Criminal Investigation Handbook for Agroterrorism

JULY 2008

To identify the response agencies with whom you will be working in your specific community and geographical region before an incident occurs, the list below is offered as a starting point upon which to build.

Resource	Contact	Phone Number
FBI WMD Coordinator		
Local FBI		
FBI Hotline		
Local JTTF		
Local FDA		
Local USDA		
City Law Enforcement Agency		
County Law Enforcement Agency		
State Law Enforcement Agency		
FBI HQ, 24/7		202-FBI-3000
FDA Emergency 24/7		301-443-1240

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Acknowledgments

This handbook represents a joint effort of the Federal Bureau of Investigation, Counterterrorism Division; the Food and Drug Administration, Office of Criminal Investigations; the Food and Drug Administration, Center for Food Safety and Applied Nutrition; the Department of Homeland Security; and the U.S. Department of Agriculture, Office of the Inspector General.

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INTRODUCTION

Background

Recent events have shown that the United States is not impervious to acts of terrorism intended to inflict death, injury, and destruction of assets within our borders. Current information indicates that, regardless of location, American infrastructures and citizens will continue to be targets of terrorist activities. Terrorists have demonstrated their willingness to employ asymmetrical warfare to achieve their goals. Agroterrorism represents one such class of nontraditional warfare. Chemical, biological, and radiological agents pose new challenges to law enforcement, food and agriculture regulatory agencies, and public health officials in their efforts to minimize the effects of a terrorist attack and apprehend those responsible for the attack.

In the past, law enforcement and food/agriculture regulatory agencies commonly conducted separate and independent investigations. An attack against the food or agriculture sector, however, requires a high level of cooperation between these disciplines to achieve their objectives of identifying the threat, preventing the spread of the disease or further contamination of a food product, preventing public panic, and apprehending those responsible. Lack of mutual awareness and understanding, as well as the absence of established communication procedures, could hinder the effectiveness of joint law enforcement investigations. Due to the continued likelihood of attacks against the U.S. food and agriculture sector, the effective use of all resources during an incident will be critical to ensure an efficient and appropriate response.

Purpose and Scope of This Handbook

The purpose of this handbook is to:

1. Provide an introduction to the food and agriculture sector and criminal terrorist investigations so joint investigations by law enforcement personnel and food/agriculture regulatory agencies develop a better understanding of each other's information requirements and investigative procedures.
2. Identify potential conflicts encountered during joint investigations and to provide potential solutions that can be adapted to meet the needs of the various jurisdictions and agencies throughout the U.S.
3. Enhance the appreciation and understanding of each discipline's expertise by all parties.

This handbook aims to facilitate communication and interaction among officials and representatives from law enforcement, animal health, plant health, and public health who become involved in a joint investigation of a potential or actual agroterrorism event. It also aims to foster a greater understanding about the food and agriculture sector among law enforcement officials to minimize potential communication barriers during an agroterrorism event.

Law enforcement officials are encouraged to read the entire handbook and not limit their review to only their respective sections. Law enforcement and the food and agriculture sector have three common concerns:

1. Early identification of the criminal terrorist event.
2. Early identification of animal health emergencies, plant health emergencies, or food tampering.
3. The time sensitivity associated with obtaining information.

Even with routine concerns, each group might be hesitant to openly share information with others due to actual or perceived information-sharing limitations. Identifying and resolving potential barriers for a free flow of information in advance will facilitate the timely exchange of critical information when dealing with an actual event.

Recognizing Potential Barriers and Issues

Law Enforcement Barriers

The law enforcement community has two primary concerns regarding the exchange of investigative information. One is a reluctance to provide information that may jeopardize the safety of confidential informants or the security of classified sources. Information that law enforcement personnel obtain from informants is frequently so sensitive that, if the information were exposed, the suspects would be able to determine exactly who had provided the information to law enforcement officials. As a result, the more people who have access to sensitive information, the greater the possibility that the information source will be exposed. Not discounting the need for closely held, informant-provided information, animal, plant, and food health officials would like to receive alerts from law enforcement if heightened awareness needs to be in effect. Whether or not this alert requires the disclosure of sensitive information, it allows monitoring and surveillance for unusual or unexplained occurrences that may otherwise initially be overlooked as a signal of an attack against the food or agriculture sector.

