



## HEALTH IN ALL POLICIES: FOOD

### Enhance Food Defense

Food safety concerns used to focus solely on accidental contamination. However, in recent years there has been concern about intentional contamination by introducing biological, chemical, or radiological agents into the food supply. To enhance food defense preparedness, a Health in All Policies approach that builds cross-sector initiatives and partnerships needs to be established and maintained among multiple federal, state, and local agencies and organizations.

#### Homeland Security Act of 2002

The Homeland Security Act of 2002 gave the U.S. Department of Homeland Security (DHS) responsibility for protecting critical infrastructure. The Homeland Security Presidential Directive Number Nine (HSPD-9) established a policy for improving intelligence, emergency response, mitigation strategies, and vulnerability assessments to defend food and agriculture against terrorism, major disasters, and other emergencies. HSPD-9 called for creating more specific plans and strategies that could be integrated into the National Response Plan and would include partnerships with state and local public health agencies.<sup>1</sup>

#### Food Safety Modernization Act

Food Safety Modernization Act Sections 103, 105, 106, and 108 also have food defense related elements, including:<sup>2</sup>

- Identify and evaluate hazards that may be intentionally introduced, including by acts of terrorism.
- Consider hazards that occur naturally, may be unintentionally introduced, or may be intentionally introduced, including by acts of terrorism.
- Issue regulations and guidance to protect against the intentional adulteration of food.
- Conduct vulnerability assessments of the food supply and determine mitigation strategies.
- Develop a strategic planning document with USDA and DHS that looks at practical food defense considerations.

#### Strategic Partnership Program Agroterrorism Initiative

States can volunteer to participate in the Strategic Partnership Program – Agroterrorism (SPPA) Initiative. Partners in this initiative include DHS, USDA, FDA, FBI, and private industry.<sup>3</sup> The program objectives of the SPPA initiative include 1) Identifying sector-wide vulnerabilities by conducting critical infrastructure assessments; 2) Identifying indicators and warnings that could signify plans for an attack; 3) Developing mitigation strategies to prevent an attack; 4) Validating assessments conducted by the United States Government (USG) for food and agriculture sectors; 5) Providing the USG and the industry with comprehensive reports including warnings and indicators, key vulnerabilities, and potential mitigation strategies; 6) Providing sub-sector reports for the USG that combines assessment results to determine national critical infrastructure vulnerability points to support the National Infrastructure Protection Plan and national preparedness goals; 7) Strengthening relationships between Federal, State, and local law enforcement and the food and agriculture industry.<sup>4</sup>

Under the food defense initiative, various tools have been developed to help reduce the risk of terrorist action on the food supply. A risk-assessment tool called CARVER + Shock helps food processors protect their products from deliberate contamination. CARVER + Shock was originally developed by the U.S. military to identify areas that may be vulnerable to an attack. FDA and USDA adapted it for the food and agriculture sector. The risk assessment

follows the acronym CARVER, which stands for six attributes that are used to evaluate targets for an attack:<sup>5</sup>

- *Criticality*: What impact would an attack have on public health and the economy?
- *Accessibility*: How easily can a terrorist access a target?
- *Recuperability*: How well could a system recover from an attack?
- *Vulnerability*: How easily could an attack be accomplished?
- *Effect*: What would be the direct loss from an attack, as measured by loss in production?
- *Recognizability*: How easily could a terrorist identify a target?

The CARVER tool also evaluates a seventh attribute, the psychological impacts of an attack, or "shock" attributes of a target."<sup>5</sup>



### Indiana State Department of Health: Food Defense Program

The Indiana State Department of Health (ISDH) with funding from a CDC public health preparedness and response to bioterrorism cooperative agreement, carries out the following activities:<sup>6</sup>

- ISDH conducts food defense assessments for Indiana food manufacturers, distributors, and retail food establishments.
- The Indiana Food Protection Program has a food defense program coordinator who has been developing and implementing these assessments.
- Assessment findings are confidential documents and not public record. Finding results are used to make improvements to the food defense system and help reduce the risk of accidental or intentional food supply contamination.
- The food defense program coordinator manages the Indiana Food Safety and Defense Task Force, which consists of stakeholders from the food industry, government, and academia.

### Georgia Committee on Agriculture and Food Defense

In April 2003, the Georgia Committee on Agriculture and Food Defense was formed with support from the Georgia Homeland Security Task Force and the Georgia Emergency Management Agency/Homeland Security (GEMA/Homeland Security). The committee is comprised of representatives from state and federal government agencies, academic institutions, and the private sector.<sup>7</sup>

- The group's purpose is to establish better lines of communication between agencies to ensure effective and efficient response to food, waterborne hazards, and other public health problems.
- The group conducts quarterly meetings to discuss current issues that require a multi-agency response.
- The committee has been a national leader in agrosecurity training. For example, it developed the first agrosecurity awareness curriculum in the United States.
- State extension agents from USDA's Cooperative Extension Office trained in content implementation help conduct agrosecurity training. The training is provided to people in the state who would likely be mobilized in the event of an agricultural emergency, such as law enforcement officers, fire fighters, emergency management and response personnel,

environmental health officers, county and city officials, agricultural leaders, and veterinarians.

- Regional response capability was developed through state agriculture response teams (SARTs) corresponding to GEMA/Homeland Security areas. During the initial phase of development, SARTs focused on poultry disease outbreak response and foodborne outbreaks. The composition of SART teams is multidisciplinary and includes members from many state and local government agencies, academic institutions, cooperative extension, and the private sector.

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<sup>1</sup> HHS. “Homeland Security Presidential Directive-9 Food and Agriculture.” Available at: [http://www.epa.gov/homelandsecurityportal/pdf/Final\\_Food\\_and\\_Ag\\_CONOPS.pdf](http://www.epa.gov/homelandsecurityportal/pdf/Final_Food_and_Ag_CONOPS.pdf). Accessed 1-9-2014.

<sup>2</sup> FDA. “Full Text of the Food Safety Modernization Act (FSMA).” Available at: <http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm247548.htm>. Accessed 1-9-2014.

<sup>3</sup> FDA. “Analysis of Results for FDA Food Defense Vulnerability Assessments and Identification of Activity Types.” Available at: <http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm347023.htm>. Accessed 1-9-2014.

<sup>4</sup> FDA. Strategic Partnership Program Agroterrorism (SPPA) Initiative. Available at: <http://www.fda.gov/Food/FoodDefense/FoodDefensePrograms/ucm080836.htm>. Accessed 1-17-2014.

<sup>5</sup> FDA. “CARVER + Shock – Enhancing Food Defense.” Available at: <http://www.fda.gov/downloads/ForConsumers/ConsumerUpdates/ucm106889.pdf>. Accessed 1-9-2014.

<sup>6</sup> Indiana State Department of Health. “Food Defense Program.” Available at: <http://www.in.gov/isdh/20994.htm>. Accessed 1-9-2014.

<sup>7</sup> University of Georgia. “Georgia Committee on Agriculture & Food Defense.” Available at: [http://www.agrosecurity.uga.edu/index.cfm?page=cafd\\_white\\_paper\\_11\\_10\\_05](http://www.agrosecurity.uga.edu/index.cfm?page=cafd_white_paper_11_10_05). Accessed 1-9-2014.