Mad Cow Threat Requires Restoring Public Health

by Marcia Merry Baker

On Feb. 5, U.S. Department of Agriculture Secretary Ann Veneman declared, "I don't anticipate that we have a significant issue in this country," referring to the case of Mad Cow disease (bovine spongiform encephalopathy, or BSE) found Dec. 23, in an animal slaughtered in Washington state on Dec. 9, 2003. On Feb. 9, Dr. Ron DeHaven, the U.S. Department of Agriculture's Deputy Administrator of Veterinary Services for the USDA's Animal and Plant Health Inspection Service (APHIS), announced the ending of the trace-back field investigation of the Washington BSE case. "We feel confident that the remaining animals represent very little risk," was the comment in DeHaven's report—on the fact that 11 of the 25 cows considered to have eaten the same feed as the BSE cow, could not be tracked down! The risk is low, DeHaven said.

In fact, these declarations are attempts to induce the resumption of beef imports from the United States, by the four principal importing nations—Japan, South Korea, Canada, and Mexico; and aimed at confidence-building in the American public, especially during the elections. U.S. Trade Representative Robert Zoellick was dispatched to Tokyo Feb. 11, to meet with officials about lifting the Japanese ban on U.S. beef, and also their suspension of U.S. chicken exports since avian flu was found in a Delaware flock.

But *natural law*—meaning, what governs microbes, pathologies, and illness—requires real public health measures, not empty reassurances. In turn, this requires a re-education of the citizenry, to apprehend the consequences of the last 40 years' toleration of increasing free trade, de-regulation of human and animal health practices, and "organic"/alternative food superstitions. From that point of view, it is worth briefly reviewing the record of the original "Mad Cow" period of Margaret Thatcher in Britain, and how basic principles of public and livestock health were knowingly violated. The Thatcher "Mad Cow" legacy of deregulation has been continued in the United States, despite the to-be-expected consequences. It is the Mad Cow thinking that must be eradicated, especially concerning the whole category of BSE-type diseases, where more is *unknown* than known.

The Thatcher BSE Record

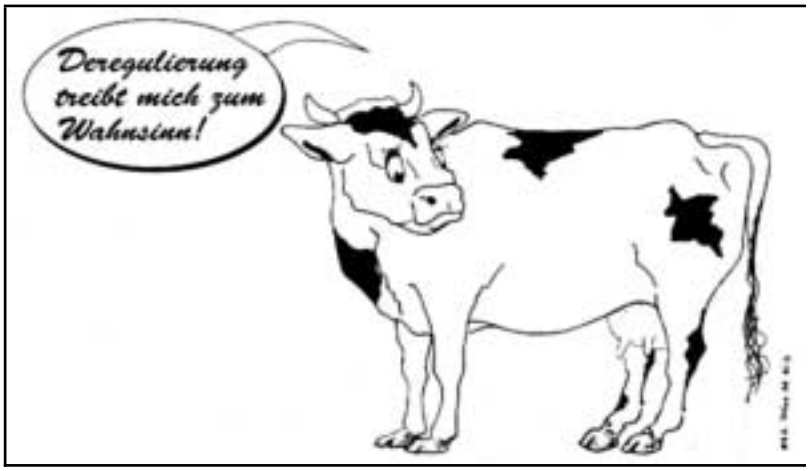
During the 1970s, many clinical studies were underway on various kinds of "transmissable dementias" in humans and animals. Known human manifestations of spongiform encephalopathies included Kuru, found among cannibals in new Guinea; and Creutzfeldt-Jacob disease, a rare, genetically-related occurence typically manifesting only in an older person. Among animals, aspects of TSE (transmissable spongiform encephalopathy—called scrapie) in sheep were being studied. Scrapie outbreaks had been observed for over a century—in Spain, South America, Britain, but little was known about the agent of transmission, or conditions for subsidence. During the 1970s, scrapie was extensive in the United Kingdom.

Among the studies of the scrapie process were those by the USDA at Ames, Iowa, observing whether mink—carnivores—could acquire and transmit the disease by eating parts of infected sheep. This would indicate a dangerous potential for species jump.

In 1979 in Britain, because of the scrapie, and the many unknowns about potential transmission, the Royal Commission on Environmental Pollution called on the government to tighten standards for what could go into animal feeds; in particular, it recommended very tight licensing for processing animal proteins back into the livestock feed, and the human food chain, particularly sheep scrapie.

"No," was the response of the incoming government of Margaret Thatcher, in one of her first decisions. The government turned down flat any idea of regulating livestock feed. Thatcher and her Agriculture Minister Lord Peter Walker stated their reason as the "principle of deregulation," namely that industries—the feed industry and others—should regulate themselves. In effect, the government ratified what was known at the time to be rampant unsanitary practices among feed manufacturers, and financial pressure on small farmers to go for the cheapest feed for their livestock herds.