The other primary concern of the law enforcement community is that suspects may avoid detection as a result of the exchange or release of sensitive information. In any investigation, the more people with access to sensitive information, the more opportunities exist for inadvertent disclosure of the information. As a result, a greater opportunity exists for the inadvertent transmission of sensitive information back to the suspected perpetrators, thus providing them advanced warning to facilitate the destruction of evidence and to possibly avoid detection.

Media Issues

Release of sensitive information by the media, though not intentional, might cause public panic or compromise law enforcement sources, thus hindering investigations. Food, agriculture, and law enforcement officials need to develop

a working relationship with the media to share timely and useful information to keep the public accurately informed but not overly alarmed. This can be accomplished by issuing public announcements. It is paramount that food and agriculture officials and law enforcement authorities coordinate their media information and appoint one lead spokesperson to respond to the media. The designated lead spokesperson will help ensure the accuracy of the information being disseminated to the public. By selecting a lead spokeperson with expertise to answer specific technical questions, it is much easier to avoid the release of sensitive information. When media representatives investigate possible economic effects or the psychological impact of an attack on the U.S. food and agriculture system, they will aggressively seek information from investigators. Establishing a Joint Information Center (JIC) with a lead spokesperson will aid in dealing with media concerns and providing timely and accurate information.

Responding to a Biological Attack Against the Food and Agriculture Sectors

Overview of Federal Authority

The response to an agroterrorism attack requires coordination between federal law enforcement agencies; federal animal, plant, and food health agencies; and other federal, state, and local agencies. Federal authority with regard to investigations of terrorism has been established in several numbered directives designated as Homeland Security Presidential Directives (HSPD). For example, HSPD-5 states that the Attorney General (AG), *usually acting through the FBI,* has lead responsibility for criminal investigations and intelligence activities related to terrorist acts and terrorist threats. HSPD-5 also requires that the FBI coordinate the activities of other members of the law enforcement community to detect, prevent, preempt, and disrupt terrorist attacks against the United States.[1] HSPD-9 states that AG, the Secretary of Homeland Security, and the Director of Central Intelligence, in coordination with the Secretary of Agriculture, Secretary of Health and Human Services, and the Administrator of the Environmental Protection Agency (EPA), shall develop and enhance intelligence

operations and analysis capabilities focusing on the agriculture, food, and water sectors.[2]

These authorities, and the Attorney General Guidelines (AG Guidelines), mandate that the FBI be involved in planning for and responding to acts of terrorism, to include an act of agroterrorism. The AG Guidelines provide clear guidance on how terrorism investigations are to be conducted:[3]

> The FBI shall not hesitate to use any lawful techniques consistent with these Guidelines, even if intrusive, where the intrusiveness is warranted in light of the seriousness of the crime or the strength of the information indicating its commission or potential future commission. This point is particularly observed in the investigation of terrorist crimes and in the investigation of enterprises that engage in terrorism.[4]

Other Federal departments and agencies may have authorities, resources capabilities, or expertise required to support terrorism-related law enforcement and investigation operations. Agencies may be requested to participate in Federal planning and response operations, and may be requested to designate liaison officers and provide other support as required.[5]

Summary of Specific Directives & Legislation

The Homeland Security Act of 2002

The Homeland Security Act of 2002 established the Department of Homeland Security (DHS) with the mandate and authority to protect the American people from the continuing threat of terrorism.[6]

Homeland Security Presidential Directive 5

In February 2003, President George W. Bush issued HSPD-5 to establish the United States Government plan to prevent, prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies. It calls for a single, comprehensive approach to domestic incident management. The objective of the U.S. Government is to ensure that all levels of government across the nation

have the capability to work efficiently and effectively together, using a national approach to domestic incident management. With regard to domestic incidents, the U.S. Government treats crisis management and consequence management as a single, integrated function, rather than as two separate functions.

