



SECTION HIGHLIGHTS

This section describes potential food security risks and information on the role of federal agencies in food security.

- » The three federal agencies that play major roles in food safety and security are the Food and Drug Administration (FDA) under HHS, the U.S. Department of Agriculture (USDA), and the U.S. Department of Homeland Security (DHS).
- » It may be difficult to differentiate between an unintentional and a deliberate outbreak of foodborne illness.
- » Risks to the food supply may come during the growing, manufacturing, transportation, or distribution process.
- » State and local public health authorities can provide more information about the specific risks in your community.



FOOD SECURITY AND FOOD SUPPLY

IMPACT OF FOODBORNE ILLNESSES

Most experts believe that terrorist acts involving the food supply fall into the category of low probability but high consequence. However, experts are concerned because contaminating food does not require as much technical skill and organization as does weaponizing anthrax. In addition, opportunities for access to the food supply stretch from farms and feedlots to restaurants and cafeterias. For example, terrorists could introduce an agent during the harvesting, packing, shipping, delivery, or preparation stage. And due to the rapid food distribution system in the United States, contaminated food could be widespread.

Contamination of the food supply could have a devastating public health and economic impact, with the possibility of global consequences. For example, fearful public reaction to bovine spongiform encephalopathy, also known as BSE or “mad cow disease,” and the refusal of major importing nations, such as Japan, to import U.S. beef beginning in December 2003 demonstrated how quickly a domestic, food-related health issue can become a global economic issue.

Because contamination of the food supply by terrorists is a potential threat, it is important to recognize and identify the potential food safety risks in all communities as well as risks that are unique to certain communities.

Risks to communities include threats to:

- › Supermarkets
- › Restaurants
- › Fast food chains
- › Other food service establishments, such as cafeterias
- › Food distribution centers and warehouses

The extent of these risks may vary in different areas. For example, there are greater risks in a tourist area with many restaurants. You should also pay special attention when large special events (e.g., sports events, conventions) take place.

Risks to specific communities are threats involving the food growing, manufacturing, transportation, and distribution processes. The risks to your area will depend on whether any

of these processes occur in your community. For example, Maryland’s Eastern Shore is home to many poultry plants; Wisconsin is a leading dairy state. The following questions will help you think about food supply threats in your jurisdictions:

- › Are there farms or dairies in your area?
- › Are there slaughterhouses in your community?
- › Are there food processing or manufacturing plants in the community?
- › Are there food packing facilities nearby?
- › Are there transshipment points locally (e.g., large warehouses, distributors)?

It is likely that your local and state health departments are preparing for these specific threats to your area and can provide you with more information on the measures they are taking.

INTENTIONAL VERSUS UNINTENTIONAL OUTBREAK OF FOODBORNE ILLNESS

Being able to detect the difference between an intentional and an unintentional outbreak of foodborne illness is difficult because outbreaks of foodborne illness are more common than most people realize and occur every year in the United States. They include infections caused by bacteria such as Salmonella, Shigella, E. coli, and Listeria; and by parasites such as Cryptosporidium and Cyclospora. Foodborne illnesses cause symptoms such as nausea, vomiting, diarrhea, or fever. These symptoms can occur between 1 hour and 3 weeks after eating contaminated food, depending on the agent ingested (bacterial, viral, or parasitic). According to the Centers for Disease Control and Prevention (CDC), there are approximately 76 million illnesses; 325,000 hospitalizations; and 5,000 deaths every year due to naturally occurring foodborne illnesses in the United States (Mead et al. 1999). The exact numbers are unknown because many people wait for their symptoms to go away and do not see a doctor. Even if someone seeks professional medical advice, the health professional may not attribute the case to a foodborne illness and may not report it to the local health department. However, some of the causes of unintentional outbreaks, such as Salmonella and E. coli O157:H7, may also be used as terrorist agents. More information on the specific organisms can be found in the “Biological Agents” section of the appendices (see p. 80).



FEDERAL PARTNERS IN FOOD SAFETY AND SECURITY

Three federal agencies account for the majority of food and agriculture safety spending and regulatory responsibilities: FDA, within HHS; the Food Safety and Inspection Services (FSIS) and Animal and Plant Health Inspection Service (APHIS), both within USDA; and DHS. The Secretaries of HHS, USDA, and DHS have agreed to coordinate their responses to the various threats, risks, and vulnerabilities that the agrarian sector and food supply are facing (Dyckman, 2003). It might be helpful to understand these agencies' roles because you could work with them during a food contamination incident.

