

Editorial

One Mad Cow Sets Off a Stampede

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The discovery of mad cow disease, or bovine spongiform encephalopathy, in a cow in Washington State should concern us all. Yet this is less because of any risk of contracting the disease through eating beef and more because a knee-jerk reaction by the public, news media and policy makers could threaten our ability to make a reasoned and effective response to the threat.

So far, we are following the script from 1996, when Britain issued a warning about a rise in a variant of Creutzfeldt-Jakob Disease, a brain-wasting syndrome in humans that resembles mad cow disease. The experts envisioned all sorts of potential consequences. Some warned of an outbreak that would kill millions, becoming the AIDS crisis that Britain never had. The European Union and countries around the world banned British beef.

Few people questioned the assertion that there was a link between eating meat and Creutzfeldt-Jakob in humans. But the dire predictions never came to pass: only about 20 Britons a year have died of the variant of Creutzfeldt-Jakob since that scare. There were other victims though: British beef farmers lost perhaps \$10 billion in sales, and the British public's trust in government and the press took a severe blow.

Yet the old misperceptions are again at center stage. Japan and South Korea have blocked American beef imports, cattle prices are tumbling on North American exchanges, and Canada and the United States are in a diplomatic tangle over who is to "blame" for the Washington cow.

Before we all go order that turkey burger, we should consider a few facts. First, there is no direct evidence that Creutzfeldt-Jakob comes from the ingestion of contaminated beef, or that the syndrome deserves its reputation as the "human form" of bovine spongiform encephalopathy.

In addition, the mad cow prion, the misfolded protein that is thought to cause the disease in cows, has never been found in solid muscle meat like the roasts, steaks and other cuts Americans are likely to eat over the holidays. The parts that are known to get infected – the brain, spinal cord and parts of the intestine – are generally not used in American cooking (And there is a minority of scientists who believe the prion is not the carrier of the disease.)

Equally important, most decisions on banning imports or changing feedstocks in the British scare were made not by scientists but by politicians and business people and were based on political and economic considerations rather than actual risk to human health. History is no guide here.

What is at stake here goes well beyond infected beef: it involves questions of how we should respond to other outbreaks like Sudden Acute Respiratory Syndrome and the flu

epidemic. Competing messages by the news media, politicians, watchdog groups and medical officials continue to make the public uneasy.

Yes, the immediate focus must be to save lives. But as a former public-health researcher (I am now a vice president in governmental affairs in Europe for Johnson & Johnson, work that has no relation to the mad cow issue), I feel we should also look at each new outbreak as an opportunity to enhance public health. For example, the deadly flu epidemic may in the end improve public hygiene if we can stress the need for hand washing, explain to the public the infectious nature of disease, and reinforce the value of epidemiologic measures.

Perhaps the mad cow discovery will lead to good policy decisions based on sound science. But for now, that science does not exist – we simply do not know exactly what we are dealing with. Rushing ahead with bans and slapdash agricultural measures might divert even more attention from the real threats to our health and well-being.