Recovery from Foreign Animal Disease Outbreaks

The success of the recovery is determined by the extent of production loss and death caused by the disease and the scope of a business continuity plan. Business resumption and claims against insurance for disaster relief will be supported only if the producer can provide adequate records of past performance. Business continuity for farms includes diversifying into production of other crops, making products that are in high demand, tightening control on production (by selling or slaughtering poorly performing animals), and discussing progress regularly and frequently with financial advisors.

The investment in eradication (the recovery after reintroduction of the disease) of transboundary diseases is an important factor in the total cost of a disease outbreak to the industry. The cost of eradication of FMD in Canada in 1952 was \$1 million, and the loss of market was \$650 million. By comparison the same disease in 1993 in Italy, a country that has long promoted the principles of disaster management for transboundary diseases, cost \$11.5 million for the eradication, but only \$200 million to the industry.

One special issue with a major epizootic is how to dispose of a large number of carcasses. This problem is not unique to transboundary diseases, which reiterates the point that all-hazards preparedness is the best approach to emergency management. An example of mass livestock carcasses is the death by malnutrition or drowning of over 90,000 cattle in the spring of 1997 in the Dakotas and Minnesota. Similar large-scale disposal of carcasses became necessary in 1997 when approximately 430,000 chickens were destroyed after an outbreak of avian influenza in Pennsylvania and in 1976 after the accidental poisoning of cattle, sheep, and poultry with polychlorinated biphenyl (PCB). In 1990 nearly 5500 feedlot cattle died in Australia, and 430 cattle died on one farm in 1998 because of he ingestion of botulinum toxin. Similar disposal issues arise when processed meat products are recalled, such as millions of pounds of hamburger meat after the identification of *Escherichia coli* O157:H7 contamination.

In line with the principle that everyday preparedness is the best preparedness for dealing with extraordinary events, carcass disposal issues arise nearly every week on most farms. Many producers have effective ways to deal with these on a small scale. Local rendering companies pick up dead cows or hogs. Poultry producers have a variety of methods to dispose of dead chickens on their farms. These systems work well unless there are excessive deaths in the region or transport systems fail, such as in floods and winter storms. Farmers may then have to find alternative methods for disposal. For effective recovery, programs and methods for everyday use should be developed that will also be useful in disasters.

An example of the need for a local emergency management planning team is the development of plans that lead to an amicable and legal resolution of carcass disposal. A problem is that most landowners and farmers are not familiar with carcass disposal. Also, in some cases environmental regulations were developed at times and for circumstances that are not practical in disasters. When emergency management teams are locally based, the workers know one another and cooperate to resolve such issues in a disaster.