and Canada have implemented systems for preventing the occurrence and spread of BSE, but both systems could be strengthened. Both should implement recommendations of the international review teams to ban all high-risk cattle parts from animal feed and pet food. In addition, USDA and Canada should ban all spinal and neck bones from food production. Finally, USDA should finalize its ban on downer cattle in the food supply and Canada should implement a similar ban.

NOTES

¹ Government of Canada/Government of Alberta, *BSE Disease Investigation in Alberta*, News release, May 20, 2003, available at:

<<http://www.inspection.gc.ca/english/corpaffr/newcom/2003/20030520e.shtml>>.

² FDA CFSAN, *Commonly asked questions about BSE in products regulated by FDA's Center for Food Safety and Applied Nutrition*, January 14, 2004, available at:

<<http://www.cfsan.fda.gov/~comm/bsefaq.html>>.

³ CFIA, *BSE Disease Investigation in Alberta (2003)*, available at:

<<http://www.inspection.gc.ca/english/anima/heasan/disemala/bseesb/ab2003/ab2003e.shtml>>.

According to the CFIA, no part of the cow entered the human food supply.

⁴ Health Canada, *Government of Canada announces new BSE measure*, News release, July 18, 2003, available at: <<http://www.hc-sc.gc.ca/english/media/releases/2003/bse.htm>>.

⁵ USDA, *Veneman announces additional protection measures to guard against BSE*, News release, December 30, 2003.

⁶ 70 Fed. Reg. at 462; CFIA, *Canada: A minimal BSE risk country*, December 2003, available at: <<http://www.inspection.gc.ca/english/anima/heasan/disemala/bseesb/minrise.shtml>>; 62

Fed. Reg. at 30935; CFIA, *Canadian Food Inspection Agency's (CFIA) feed ban*, Fact sheet, available at: <<http://www.inspection.gc.ca/english/anima/feebet/rumin/ruminfse.shtml>>;

CCIA, *Details of the Canadian cattle identification program*, available at:

<<http://www.canadaid.com/about/details.shtml>>; Health Canada, *Regulations amending the Food and Drug regulations (1389 - specified risk material)*, SOR/2003-265, July 24, 2003,

available at: <[http://www.hc-sc.gc.ca/food-aliment/friia-raaii/food_drugs-](http://www.hc-sc.gc.ca/food-aliment/friia-raaii/food_drugs-aliments_drogues/part-partie_11/e_1389.html)

[aliments_drogues/part-partie_11/e_1389.html](http://www.hc-sc.gc.ca/food-aliment/friia-raaii/food_drugs-aliments_drogues/part-partie_11/e_1389.html)>; CFIA, *Development of specific regulatory enhancements to Canada's BSE feed controls*, Information paper, available at:

<<http://www.inspection.gc.ca/english/anima/feebet/rumin/docinfoe.shtml>>; USDA APHIS, *Bovine spongiform encephalopathy (BSE) surveillance plan, March 15, 2004*, available at:

<http://www.aphis.usda.gov/lpa/issues/bse/BSE_Surveil_Plan03-15-04.pdf>; CFIA, *Government of Canada announces enhancements to surveillance and animal tracking systems*, News release, January 9, 2004, available at:

<<http://www.inspection.gc.ca/english/corpaffr/newcom/2004/20040109e.shtml>>; 69 Fed. Reg. at 1870, amending 9 CFR 309.2.

⁷ USDA ERS, *Cattle: trade*, Briefing, available at:

<<http://www.ers.usda.gov/Briefing/Cattle/Trade.htm>>.

⁸ USDA ERS, *Cumulative U.S. meat and livestock trade*, available at:

<<http://www.ers.usda.gov/Briefing/Cattle/Data/AnnualLivestockTable.xls>>.

⁹ 69 Fed. Reg. at 462. The feed ban in the UK, the country with by far the greatest incidence of the disease, is considered to have been crucial in bringing it under control.

¹⁰ 70 Fed. Reg. at 459.

¹¹ CFIA, *BSE in North America: Latest information (as of January 11, 2005 – 14:00 EST)*, available at:

<<http://www.inspection.gc.ca/english/anima/heasan/disemala/bseesb/situatione.shtml>>.

¹² CFIA, *Questions and answers: case #3 (confirmed January 11, 2005)*, available at:

<<http://www.inspection.gc.ca/english/anima/heasan/disemala/bseesb/ab2005/3queste.shtml>>.

The USDA's technical assessment concluded that Canada's feed ban was effective and that producers' compliance with the ban was good. The technical team sent by the National Cattlemen's Beef Association (NCBA) drew similar conclusions. See USDA Assessment at 36-38; NCBA Canadian Trade Delegation Final Report, page 12, available at

<www.beefusa.org/documents/ACF985.pdf>.