In less than a decade, BSE—the bovine form of TSE—appeared in Britain, with the first case identified in November 1986. All



"Deregulation is driving me crazy"—from the German weekly Neue Solidarität.

Avian Flu: A Global Pandemic Threatening?

The devastating outbreak of avian flu in eight East Asian countries has decimated poultry flocks, and caused the death of 14 people in Vietnam and 5 in Thailand. Millions of chickens have been killed across the area to stop the spread of the disease, wiping out the livelihood of small farmers and eliminating a major source of protein for the population.

So far in the outbreak, the human illnesses have occurred in people who have had direct contact with a sick bird or bird feces. There is no documented case of this strain of the avian flu, H5N1, combining genetically ("reassorting") with a human flu strain to mutate into a more deadly, human-to-human transmissible form of the flu, for which people would have no natural immunity. But the danger of such a potential looms, as the avian flu spreads throughout populous rural areas, where chickens and people live in close proximity. An avian flu that genetically combined with a human flu is the likely origin for the great "Spanish flu" pandemic that followed World War I, in 1918-19, causing more than 20 million deaths and affecting more than 200 million people.

Where Does the Virus Come From?

The reservoir of the H5N1 strain of the virus is in waterfowl and wild birds, which have some natural protection against the virus. But chickens do not have such protection, and when the virus takes hold among poultry—passed through contact at a live poultry market that includes ducks and geese, or through fecal matter, or the water supply—its kill rate is high and fast.

Once a chicken population is confirmed to be infected, the only way to contain the spread is to quickly quarantine the area (to prevent transmission to other poultry farms) and kill entire flocks.

In 1983, in Pennsylvania, for example, another strain of avian virus, H5N2, infected chickens and turkeys and became extremely deadly for poultry. More than 17 million birds were destroyed in order to stop the epidemic, at a direct cost of $60 million. There was no transmission to human beings. And this year in Delaware, an outbreak of another, milder strain of avian flu required a similar quick culling of thousands of birds and a quarantine of the surrounding area.

After the infected chickens are killed, the buildings and equipment used with them must be carefully disinfected and then left vacant for a couple of weeks. The area around the farm that is infected must be quarantined, because the virus can be easily transmitted on boots, vehicles, clothing, etc.

In Hong Kong, in 1997, avian flu H5N1 did jump the species barrier, infecting 18 persons and killing 6 of them. A potential pandemic was averted because of rapid action—within three days, about 1.5 million birds, all of Hong Kong's poultry population, were destroyed.

Scientists are now working to develop a vaccine for human beings, using a process called reverse genetics, which substitutes harmless flu genes for the lethal H5N1 strain.

Although the often quoted scare story, via the World Health Organization, is that "experts agree that another influenza pandemic is inevitable and possibly imminent," the very real danger now has to do with the physical economy. Fully-staffed and fully-funded public-health systems, vigilant disease monitoring and surveillance, and the kind of scrupulous public sanitation measures that require adequate budgets and well-housed populations, are the front-line fighting force to prevent any viral pandemic. To the extent that we lack these measures in the United States and elsewhere, we put ourselves and the world population at risk.—*Marjorie Mazel Hecht*

told, there would come to be 180,000 BSE cows reported in Britain over the following years, by the time the outbreak waned in about 1997. In the end, the British government destroyed 2 million cattle to try to stop the epidemic.

The Thatcher government only took measures to intervene after coming under fierce political pressure, domestically and from the European Union and other powers. For example, in 1989, a year in which 6,000 BSE cows were reported, the Thatcher Cabinet rejected the call by shadow Agriculture Minister Ron Davies to stop all exports of scrapie-infected sheep meal (about 3,000 tons a year at that time). Thatcher's Minister Walker, when he left office in May 1990, joined the board of Dalgety PLC, to be the largest livestock feed mix firm in the world by the mid-1990s.

Even in 1995, with over 20,000 BSE cows a year, British Prime Minister John Major tried to placate Parliament, "There is no scientific evidence that BSE can be transmitted to humans."

Not so. During the 1990s, a variant form of the already-known human spongiform encephalopathy called Creutzfeld-Jacob appeared in Britain; it was named vCJD. Since its first identification, over 160 cases have been reported in the United Kingdom, with one of the characteristics being incidence among younger, as well as older persons.

Among the measures finally taken in the course of the disease in Britain, were high-tech disposal of the infected

animals, an order in 1988 to end recycling animal parts back into feed for ruminants, and other regulations.