In HSPD-5, the President designates the Secretary of Homeland Security as the Principal Federal Official (PFO) for domestic incident management and empowers the Secretary to coordinate Federal resources used in response to or recovery from terrorist attacks, major disasters, or other emergencies in specific cases. The directive further states that the AG has lead responsibility for criminal investigations of terrorist acts or terrorist threats by individuals or groups inside the U.S., or directed at U.S. citizens or institutions abroad, where such acts are within the Federal criminal jurisdiction of the U.S. The AG is also responsible for related intelligence collection activities within the U.S., subject to the National Security Act of 1947 and other applicable law, Executive Order 12333, and AG-approved procedures pursuant to that Executive Order. Generally acting through the FBI and in cooperation with other Federal departments and agencies engaged in activities to protect our national security, the AG shall also coordinate the activities of the other members of the law enforcement community to detect, prevent, preempt, and disrupt terrorist attacks against the U.S. Following a terrorist threat or an actual incident that falls within the criminal jurisdiction of the U.S., the full capabilities of the U.S. shall be dedicated, consistent with U.S. law and with activities of other Federal departments and agencies to protect our national security, to assisting the AG to identify the perpetrators and bring them to justice.

The National Response Plan (NRP) was originally created under the HSPD-5 but has since been superseded by the National Response Framework (NRF) and its companion the National Incident Management System (NIMS). Both of these documents were created as a guide for how the Nation will conduct all-hazards response ranging from terrorist plots to natural disasters by planning, organizing, training, and improving procedures. Its whole purpose is to let everyone at the local, tribal, state, and Federal levels of government as well as nongovernmental agencies know what agency has precedence and who makes

what decisions before an incident occurs so there is no confusion and everything can run as smoothly as possible when an incident does occur. The way this is done is through unified command and engaged partnership that allows these groups to plan and train together before an incident occurs so they can more easily prevent or recover from one while it is occurring.

The Framework is written for senior elected and appointed leaders, such as Federal department or agency heads, Governors, mayors, tribal leaders, and city or county officials – those who have a responsibility to provide an effective response to preserve the safety and welfare of the community. At the same time, the Framework informs emergency management practitioners, explaining the operating structures and systems used routinely by first responders and emergency managers at all levels of government.

There are four goals for Homeland Security that are outlined in the Framework which include preventing and disrupting terrorist attacks, protecting critical infrastructure and resources, responding to and recovering quickly from incidents, and strengthening the system for long term success. While the Framework outlines who is in charge of what tasks, it also provides a level of flexibility that can accommodate any situation that may arise.

Under the Framework tribal, local, and state governments can ask for assistance during an incident from other states or the Federal government provided that the incident is exceeding their capabilities or is expected to. When another state helps out it is through an assistance agreement whereas when the Federal government becomes involved they do so through the Stafford Act. The Stafford Act can only be obtained after the Governor asks that the President declare a state of emergency.

The Framework document is augmented with online access to supporting documents, further training, and an evolving resource for exchanging lessons learned - http://www.fema.gov/emergency/nrf/index.htm.

NRF Emergency Support Function 11: Agricultural and Natural Resources Annex

Animal and Plant Disease and Pest Response

The U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) addresses the potential for outbreaks in multiple States and provides guidance to unaffected States in taking immediate precautionary measures within their borders.

If a possible intentional pathogen or pest release is reported, animal or plant health authorities immediately notify USDA's Office of Inspector General (OIG), which in turn contacts the National Operations Center. As the situation warrants, the USDA OIG notifies and coordinates with the appropriate law enforcement agencies at the local, tribal, State, and Federal levels.

If criminal activity is suspected in connection with an outbreak, the USDA OIG works closely with the responding veterinary or plant diagnostics staff to ensure the proper handling and packing of any samples and their shipment to the appropriate research laboratory for testing and forensic analysis. The USDA OIG conducts any subsequent criminal investigation jointly with other appropriate Federal law enforcement agencies. If the outbreak is determined to

be a criminal but not a terrorist act, the USDA OIG assumes primary Federal responsibility for a law enforcement response.

If a terrorist act is suspected in connection with an outbreak, the USDA OIG notifies the Weapons of Mass Destruction Unit of the Department of Justice (DOJ)/Federal Bureau of Investigation (FBI). The USDA OIG, other appropriate Federal law enforcement agencies, and the DOJ/FBI conduct a joint criminal investigation.

Common Goals of Law Enforcement and Food/Agriculture Regulatory Agencies

- Protect the public
- Prevent attacks against the food and agriculture sector
- Prevent or stop the spread of disease or contamination
- Identify those responsible for a threat or an attack
- Protect their respective personnel during their response and investigations

The means to achieve common goals, as well as other discipline-specific goals, are set forth in this handbook.

