

Public Perception to Disasters Involving Farm Animals

The public's perception is affected by reports of how the disaster is spreading. In 1996 an outbreak of Mediterranean fruit flies was reported in northeastern Australia. The media communicated the accurate information it received on the day-to-day spread of the infestation and on predictions of how it could devastate the Australian fruit industry. The public perceived this possible spreading as evidence of incompetence, recklessness, and lack of effective intervention by officials, none of which was true.

By contrast, when the first reports of a zoonotic equine *Morbillivirus* were reported in Australia, veterinary health officials immediately declared a 300-mile quarantine zone. This decision was followed by prompt reports of a decrease in the area under quarantine, which the public perceived to be effective and proactive official intervention. Ultimately most infected horses were traced to a few farms and the potential for spread of the disease appeared to be limited.

Sequential reports of the spread of a radioactive plume can result in widespread public concern. The extensive scientific data given to the media and public on how a plume might disperse caused a serious problem after the Three Mile Island nuclear accident. Years of complaints from and lawsuits filed by concerned farmers could have been avoided if they had received complete, understandable reports at the time of the accident. The public generally wants to know the worst possible scenario and to see rapid improvement. Reports of gradual spread can bring panic, even if to the scientist, monitoring such spread is of little concern.

The public's trust in the food supply is fragile. As with other food safety concerns, the American public is likely to have zero tolerance of possible food contamination by radionuclides. It is highly unlikely that consumers will accept any food that originates from animals that have been exposed to radiation; rather, they will assume that such food is contaminated. The public's perception is unlikely to be changed by government programs that promote food safety models based on radionuclide half-lives.

Perhaps the largest impact of disasters affecting the livestock industry is on public perception of food safety. A relatively common disaster the public believes to be related to livestock is outbreaks of cryptosporidiosis in drinking water. These are frequently attributed to contamination of the water from animal manure. However, most cases of water-borne cryptosporidiosis are the result of faulty water sanitation systems. Nevertheless, the first impression is often the one that sticks, and the livestock industry may end up defending itself in disasters it did not create.