¹³ See, e.g., Public Citizen, letter to Ann Veneman and Mike Johanns, January 5, 2005; *Claims and assumptions underpinning the final USDA minimal BSE risk rule: Are they valid?* R-CALF USA handout, January 28 2005.

¹⁴ USDA, *U.S. Department of Agriculture's Assessment of the Canadian Feed Ban*, February 25, 2003, available at: <<http://www.aphis.usda.gov/lpa/issues/bse/bse.html>> (hereinafter USDA Assessment).

¹⁵ FAO, *Recent cases of "mad cow disease" are isolated incidents*, News release, February 7, 2005, available at:

<www.fao.org/newsroom/en/news/2005/89641/print_friendly_version.html>.

¹⁶ USDA, *Statement by Agriculture Secretary Mike Johanns*, Press release no. 0047.05, February 9, 2005. On February 9, the incoming Agriculture Secretary Mike Johanns announced that meat from animals 30 months or older could not be imported, because "our ongoing investigations into the recent finds of BSE in Canada in animals over 30 months are not complete." This policy seems to make sense.

¹⁷ CFIA, *BSE in North America*, available at:

<<http://www.inspection.gc.ca/english/anima/heasan/disemala/bseesb/bseesbindexe.shtml>>.

¹⁸ CFIA, *Questions and Answer about the Canadian Feed Ban*, January 18, 2005, available at <http://www.inspection.gc.ca/english/anima/feebet/rumin/ruminfse.shtml>

¹⁹ CFIA, *New regulations proposed for BSE-related feed controls*, News release, December 10, 2004, available at:

<<http://www.inspection.gc.ca/english/corpaffr/newcom/2004/20041210e.shtml>>.

²⁰ CSPI's analysis to support "What is the likely risk to human health?":

U.K.: 60 million people/3.3 million infected cattle=18 people per infected animal

U.S.: 295 million people/100 infected cattle=2.95 million people per infected animal

Difference in exposure: 2.95 million people/18 people=163,888

U.K.: 160 vCJD deaths

U.S.: 160 U.K. vCJD deaths/163,888=0.000976 vCJD deaths.

²¹ Ferguson NM, Donnelly CA. Assessment of the risk posed by bovine spongiform encephalopathy in cattle in Great Britain and the impact of potential changes to current control measures. *Proc. R. Soc. Lond. B* 2003: 03PB0529.1-6.

²² UK Department of Health, *Creutzfeld-Jakob disease in the UK*, Press release, March 8, 2005, available at: <<http://www.dh.gov.uk/assetRoot/04/10/53/47/04105347.pdf>>.

²³ R-CALF USA, *Ranchers Cattlemen Action Legal Fund United Stockgrowers of America v. United States Department of Agriculture, Animal and Plant Health Inspection Service: Verified complaint for declaratory and injunctive relief* (D. Mont., January 10, 2005), available at: <<http://www.r-calfusa.com/BSE/1-10-05.%20R-CALF%20USA%20Complaint%20against%20Final%20Rule.pdf>>.

²⁴ *Ibid.*, p.2.

²⁵ AMI, *American Meat Institute files challenge to continuing ban on Canadian cattle*, Press release, December 30, 2004, available at:

<<http://www.meatami.com/Template.cfm?Section=Current&template=PressReleaseDisplay.cfm&PressReleaseID=2246>>.

²⁶ AMI, *American Meat Institute Foundation says Lancet study supports efficacy of existing BSE firewalls to protect human health*, Press release, January 27, 2005, available at:

<<http://www.meatami.com/Template.cfm?Section=Current&template=PressReleaseDisplay.cfm&PressReleaseID=2288>>.

²⁷ S. J. Res. 4; Similar legislation has been introduced in the House (H. J. Res. 23), but has not been voted on.

²⁸ Jim Wiesemeyer, *Japanese Officials Meet with R-CALF and Inform the R-CALF's Actions 'Will Actually Delay Re-Opening of Japanese Border' To American Beef*, Inside Washington Today, March 15, 2005.

²⁹ R-CALF, *Why the United States should immediately cancel its proposed rule establishing a BSE minimal-risk region, adding Canada to that region, and re-opening the Canadian border to live cattle and beef. And further, why the United States should immediately retract the USDA decision to allow boxed beef into the United States from Canada*, Talking points, March 29, 2004, available at: <<http://www.r-calfusa.com/BSE/3-29-04.%20Talking%20Points.pdf>>.

