The Truth about NAIS and BSE:
Why NAIS Will Not Prevent "Mad Cow Burgers"

By Judith McGeary*

NAIS has been touted as the solution to the Mad Cow problem, with people claiming that "We need tracking to prevent 'Mad Cow-burgers.'" This mythology gained new force after tests confirmed the presence of Mad Cow disease in a cow in Alabama, as various people asserted that this event showed the need for a national animal identification system.

But like many mythologies, this one is based on fear and a lack of understanding of the facts. NAIS is neither needed, nor even useful, for addressing concerns about Mad Cow disease.

What is Mad Cow Disease?

Bovine spongiform encephalopathy (BSE), widely known as "Mad Cow disease,' is a chronic, degenerative disease affecting the central nervous system of cattle.[1] BSE takes ***years*** to develop in cattle, not days or weeks.

BSE is *not* contagious. USDA states: "It's important to note that [BSE and related diseases] are not communicable diseases—they do not spread easily like viruses."[2] BSE does ***not*** spread by contact between unrelated adult cattle or from cattle to other species. In addition, BSE usually is not even transmitted from mother to offspring.[3] It entered the human food chain in Europe by human consumption of infected brain and spinal column tissue. Human infection can be prevented through careful handling and removal of brain and spinal column tissue from all ruminant carcasses at meat processing facilities.

Just these basic facts are sufficient to reveal the flaw in relying on NAIS to protect consumers from mad cow disease. NAIS was designed to accomplish only one thing: 48 hour traceback of all animal movements. This is simply not relevant to the issue of a non-contagious disease that takes years to develop.

Moreover, NAIS does not address the cause of BSE. **BSE has a *known cause* and is *preventable***. The accepted theory is that BSE is caused by the use of animal feed containing contaminated animal products as a protein source.[4] BSE is entirely preventable: one simply has to avoid feeding cows any animal products from other mammals who might have the disease agent.

What is the United States already doing?

The U.S. has already taken the critical step of addressing the cause of BSE. On August 4, 1997, the Food and Drug Administration (FDA) established regulations that prohibit the feeding of most mammalian proteins to cattle.[5] This feed ban appears to have been effective in preventing younger cattle from developing BSE. Both of the U.S. cows found to have BSE (one in Texas and one in Alabama) were over ten years old; they were born before the feed ban. As the USDA has stated: "Older animals are more likely to have been exposed to contaminated feed circulating before the FDA's 1997 ban on ruminant-to-ruminant feeding practices, which scientific research has indicated is the most likely route for BSE transmission."[6]

The feed ban prevents BSE from developing in animals born and raised in the U.S. after 1997, when the feed ban was implemented. So the remaining issues are: (1) imported animals and (2) animals born before 1997 who might enter the food supply.

To deal with imported animals, the U.S. has banned imports from countries with significant BSE problems. In 1989, the U.S. banned the importation of live ruminants from the United Kingdom. In 1997, the U.S. also banned the import of live ruminants and most ruminant products from all of Europe.[7] The imported cattle who are still alive are being quarantined or monitored. Note that the U.S. was able to trace these imported cattle ***without*** NAIS.

To deal with animals who may have been fed inappropriate feeds (whether because they were born before the feed ban or because of lax enforcement of the feed ban), the U.S. has also instituted several protective measures, including:

> (1) Educating veterinary practitioners, veterinary laboratory diagnosticians, industry and producers on the clinical signs and pathology of BSE.
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> (2) Examining hundreds of cattle brains each year submitted from adult cattle displaying neurologic signs either at slaughter or on the farm
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> (3) Performing pre-slaughter inspection at all federally-inspected slaughter establishments. Any animals with suspected central nervous system disorders are condemned and tested.
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> (4) Development of an informal surveillance system through a network of private veterinary practitioners that refers unusual cases to veterinary schools or State diagnostic laboratories around the United States.
>
> (5) Training more than 250 State and Federal field veterinarians located throughout the United States in the recognition and diagnosis of foreign animal diseases, including BSE.[8]

The USDA has repeatedly stated that these measures ensure the safety of our food supply. After the recent discovery of BSE in an Alabama Cow, the USDA Chief Veterinary Officer, John Clifford, DVM, stated: “I want to emphasize that human and animal health in the United States are protected by a system of interlocking safeguards, and that we remain very confident in the safety of U.S. beef. Again, this animal did not enter the human food or animal feed chains.”[9]

The FDA has also expressed confidence in the safety of our food supply. The FDA’s question/ answer section on BSE states: “Q: Are the protective measures in place sufficient to ensure the safety of the human food supply in light of the June 2005 BSE positive cow? A: Yes, the protective measures put into place in July 2004 by FDA ... along with similar measures established by USDA, provide a uniform national BSE policy and ensure the safety of human food.”[10]

<u>But what about tracking cattle with BSE?</u>

To review the facts so far, the cause of BSE is both known and preventable: we simply stop feeding mammalian protein to cattle. While we wait for the animals who were born before the feed ban to die, the government has multiple measures already in place to ensure the safety of the food supply. But would NAIS create even greater safety? The answer is no.

