

## Guest Editorial

### Our Role as Agricultural Safety and Health Professionals in the Post-9/11 World

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Since September 11, 2001, many professionals who work for the “public good” have wrestled with the question of how their work fits with current funding priorities and the new environment in which our stakeholders assess risk. We are challenged because the public and the traditional audiences that agricultural safety and health professionals serve are bombarded with information about homeland security, biological/chemical hazards, and other exotic threats. In this new world where safety and security is on the top of people’s minds, where does the work and knowledge of the agricultural safety and health professional fit?

It is my belief that our work is now more important than ever. With increased public concern about safety, health, and homeland security, we have a great opportunity to position our work and our profession. If we are creative, and think about the bigger food system, this can mean connections with different audiences, expanded partnerships with new players, and access to a larger resource pool. How is our work in agricultural health and safety connected directly to the new post-9/11 priorities that have shifted the world’s safety, health, and security focus?

For several years, public policy experts, homeland security advocates, and members of the intelligence community have characterized agriculture as a potential target for terrorists or others with a political or economic agenda. After 9/11, retired CIA official and consultant Peter Probst told *The New York Times* (Dillon, 2001) that “agriculture is the soft underbelly of the American economy.” Mr. Probst said, “It’s an absolutely vital sector, but it’s terribly difficult to protect.” In his 2004 Congressional Research Service Report to the U.S. Congress, Agriculture Policy Analyst Jim Monke (2004) concluded that:

“The results of an agroterrorist attack may include major economic crises in the agricultural and food industries, loss of confidence in government, and possibly human casualties. Humans could be at risk in terms of food safety or public health, especially if the chosen disease is transmissible to humans (zoonotic).”

With agroterrorism as a new and high-profile threat, how does our work fit? First, we must remember that people on the front lines of a terrorist strike are usually the most significantly affected. The majority of the people who died during and following the jetliner crashes on 9/11 were at work. This included the office workers in the World Trade Center, those working in the Pentagon, the employees working on and flying in the airplanes, the responding fire service and police force workers, and other emergency

service personnel. Likewise, it was people working in postal facilities and other places who were exposed and became ill or died in the October 2001 anthrax attacks.

The potential for terrorism in agriculture is most certainly an occupational safety and health issue and concern. Many of the bioterrorism agents that are a threat to agriculture are also zoonotic diseases. If a person wished to introduce a chemical toxin such as botulism toxin, ricin, or a pesticide into animal feed, a grain storage bin, a farm's water supply, or other point of contact, those most likely to be first exposed are front-line workers within the operation. Workers are also the ones most likely to be first responders, and may be exposed during clean up and recovery activities after an intentional event.

History has shown that of the isolated and relatively small-scale agricultural and food system "attacks" that have occurred, workers and others with an inside knowledge of specific operations are often involved in the incidents as perpetrators. In a 1996 Wisconsin case (Neher, 1999) involving a contamination of 4,000 tons of animal feed with chlordane (an organochlorine insecticide), the perpetrator was a disgruntled independent contractor who routinely delivered inputs from farms to a local feed manufacturer, which was the target of the attack. Similarly, in a 2003 event, a disgruntled employee poisoned a batch of hamburger processed in a Michigan supermarket, again with an insecticide (CDC, 2003).

So, where do we fit? First, efforts to secure and protect farms and related food industry facilities from wrongdoers directly compliment and enhance the health and safety of workers. As an example, the practice of biosecurity in livestock operations involves preventing the intentional (or unintentional) transmission of bacteria, viruses, and other pathogens onto the farm or from animal to animal (or from animal to worker). This involves monitoring the flow of traffic and inputs onto the farm, proper use of personal protective equipment, and basic personal and equipment hygiene practices (handwashing, equipment sanitation, etc.). These efforts improve the security status of the operation, but also directly serve to protect worker health.

Because of our historical work in many of these areas, we can be a great partner working with agricultural producers, veterinarians, educators, and various agricultural trade associations to help convince people of the need to adopt sound biosecurity and human health behaviors. Related to that, agricultural safety and health efforts require an in-depth knowledge of the farm culture, work practices, basic equipment, facility design and layout, and other factors. Agricultural safety and health professionals have a long history of merging this technical knowledge with the knowledge related to a farmer's or rancher's ability and desire to assess and act on various risks, including those impacting safety, health, economic well-being, and now facility security. Our work in this field over the last 50+ years and the research-based knowledge we've accumulated will be beneficial to those new players involved in agricultural and food system security if we are willing to get involved.

Since being a "disgruntled worker" appears to be one potential risk factor for terrorism, we have a role in helping agricultural producers and the food industry understand that one key to protecting their operations is to ensure and purposely create a safe, healthy, clean, and well-managed work environment. Similarly, as the nature of our agricultural workforce changes and grows more diverse, it becomes important that employers maintain strong relationships with their workers, including open communications and empowering employees to be the front-line "eyes and ears" that are vital in protecting any type of facility from wrongdoing. Efforts to recognize security vulnerabilities must go hand-in-hand with efforts to recognize and control other types of workplace safety and health hazards.

We have many new challenges. Many of the people performing traditional agricultural jobs (like machinery operation, milking, crop harvesting, product transportation, etc.) speak a language other than English, and many were born outside of the U.S. There is no evidence to suggest that these new agricultural workers are any greater of a security threat. However, producers need to work extra hard to ensure open communication, which includes helping these workers understand the risks they face and the ways that they can protect themselves, the operations that they work in, and the health of the public.

President Abraham Lincoln said, “The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so we must think anew and act anew.” I will continue to argue that the role and profession of agricultural safety and health professionals is now more important than ever. The world is changing. So must we!

## References

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