FDA

FDA is responsible for overseeing all domestic and imported food sold in interstate commerce, including shell eggs, bottled water, and wine beverages with less than 7 percent alcohol. FDA is also responsible for overseeing animal drugs, feeds, and veterinary devices. FDA inspections take a broad approach to food inspections to ensure that the overall food production process within a given establishment functions appropriately. To do this, FDA conducts a scientific evaluation and risk analysis to analyze potential hazards associated with the foods under its jurisdiction. Next, the agency identifies critical control points in a food's production at which the potential hazard could be controlled or eliminated; this includes processing, shipping, consumption, etc. Most importantly, FDA establishes preventative measures and procedures to monitor the correct use of these measures—for example, reprocessing or disposing of food if the minimum cooking temperature was not reached. Once proper preventative measures and monitoring procedures are in place, FDA does a comprehensive evaluation of a specific food establishment about every 5 years. FDA has about 770 inspectors for 57,000 food establishments and 132 ports and has 39 contract and 37 partnership agreements with states to assist with domestic inspection activities. In addition, FDA works closely with state and local food safety officials on food safety inspections at the retail level.

USDA

In contrast, FSIS is responsible for the ongoing inspection of the foods under its jurisdiction. FSIS protects consumers by ensuring that meat, poultry, and egg products (e.g., dried egg yolks, scrambled egg mix, liquid eggs)—foods not inspected by FDA—are safe, wholesome, and accurately labeled. Due to the fact that the production of these foods requires the slaughter of animals, many USDA inspections focus on ensuring sanitary conditions for all slaughter and processing activities. This type of scrutiny requires frequent—even daily—onsite inspections. FSIS has more than 7,600 inspectors and veterinarians in over 6,000 meat, poultry, and egg product plants every day and at ports of entry to prevent, detect, and respond to food safety emergencies.

APHIS protects agricultural production and consumers from animal and plant pests and diseases, such as exotic fruit flies and foot-and-mouth disease, by enforcing strict sanitary and phytosanitary import requirements and conducting domestic agricultural pest and disease monitoring and surveillance. APHIS also works to safeguard agriculture and the public from harmful zoonotic—affecting animals and humans—diseases like BSE, or “mad cow disease,” through the routine testing of samples.

CDC, the Environmental Protection Agency, and U.S. Customs and Border Protection (part of DHS) also have limited responsibilities for food security. CDC reports and tracks foodborne disease and works with state and local health departments to investigate and control the outbreak. The Environmental Protection Agency evaluates environmental safety (e.g., levels of pesticides and herbicides), and U.S. Customs and Border Protection monitors food imports.

FOOD RECALL

A food recall is a voluntary action by a manufacturer or distributor to protect the public from products that may cause health problems or possible death. Neither USDA nor FDA has mandatory recall authority. One exception for FDA is that infant formula recalls are mandatory. USDA will issue a recall announcement for recalls of foods under its jurisdiction. FDA will issue a recall announcement of foods it regulates if a company does not do so within 24 hours. These announcements are meant to alert consumers about dangerous foods that they could have in their homes.



ADDITIONAL INFORMATION

WEB SITES:

FDA Center for Food Safety and Applied Nutrition:
<http://vm.cfsan.fda.gov/>

FDA regional offices: http://www.fda.gov/ora/inspect_ref/iom/iomoradir.html#orafield

USDA Food Safety and Inspection Services (FSIS):
<http://www.fsis.usda.gov>

USDA Animal and Plant Health Inspection Service:
<http://www.aphis.usda.gov>

CDC: <http://www.cdc.gov/foodborneoutbreaks/>

Association of State and Territorial Health Officials:
http://www.astho.org/pubs/foodsafety_final.pdf

PHONE NUMBERS TO REPORT SUSPECTED FOOD TAMPERING:

USDA hotline for suspected meat and poultry tampering:
1-888-674-6854

USDA Food Safety and Inspection Service 24-hour Office
of Food Defense and Emergency Response number:
1-800-333-1284

FDA's 24-hour emergency number for reporting unsafe
seafood, produce, or eggs: 1-301-443-1240;
nonemergency number: 1-888-SAFEFOOD