

Food Safety

Historically the greatest concern for food safety in disasters has been the contamination of meat and milk after radionuclide fallout. This concern originated in the Cold War era and during the development of nuclear power. A resurgence of interest in countries other than the United States occurred after the Chernobyl nuclear reactor accident in 1986. This accident resulted in an international incident because meat and milk of many species throughout the world became contaminated from nuclear fallout.

In the United States the interest in radionuclide contamination of the food supply was at its peak from the early 1950s to the 1970s. Unfortunately, despite the knowledge gained on the effects of radiation and the development of clinical signs, on pathophysiology, on pathology, and on the distribution of radionuclides in meat and milk, little funding or research has gone to support mitigation and preparedness programs beyond printing and distributing literature on disease processes.

Meanwhile food safety issues other than radionuclide contamination have been more or less overlooked in disaster reduction programs. Examples are public acceptance of contaminated food, public perception of animal welfare, methods for disposal of large amounts of contaminated carcasses and food, pragmatic rehearsal of evacuation procedures, the infrastructure needed to supply alternative feeds, indemnity programs, and current discussions with producers. Also, although the national media frequently report on the large-scale contamination of meat and milk with bacteria (e.g., *Escherichia coli* O157:H7, *Salmonella* spp.), these outbreaks are rarely thought of as disasters. However, they should be.

Food safety problems should be considered a type of disaster, complete with an emergency management cycle of mitigation, preparedness, response, and recovery. Without this recognition the ability of the United States to deal with food safety, including radionuclide contamination, remains a vicious circle of destruction and repair that progressively undermines confidence in the safety of the U.S. food supply.

Reinforcing the lack of credibility about food safety is the current structure in which an efficient response to extraordinary events is expected of agencies and groups that have little or no everyday experience with the issues likely to arise in disasters. The groups that have experience and a vested interest in the outcome of any disaster, such as consumers, media, producers, veterinarians, and researchers, have rarely been brought into the planning phases of managing food safety disasters. Experience in other types of disasters has shown that without comprehensive input, an efficient disaster response cannot be expected.