First, the issue of tracking may be largely irrelevant when it comes to BSE. The USDA has stated that it "is ***highly unusual*** to find BSE in more than one animal in a herd or in an affected animal's offspring."[11] Combined with the fact that BSE is ***not*** contagious, this means that there is little to be gained from tracking an animal found to have BSE; none of the animals who have had contact with the diseased cow are likely to be diseased themselves.

Even so, USDA has made a concerted effort to track any cow that is found with BSE. And USDA has succeeded. **The government *already* has the ability to track cattle.** Brands, ear tags, and sales records all enable the government to determine the history of the diseased animal and locate both its offspring and its herdmates. For example, when a cow was found to have Mad Cow disease in Texas in 2005, the USDA was able to determine its entire history: It was a 12-year old Brahma cross, born and raised on a ranch in Texas prior to the implementation of the FDA's 1997 feed ban. The animal was sold through a livestock sale in November of 2004 and transported to a packing plant. The animal was dead upon arrival at the packing plant and was then shipped to a pet food plant where it was sampled for BSE. The plant did not use the animal in its product, and the carcass was destroyed in November 2004.[12] USDA tested 67 cows from the farm where the diseased cow's heard had originated. USDA was also able to determine that 200 adult cattle had left the farm, and was able to locate 90% of those. USDA was also able to locate all but 1 of 213 calves of interest. [13] No cattle with BSE, aside from the original 12-year old Brahma, were found.

So what can we learn from this? First, that USDA already has sufficient ability to track cattle. While the process may take some time, BSE takes much, much longer; in fact, BSE takes years to spread. Second, the results from the tracking merely confirm that tracking is largely unnecessary, because BSE is not contagious and has extremely low transmissibility even to offspring.

One argument from those who favor NAIS has been that tracking is necessary to reassure the foreign markets that U.S. beef is safe. But China has already re-opened its market to U.S. beef.[14] And recent problems with exports to Japan have *not* related to the identity of the cows, but to problems with their processing.[15] So the facts do not support the claim that tracking is needed to protect our export market. Moreover, to the extent that tracking improves exports, the program should be **voluntary**. A voluntary program allows farmers and ranchers to choose whether they want to be part of the export chain and to obtain a premium for the extra work and cost in tracking their animals. In contrast, a mandatory program imposes burdens on everyone, and there is no incentive for the meat packers to offer any premiums.

Last, it is important to remember that NAIS is a prospective program only. Some press releases have implied that, if NAIS were in place, the government would be able to track the Alabama cow's history within 48 hours. Unless there were a time warp, however, this is impossible. NAIS cannot retroactively track animals. NAIS will not enable us to determine the age of the animals born several years ago, nor provide any evidence as to their movements to date. So NAIS cannot do anything about the animals born before the 1997 feed ban, who present a risk to our food supply.

<u>The Best Protection: Testing</u>

USDA and FDA both claim that our food supply is *already* safe from the threat of Mad Cow disease, and tracking appears to be mostly useless. But what if you are still concerned?

The single best protection against having Mad Cow disease enter our food supply is to ***test*** the animals that are slaughtered for food. Currently, the U.S. tests about 1% of slaughtered cows.[16] The USDA plans to reduce this "enhanced surveillance program,"[17] stating that "the incidence of BSE in this country remains extremely low and our interlocking safeguards are working to protect both human and animal health and we remain very confident in the safety of U.S. beef." Testing is simply viewed as one of the USDA's "interlocking safeguards."
But if we want extra protection, it is feasible to test a much larger percentage of the cattle. Japan currently tests every slaughtered cow before it enters the food supply chain. [18] England and the European Union also test significant numbers of cattle, approximately 20%.[19]

Interestingly, a U.S. company, Creekstone Farms & Premium Beef, has repeatedly requested permission to test all of its cattle for BSE, in order to satisfy its customers' wishes. The USDA has refused to allow it to do so. USDA claims that it has the legal authority to control access to and the use of the test kits needed to perform BSE testing, and that a private company *cannot* test 100% of its cattle.

So the USDA not only claims that our food supply is already safe, it is unwilling to allow private companies to *choose* to take additional precautions. Yet USDA is proposing to *force* every animal owner to tag and track their animals, subjecting themselves to intrusive government surveillance, in a program that will not prevent contamination of our food supply.

Facts, not Mythology

The truth is that NAIS will do nothing to stop BSE-tainted beef from entering the food supply. Indeed, the result of NAIS will be the exact opposite – it will **decrease** the safety of our food supply.

NAIS offers a false sense of security. When consumers are lulled into complacency by the reassurance that "all is well because we can track every cow," there will be little pressure on the government or the industry to take the measures necessary to actually keep our food supply safe, such as changing their management practices or improving inspections of slaughterhouses. Remember that the best protection against "Mad Cow Burgers" is to enforce the feed ban, inspect animals before and after slaughter, and conduct testing.

NAIS will also drive many small and medium-size farmers and ranchers out of business. Many of these farmers sell directly to each other or to consumers, creating responsibility and accountability. In contrast, the large producers who will be able to comply with the burdens of NAIS have no personal relationships with their customers, leaving profit as the only motivation.