Within agency capabilities, APHIS provides appropriate services to include inspection, quarantine enforcement, fumigation, disinfection, sanitation, pest extermination, and destruction of animals or articles found to be so infected or contaminated as to be sources of dangerous infection to human beings and takes such other measures as necessary.

APHIS, under the Plant Protection Act and the Animal Health Protection Act, enforces interstate quarantines and coordinates with the States to ensure the establishment of appropriate intrastate quarantines.

NRF Food and Agriculture Incident Annex

The Food and Agriculture Incident Annex describes the roles and responsibilities associated with all incidents involving the Nation's agriculture and food systems that require a coordinated Federal response utilizing principles from the NRF doctrine.

The objectives of a coordinated national response to an incident impacting food and agriculture are to:

- Detect the event through the reporting of illness, disease/pest surveillance, routine testing, consumer complaints, and/or environmental monitoring.
- Determine the primary coordinating agency.
- Determine the source of the incident or outbreak.
- Control and contain the distribution of the affected source.
- Identify and protect the population at risk.
- Assess public health, food, agriculture, and law enforcement implications.
- Assess the extent of residual biological, chemical, or radiological contamination, then decontaminate and dispose as necessary.

If an agency suspects a threat involving biological, chemical, or radiological agents or indications that instances of disease may not be the result of natural causes, the Department of Justice (DOJ) must be notified through the DOJ/Federal Bureau of Investigation (FBI), Weapons of Mass Destruction Operations Unit. The FBI, in turn, immediately notifies the National Operations Center (NOC) and the National Counterterrorism Center.

In accordance with the NRF tiered response principle and partnership principle, the designated primary coordinating authority is established at the lowest possible level. Therefore, the local or State agency with the legal authority for food or agriculture is the initial lead coordinating agency, with all other private-sector, NGO, and government agencies cooperating. If the level of the incident progresses by a Secretarial declaration of emergency, by either the Department of Health and Human Services (HHS) or Department of Agriculture (USDA), or by a State request, then HHS or USDA will serve as the lead coordinating agency. USDA and/or HHS will be supported by other Federal agencies as appropriate and will perform the roles described in this

annex in coordination with Department of Homeland Security (DHS) and State partners. If the incident further progresses, the Secretary of Homeland Security shall coordinate the Federal Government resources utilized in response to or recovery from terrorist attacks, major disasters, or other emergencies. When exercising this role, the Secretary is supported by other coordinating agencies and cooperating agencies.

Participating Federal, State, tribal, and local agencies may take emergency actions, consistent with the law, and in accordance with their organization's policies to protect the public, mitigate immediate hazards, and collect information concerning the emergency. These actions may be taken prior to any formal State or Federal declaration.

State, tribal, and local governments are primarily responsible for detecting and responding to food and agriculture incidents and implementing measures to minimize the health and economic consequences of such an incident or outbreak.

Homeland Security Presidential Directive 9

HSPD-9 establishes a national policy to defend the agriculture and food system against terrorist attacks, major disasters, and other emergencies. The Secretaries of the Interior, Agriculture, and Health and Human Services; the Administrator of the EPA; and heads of other appropriate Federal departments and agencies shall develop robust, comprehensive, and fully coordinated surveillance and monitoring systems, including international information, for animal disease, plant disease, wildlife disease, food, public health, and water quality that provides early detection and awareness of disease, pest, or poisonous agents; develop systems that, as appropriate, track specific animals and plants, as well as specific commodities and food; and develop nationwide laboratory networks for food, veterinary, plant health, and water quality that integrate existing Federal and State laboratory resources, are interconnected, and use standardized diagnostic protocols and procedures.

HSPD-9 further mandates that the AG, the Secretary of Homeland Security, and the Director of Central Intelligence, in coordination with the Secretary of Agriculture, the Secretary of Health and Human Services, and the Administrator of the EPA, shall develop and enhance intelligence operations and analysis capabilities focusing on the agriculture, food, and water sectors. Capabilities will include collection and analysis of information concerning threats, delivery systems, and methods that could be directed against these sectors.

Footnotes

1 George W. Bush. *Homeland Security Presidential Directive 5*, *Management of Domestic Incidents* (February 28, 2003).

2 George W. Bush. *Homeland Security Presidential Directive 9*, *Defense of United States Food and Agriculture* (January 30, 2004).