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- ³⁰ USDA APHIS, *BSE Update – February 9, 2004*, available at: http://www.aphis.usda.gov/lpa/issues/bse/updates/bse_update02-09-04.htm.
- ³¹ CFIA, *BSE disease investigations in Alberta (2005): Questions and answers - case #2 and case #3*, available at: <http://www.inspection.gc.ca/english/anima/heasan/disemala/bseesb/ab2005/ab2005e.shtml>.
- ³² CFIA, *Summary of the report of the investigation of bovine spongiform encephalopathy (BSE) in Alberta, Canada*, available at: <http://www.inspection.gc.ca/english/anima/heasan/disemala/bseesb/evalsume.shtml>; CFIA, *CFIA's investigation into the December 2003 BSE case found in Washington state, US*, available at: <http://www.inspection.gc.ca/english/anima/heasan/disemala/bseesb/america/amerinveste.shtml>.
- ³³ USDA, Foreign Animal and Poultry Disease Advisory Committee, Subcommittee on the United States' Response to the Detection of a Case of Bovine Spongiform Encephalopathy, *Report on measures relating to bovine spongiform encephalopathy (BSE) in the United States*, February 2, 2004, at p. 2 (hereinafter IRT Report).
- ³⁴ USDA APHIS, *BSE update - February 6, 2004*, available at: http://www.aphis.usda.gov/lpa/issues/bse/updates/bse_update02-06-04.html.
- ³⁵ USDA APHIS *National Animal Identification System (NAIS) Q&A* says that "Eventually, USDA may move toward a requirement for mandatory premises and animal identification for all species included in the system." Available at: http://animalid.aphis.usda.gov/nais/about/nais_qa_factsheet.shtml#27. But for now the system is voluntary.
- ³⁶ CCIA, *Details of the Canadian cattle identification program*, available at: <http://www.canadaid.com/about/details.shtml>.
- ³⁷ CCIA, *6 CCIA approved RFID tags for use in cattle identification program*, available at: http://www.canadaid.com/tags/tag_options.shtml.
- ³⁸ CCIA, *RFID will benefit the Canadian cattle identification program*, available at: <http://www.canadaid.com/rfid%20for%20website.pdf>.
- ³⁹ CFIA, *Enhancements to BSE surveillance and animal tracking*, Fact sheet, January 9, 2004, available at: <http://www.inspection.gc.ca/english/anima/heasan/disemala/bseesb/bseesbsurvise.shtml>.
- ⁴⁰ CFIA, *BSE investigation on January 2 case concludes*, News release, January 21, 2005, available at: <http://www.inspection.gc.ca/english/corpaffr/newcom/2005/20050121e.shtml> "Canada's ability to quickly exhaust all lines of inquiry clearly demonstrates the effectiveness of the systems in place to respond to BSE. It also reflects the commitment to food safety stewardship and diligent record keeping of cattle producers and industry representatives that have assisted in this investigation."
- ⁴¹ Mike McGraw, "Mad cow defenses called into question," *The Kansas City Star*, January 30, 2005.
- ⁴² World Organisation for Animal Health, *Number of reported cases of bovine spongiform encephalopathy (BSE) in farmed cattle worldwide (excluding the United Kingdom)*, available at http://www.oie.int/eng/info/en_esbmonde.htm.
- ⁴³ Bob Brewin, quoting Tony McDougal, spokesman for UK Department of Environment, Food and Rural Affairs, "US lags beef exporter nations in developing cattle ID system," *Computer World*, December 30, 2003, available at: www.computerworld.com/printthis/2003/0.4814.88680.00.html.
- ⁴⁴ Defra, *Cattle Tracing System*, available at: <http://www.defra.gov.uk/animalh/tracing/cattle/cts.htm>.
- ⁴⁵ European Parliament and Council, Regulation (EC) No 1760/2000 of the European Parliament and of the Council of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/97, *Official Journal of the European Communities* L 204(2000): 1-10.