On the Continent, where BSE cows were reported over the 1990s, traced to British herds and/or feed, new tests have been devised, allowing for rapid determination of whether a cow is infected. This permits reliability in the food chain; and also is a line of defense for swift containment, should the disease manifest.

Thatcher Ideology Means BSE in North America

What about North America? The U.S. version of Mad Cow ideology—called in the mid-1990s "Contract for America," or neo-conservatism—has prevailed to the extent that BSE has now shown its presence in Canada and the United States. The pretense of the Americas being somehow "safe," is gone.

That there is a "high probability" of more cases to be found, was the conclusion of a Feb. 4, 2004 report by a USDA-convened panel of experts, the International Review Sub-Committee of the Agriculture Secretary's Advisory Committee on Foreign Animal and Poultry Diseases. They warned that the probability will persist, if the United States doesn't ban certain high-risk slaughter waste materials—cattle brains and spinal matter—from *all livestock feed and pet food.* The panel pointed out that it is probable that BSE-infected animals were imported over time, and likely incorporated into feed, "so that cattle in the United States have also been indigenously infected."

Once again: While there remain many unknowns about BSE, tainted feed is still considered the likely mode of infection.

In 1997, the Food and Drug Administration (FDA) issued an order banning cattle parts from being recycled into cattle feed. However, these parts have gone into other parts of the food chain. Moreover, it is an open scandal that the regulation is not enforced. This news service has received several reports of its violation. One publicized case occurred within weeks of the Bush Administration taking office. On Jan. 30, 2001, the FDA made known that a Texas feedlot fed 1,200 cattle with meal containing cow remains. The feed came from St Louis-based Purina Mills, Inc. (one of the world's biggest livestock feed companies, and owned for a time in the 1980s by British Petroleum). According to the Jan. 31 *New York Post*, "The feedlot owner said 620 pounds of the feed [containing meat and bonemeal from ruminants] had been mixed with 15,000 pounds of other feed and distributed to the cattle Jan. 17. Once the discovery was made, the animals were quarantined."

Apart from lack of enforcement of the 1997 ban, the record shows the danger of lack of other precautionary measures. For example, the question of blood. Recently, it has been confirmed in Europe, through an unfortunate case of blood transfusion, that transmission of the vCJD can take place this way.

The FDA, in a new set of orders on Jan. 26 this year—best described as "very late, and very little"—outlawed mammalian blood from animal feed. Among other orders announced by the agency are a ban on poultry litter and table-waste going into feed; and an increase in the number of inspections of renderers and feed mills during 2004. Also in mid-February, Federal officials have proposed a mandatory livestock identification system, to track herd and individual animal movements quickly, in the case of suspect disease. If Congress passes the proposed bill, the USDA will have 90 days to establish a nationwide, electronic tagging and tracking program.

Parameters of What Must Be Done

These kinds of measures are overdue. But beyond that, there are many more, and obvious ones, required.

First, basic scientific research—among all kinds of specialists, from medics, to bio-physicists—must be backed and expanded. Studies—which will be reviewed in *EIR* in an upcoming issue—already show that the "prion" pathology involved, at the sub-cellular level, poses threats in other potential species jumps, and in ways that are not understood. The diseases of spongiform encephalopathy are 100% fatal.

Likewise, there are urgent R&D tasks. Tests need to be perfected to enable testing for the disease in live animals, and not at the point of apparent illness, or after slaughter. Already, researchers in the Colorado Division of Wildlife are near perfecting a needle biopsy procedure they have used successfully on mule deer, which also get the disease. Also, sterilization technologies must be developed, as well as disposal facilities. For example, there is work on a "plasma furnace" kind of crematorium in Europe, for disposing of infected matter.

Secondly, a nationwide, two-tiered testing system is called for, to prevent BSE-infected cattle from entering the food chain. At the herd level, needle biopsy samples from live animals would allow monitoring of herds at the farm level. If any positive BSE infections were found, only that herd would have to be quarantined, and fully tested.

At the level of the slaughterhouse, more animals must be tested, with stricter standards than those currently used by USDA. Last year, only 20,000 animals were tested, out of over 30 millions slaughtered. Secretary Veneman now proclaims that 40,000 will be tested in 2004. By contrast, in France, half of all cows slaughtered are tested, some 3 million out of 6 million. In Japan, *all* are tested.

Also in France, a rapid test is in use, in contrast to the U.S. situation—as seen in the case of the Washington state BSE cow, where the sample material had to go to one of the few labs set up to do the test, and the results took over a week. In February, in Canada, Alberta Province became the first location in North America to announce switching to the rapid test.