3 U.S. Department of Justice. *The Attorney General's Guidelines on General Crimes, Racketeering Enterprise and Terrorism Enterprise Investigations*, by John Ashcroft, pages 1-24 (May 30, 2002).

4 Ibid., page 7.

5 National Response Plan. *Terrorism Incident Law Enforcement and Investigation Annex* (December 2004).

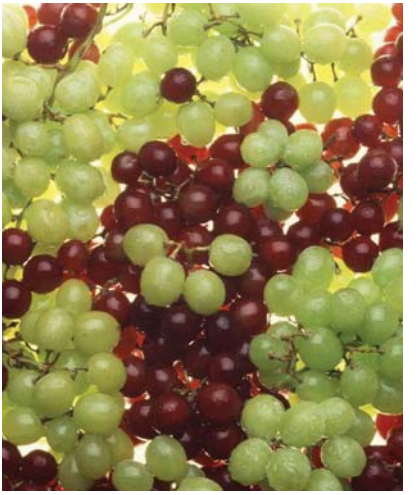
6 Ibid., page 78.

Food and Agriculture Regulatory Agencies

Food and Drug Administration

Mission and Scope

The Food and Drug Administration (FDA), part of the Department of Health and Human Services (DHHS), maintains the integrity of countless products used by Americans every day. It not only ensures the safety of the food, but also regulates cosmetics, medicines, biologics, medical devices, and radiation-emitting products such as microwave ovens. Additionally, feed for pets and farm animals falls under FDA scrutiny.



FDA ensures that these products are labeled truthfully with the information that people need to use them properly. As one of the nation's oldest consumer protection agencies, FDA's employees monitor the manufacture, import, transport, storage, and sale of more than $1 trillion worth of products each year.

As an agency within the Public Health Service, FDA is headed by the Commissioner for Food and Drugs. First and foremost, FDA serves as a public health agency, charged with protecting American consumers by enforcing the Federal Food, Drug, and Cosmetic Act (FFDCA), and several related public health laws. To carry out this mandate of consumer protection, FDA employs roughly 1,100 investigators and inspectors to cover almost 95,000 FDA-regulated businesses in the United States. These employees are located in district and local offices in 157 cities across the country.

Inspections and Legal Sanctions

Investigators and inspectors visit more than 15,000 facilities per year, verifying that products are manufactured correctly and labeled truthfully. As part of their inspections, they collect about 80,000 domestic and imported product samples for examination by FDA scientists or for label checks.

If a company is found in violation of any of the laws that FDA enforces, FDA can encourage the firm to voluntarily correct the problem or recall a faulty product from the market. A recall is generally the fastest and most effective way to protect the public from an unsafe product.

FDA inspections are conducted to maintain the integrity of products used by Americans every day. Each year, about 80,000 domestic and imported product samples are examined by FDA scientists for label checks.

When a company cannot or will not voluntarily correct a public health problem with one of its products, FDA can enact legal sanctions. The agency can go to court to force a company to stop selling a product and to have items already produced seized and destroyed. When warranted, criminal penalties—including prison sentences—are sought against manufacturers and distributors.

Approximately 3,000 products per year are found to be unfit for consumers and are withdrawn from the marketplace, either by voluntary recall or by court-ordered seizure. In addition, an estimated 30,000 import shipments are detained yearly at ports of entry because the goods appear to be unacceptable.

Scientific Expertise

The scientific evidence needed to back up FDA's legal cases is prepared by the agency's 2,100 scientists, including 900 chemists and 300 microbiologists, who work in 40 laboratories in the Washington, D.C. area and around the country. Some of these scientists analyze samples to see, for example, if products are contaminated with illegal substances. Other scientists review test results submitted by companies seeking agency approval for drugs, vaccines, food additives, coloring agents, and medical devices.

Assessing risks—and, for drugs and medical devices, weighing risks against benefits—serves as the core of FDA's public health protection duties. By ensuring that products and producers meet certain standards, FDA protects consumers and educates them about their purchases. In deciding whether to approve new drugs, FDA does not itself do research, but rather examines the results of studies done by the manufacturer. The agency must determine that the new drug produces the benefits it is supposed to without causing side effects that would outweigh those benefits.