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- ⁴⁶ Clint Peck, Senior Editor, "Around the ID world," *Beef Magazine*, December 1, 2003, available at: <http://beef-mag.com/mag/beef_around_id_world/>.
- ⁴⁷ Embassy of Japan, *Japan's Policy on BSE and Food Safety*, available at: <<http://www.us.emb-japan.go.jp/english/html/fafacts/bse/bse.htm>>.
- ⁴⁸ Taiga Uranaka, "Tracking systems try to tackle food safety," *The Japan Times*, May 1, 2002, available at: <<http://www.japantimes.co.jp/cgi-bin/getarticle.pl5?nn20020501b3.htm>>.
- ⁴⁹ The Knowledge Basket: New Zealand's Research Archive, *Biosecurity (Animal Identification Systems) Regulations 1999*, available at: <<http://rangi.knowledge-basket.co.nz/regs/regs/text/1999/1999125.txt>>.
- ⁵⁰ Meat and Livestock Australia, *About the NLIS*, Fact sheet, available at: <<http://www.mla.com.au/content.cfm?sid=1350>> MLA is a producer-owned company that provides services to the entire Australian red meat industry.
- ⁵¹ Queensland Government DPI&F, *NLIS and QNIC Frequently asked questions*, available at: <www.dpi.qld.gov.au/nlis/15103.html>.
- ⁵² Clint Peck, Senior Editor, "What is Brazil's threat?" *Beef Magazine*, May 1, 2004, available at: <http://beef-mag.com/mag/beef_brazils_threat/index.html>.
- ⁵³ Digital Angel Corporation, *Digital Angel Corporation to provide food safety and export assurance systems for Brazil's National Livestock Identification Project*, Press release, April 17, 2004, available at: <www.digitalangelcorp.com/about_pressreleases.asp?RELEASE_ID=55>.
- ⁵⁴ Diogo M. Souza-Monteiro and Julie A. Caswell, *The economics of implementing traceability in beef supply chains: Trends in major producing and trading countries*, Working paper no. 2004-6, University of Massachusetts Amherst, June 2004, pages 16-17, available at: <<http://www.umass.edu/resec/workingpapers/resecworkingpaper2004-6.pdf>>.
- ⁵⁵ Clint Peck, Senior Editor, "Around the ID world," *Beef Magazine*, December 1, 2003 available at: <http://beef-mag.com/mag/beef_around_id_world/>.
- ⁵⁶ USDA APHIS, *National Animal Identification System: Goal and vision*, available at: <<http://animalid.aphis.usda.gov/nais/about/plan.shtml>>.
- ⁵⁷ FDA, *Testing for rapid detection of adulterated food*, Report to Congress, October 2003, available at: <http://www.fda.gov/oc/bioterrorism/report_congress.html>.
- ⁵⁸ USDA, Statement by Secretary Veneman Submitted for the Record to the Gilmore Commission, September 9, 2003, available at: <<http://www.usda.gov/news/speeches/st28.htm>>
- ⁵⁹ USDA FAS, *U.S. beef, pork, and poultry trade at a glance*, November 2004, available at: <<http://www.fas.usda.gov/dlp/tradecharts/tradesummary.html>>.
- ⁶⁰ Miho Yoshikawa, "Japan says progress made in BSE dispute with US," *Reuters*, January 20, 2005. USDA has argued that the Japanese can have confidence that U.S. grade "A40" beef, which comes primarily from cattle 12 to 17 months old, satisfies this requirement.
- ⁶¹ USDA AMS, *Country of origin questions and answers*, available at: <<http://www.ams.usda.gov/cool/Q&A.htm>>.
- ⁶² 69 Fed. Reg. at 71566-71567; NCBA, *Labeling requirements must be simple and affordable*, News release, August 15, 2002, available at: <<http://www.beefusa.org/governmentaffairs.aspx?content=14828>>; TSCRA, *Cattle industry leaders testify on mandatory labeling*, News release, May 5, 2003, available at: <http://www.texascattleraisers.org/newsDesk/COOL_listening_tscra_Texas_cattle.asp>.
- ⁶³ Deborah Silver, *Meatingplace.com Readers Share Their 2005 Predictions*, January 5, 2005, available at: <www.meatingplace.com/DailyNews/ooop/qnohit_g.asp?ID=13637>.
- ⁶⁴ William Pack, "IDs for animals," *San Antonio Express News*, January 25 2005, available at: <www.mysanantonio.com/global-includes/printstory.jsp?path=/business/stories>.
- ⁶⁵ Suzanne Martinson, "Analysis: Demise of country-of-origin labeling for products won't help shoppers or local farmers," *Pittsburgh Post Gazette*, January 29, 2004.
- ⁶⁶ Sandi Doughton, "Protecting the beef supply—one cow at a time," *The Seattle Times*, December 27, 2004.
- ⁶⁷ AMI, *Federal measures to mitigate risks: Considerations for further action*, Comments to APHIS regarding animal ID ANPR, FDA Docket No. 04-047-1, September 13, 2004,

available at:

<http://www.meatami.com/Template.cfm?Section=AnimalHealth&CONTENTFILEID=1294&TEMPLATE=/ContentManagement/ContentDisplay.cfm>.

⁶⁸ Chris Harris, “Industry must create ID plan: A McDonald’s Corp. executive calls animal identification a “core competency” the meat industry must develop,” *Meat News*, October 3, 2004, available at: www.meatnews.com/index.cfm?fuseaction=PArticle&artNum=8290.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Sandi Doughton, “Protecting the beef supply—one cow at a time,” *The Seattle Times*, December 27, 2004.