A Guide to Useful Information about Food Protection and Defense

Richard H. Linton
Professor of Food Safety at Purdue University

All of us remember where we were the morning of September 11, 2001 when our country came under terrorist attack. Years later, on December 3, 2004, Health and Human Services Secretary Tommy Thompson was quoted as saying "For the life of me, I cannot understand why the terrorists have not attacked our food supply because it is so easy to do." These two events reminded us all about the importance of our food and water supplies and their vulnerability to contamination. This also started a movement toward building programs and networks to protect our food supply from the possibility of an intentional attack from biological, chemical, physical and/or radiological threats. Since this time, there has been a lot of good information and collaborative programs that have strengthened food protection and defense from both intentional as well as inherent threats in food. The focus of this article is to make you aware of some of the food protection and defense efforts that are ongoing in the United States.

There are a few sites that offer good overall information related to food protection and defense. The National Center for Food Protection and Defense (NCFPD) is a great source of information and a good place to start. The Center was officially launched as a Homeland Security Center of Excellence in July 2004. NCFPD is a multidisciplinary and action-oriented research consortium that addresses the vulnerability of the nation's food system to attack through intentional contamination with biological or chemical agents. NCFPD's research and education programs are aimed at reducing the potential for contamination at any point along the food supply chain and mitigating potentially catastrophic public health and economic effects of such attacks. The program incorporates cutting-edge research across a wide range of disciplines, taking a comprehensive, farm-to-table view of the food system and encompassing all aspects from primary production through transportation and food processing to retail and foodservice. Information about NCFPD can be found at http://www.ncfpd.umn.edu/index.cfm.

The National Agricultural Biosecurity Center (NABC) was established more recently by Kansas State University (KSU) to coordinate interdisciplinary activities focused on protecting America's agricultural infrastructure and economy from endemic and emerging biological threats. Information about NABC can be found at http://nabc.ksu.edu/content/.

From a regulatory perspective, the USDA has an informative site focused on food defense and protection. This site focuses on providing information related to intentional adulteration by biological, chemical, physical or radiological agents. It also addresses concerns related to physical, personnel, and operational safety. The website is designed to provide information about a) preparation and prevention, b) surveillance, c) response, and, d) recovery. The USDA site can be found at: http://www.fsis.usda.gov/Food Defense & Emergency Response/index.asp. FDA also works with a number of government agencies and private sector organizations to help reduce the risk of tampering or other malicious, criminal, or terrorist actions on the food supply. The FDA website is designed to provide information about a) food defense programs, b) regulatory information, c) food security preventive measures
guidance, d) CARVER + Shock, d) emergencies, and, d) training. The agency’s website can be accessed at [http://www.fda.gov/Food/FoodDefense/default.htm](http://www.fda.gov/Food/FoodDefense/default.htm).

A good resource that focuses on public health protection is the Center for Emergency Care and Disaster Preparedness (CECDP), housed in the Department of Emergency Medicine at the University of Alabama at Birmingham (UAB). This center addresses issues associated with preparation for biological terrorist attacks, public health emergencies, and emergency medical care through broad-based, multidisciplinary research, training, and service programs. The center focuses on a wide range of activities that contribute to the preparedness of communities for the smaller disasters which occur daily and to enhance preparedness that will save lives and contribute to improved community emergency healthcare. More information can be obtained at [http://www.uab.edu/cecdp/](http://www.uab.edu/cecdp/) and [http://www.bioterrorism.uab.edu](http://www.bioterrorism.uab.edu).

Other sites have focused on animal related food defense issues. The National Center for Foreign Animal and Zoonotic Disease Defense (FAZD) develops products to defend the United States from the introduction of high-consequence zoonotic diseases. FAZD focuses on zoonotic diseases that pose catastrophic risks to human health, livestock health and the national agricultural economy. Scientists at the Center focus on a) biological systems (vaccines, antiviral agents detection/diagnostic tests), b) information and analysis systems (modeling and analysis tools to support decision making), and, c) education and outreach. Each project conducted by the Center addresses the "dual benefit" concept by reducing the risks from both intentional and natural outbreaks of FAZDs. Iowa State University houses the Center for Food Security and Public Health (CFSPH) at the College of Veterinary Medicine. This CDC funded initiative helps to a) increase awareness of bioterrorism, agroterrorism, foreign animal diseases, and zoonotic diseases, b) provide tools on biological risk management, and, c) assist local and state governments to prepare for animal emergencies. More information about this center can be found at [http://www.cfsph.iastate.edu/default.htm](http://www.cfsph.iastate.edu/default.htm).

Finally, the Extension Disaster Education Network (EDEN) is a collaborative multi-state effort by universities across the country to improve the delivery of services to citizens affected by disasters. The mission of EDEN ([www.eden.lsu.edu](http://www.eden.lsu.edu)) is to share education resources to reduce the impact of natural and man-made disasters. This mission is carried out through a) interdisciplinary and multi-state research and education programs addressing disaster mitigation, preparation, response and recovery, b) linkages with federal state and local agencies and organizations, c) anticipation of future disaster education needs and actions, d) timely and prompt communications and delivery of information that meets audience needs, and e) credible and reliable information.

This article provides some examples of information and collaborative programs that have been created to strengthen food protection and defense from both intentional and inherent threats. I hope you find the information useful as you develop food protection and defense programs for your retail food operation.