In addition, as we lose our independent farms and ranches, small local slaughterhouses will be driven out of business. Yet, like the farmers they serve, these local slaughterhouses are accountable to their customers for a much higher standard than the minimal government requirements.

The argument that NAIS will help address the problem of Mad Cow disease is not based on any facts and directly contradicts the government's own statements. **NAIS will not benefit cattle, farmers, or consumers.** Rather, NAIS will create profits for the companies that make the microchips and radio tags, while American consumers will see the price of their beef rise without any additional safety.

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Freedom Alliance website at www.farmandranchfreedom.org

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[1] *See* Bovine Spongiform Encephalopothy (BSE) at http://www.aphis.usda.gov/lpa/issues/bse/bse-overview.html (last checked April 15, 2006) (hereinafter "USDA BSE Overview")

[2] *See* BSE Facts at http://www.aphis.usda.gov/lpa/issues/bse_testing/bsefacts.html (last checked April 14, 2006).

[3] There is some evidence to suggest that offspring of BSE-infected cows have a ***very*** slight (9%) increase in occurrence of BSE, but that may be due to genetic factors. Wilesmith et al. 1997. But a recent study found no evidence that BSE was transmitted to embryos, when they were collected from cows with BSE. Wrethall et. al., 2001. Both studies are cited in the USDA BSE Overview at http://www.aphis.usda.gov/lpa/issues/bse/bse-overview.html (last checked April 15, 2006).

[4] *See* USDA BSE Overview, http://www.aphis.usda.gov/lpa/issues/bse/bse-overview.html; *see also* BSE Facts, at http://www.aphis.usda.gov/lpa/issues/bse_testing/bsefacts.html ("Cattle can become infected with BSE by eating feed contaminated with the infectious BSE agent."). Some individuals have proposed an alternative theory as to the cause of BSE, namely that it is the result of the use of organophosphate pesticides and mineral imbalances. The USDA, FDA, and beef cattle industry have not accepted this theory. And even under this alternative theory, BSE is an entirely preventable, non-contagious disease, against which the best defense is testing, not tracking, as discussed below.

[5] *See* 21 C.F.R. Pt. 589, discussed at USDA BSE Overview, http://www.aphis.usda.gov/lpa/issues/bse/bse-overview.html

[6] Press Release No. 0083.06 (Mar. 13, 2006)

[7] *See* USDA BSE Overview, http://www.aphis.usda.gov/lpa/issues/bse/bse-overview.html

[8] *See* USDA BSE Overview, http://www.aphis.usda.gov/lpa/issues/bse/bse-overview.html

[9] *See* **Statement by USDA Chief Veterinary Officer John Clifford (DVM) Regarding Positive BSE Test Results** (**Mar. 13, 2006).**

[10] *See* http://www.fda.gov/oc/opacom/hottopics/bse.html

[11] Release No. 0083.06 (Mar. 13, 2006) (emphasis added).

[12] *See* USDA Press Release No. 0336.05 (Aug. 30, 2005).

[13] *See* USDA Press Release No. 0336.05 (Aug. 30, 2005).

[14] *See* Press Release No. 0123.06 (Apr. 11, 2006)

[15] *See* Press Release No. 0047.06 (Feb. 17, 2006) ("The report concludes that mistakes were made by the plants involved with the shipment and by USDA inspection personnel. Those mistakes resulted from a lack of understanding of which products were eligible for shipment to Japan. The ineligible product included veal with the vertebral column intact and veal offal.")

[16] The U.S. tested a little over 176,000 cows for BSE in 2004 and tested fewer than 700,000 cows *total* between June 2004 and March 2006, a period of almost two years. *See* News Release, Statement by USDA Chief Veterinary Officer John Clifford (DVM) Regarding Positive BSE Test Results (Mar. 13, 2006).

Between 32 and 35 million cattle are slaughtered each year in the U.S., so the USDA has been testing approximately 1% for BSE. *See* USDA, Livestock Slaughter 2003 Summary (35.5 million cattle); Livestock Slaughter 2004 Summary (32.7 million cattle); 2005 Summary (32.4 million cattle).

[17] *See* Press Release No. 0083-06 (Mar. 13, 2006)

[18] *See* Congressional Record—House at H4270 (June 8, 2005) (comments of Congressman Kucinich); *See also* Final Report, Japan-United States Working Group, Section 1(1)(iii) (Japan's BSE Measures) (July 22, 2004) ("Based on Article 14 of the Abbatoirs Law, only animals that pass ante-mortem and post-mortem inspections are approved for slaughter and dressing for use as edible meat. … cattle of 0 months or older (all ages) are subjected to BSE testing during this post-mortem inspection.").

[19] The European Union countries tested more than 8 ½ **million** cows just in 2003, and tested over 6 million in just the first 9 months of 2004. *See* U.K. Food Standards Agency, Results of BSE testing in the EU, http://www.food.gov.uk/bse/facts/cattletest; Results of BSE testing in EU in 2004, http://www.food.gov.uk/bse/facts/cattletest2004.