Product Safety

Another major FDA mission is to protect the safety and wholesomeness of food. Agency scientists test samples to see if any substances, such as pesticide residues, exist in unacceptable amounts. If contaminants are identified, FDA takes corrective action. FDA also sets labeling standards to inform consumers of the contents of the food they purchase. The nation's food supply is protected in yet another way as FDA ensures that medicated feeds and other drugs given to animals raised for food do not threaten the consumer's health.

The safety of the nation's blood supply is another FDA responsibility. The agency's investigators routinely examine blood bank operations, from recordkeeping to testing for contaminants. FDA also ensures the purity and effectiveness of biologicals (medical preparations made from living organisms and their products), such as insulin and vaccines.

Office of Criminal Investigation

Mission and Scope

The Office of Criminal Investigation (OCI) was established in 1992 and includes a Special Prosecutions Task Force and an Internal Affairs Division. It currently operates from 29 offices throughout the United States. OCI investigates criminal violations falling within FDA's jurisdiction such as food, cosmetic, and medical device tampering; alteration/misbranding of FDA regulated products; manufacture and sale of counterfeit/unapproved drugs; product substitution; product tampering; health fraud; new drug application fraud; crimes affecting the nation's blood supply; crimes related to fraudulent clinical studies; and Internet facilitated criminal violations involving FDA regulated products. FDA Criminal Investigators, "Special Agents," employ customary federal law enforcement methods and techniques in the suspected criminal violations of Title 21, FFDCA; Title 18 United States Code (USC) 1368, The Federal Anti-Tampering Act, and other related federal statutes.

OCI Procedures

OCI bears the primary responsibility for all criminal investigations conducted by the FDA, including suspected tampering incidents and suspected counterfeit products. Similarly, OCI holds primary responsibility and serves as the primary point of contact for all law enforcement and intelligence issues pertaining to threats or perceived threats against FDA-regulated products. OCI participates in numerous law enforcement and intelligence task forces both nationally and internationally, and has assigned a full-time representative to the FBI National Joint Terrorism Task Force (NJTTF) and Interpol.

The NJTTF is made up of representatives from 35 government agencies, representing the intelligence, law enforcement, diplomatic, defense, public safety and homeland security communities.

Reporting Criminal Activity Related to FDA-Regulated Products

All reports of suspected or confirmed criminal activity, including suspected tampering or counterfeiting incidents, should be reported to the appropriate OCI field office or resident office without delay. Additionally, all threats or perceived threats against FDA regulated products should be referred immediately to the local OCI Field Office or to OCI Headquarters (HQ).

Liaison with Law Enforcement / Intelligence Community

OCI is the FDA's liaison component with the law enforcement community for criminal investigations and related matters. In addition, OCI serves as the primary point of contact between the FDA and the Intelligence Community on all matters of mutual interest. All contacts regarding requests or questions received from federal, state, or local law enforcement agencies or intelligence agencies are to be referred without delay to the local OCI Field Office. Similarly, contacts to FDA HQ or Centers should be referred to OCI HQ.

Center for Food Safety and Applied Nutrition

Mission

The Center for Food Safety and Applied Nutrition (CFSAN) represents one of six product-oriented centers that carry out the mission of FDA. CFSAN, in conjunction with the Agency's field staff, promotes and protects the public's health by ensuring that the nation's food supply is safe, sanitary, wholesome, and honestly labeled, and that cosmetic products are safe and properly labeled. With more than 800 employees, CFSAN boasts a staff of highly specialized professionals—such as chemists, microbiologists, toxicologists, food technologists, pathologists, molecular biologists, pharmacologists, nutritionists, epidemiologists, mathematicians, and sanitarians.

Scope of Responsibility

The Center regulates $240 billion worth of domestic food, $15 billion worth of imported foods, and $15 billion worth of cosmetics sold across state lines. This regulation takes place from the products' point of U.S. entry or processing to their point of sale, with approximately 50,000 food establishments (includes more than 30,000 U.S. food manufacturers and processors and over 20,000 food warehouses) and 3,500 cosmetic firms. These figures do not include the roughly 600,000 restaurants and institutional food service establishments and the 235,000 supermarkets, grocery stores, and other food outlets regulated by state and local authorities that receive guidance, model codes, and other technical assistance from FDA. FDA enhances its programs by supporting state and local authorities with training and guidance to ensure uniform coverage of food establishments and retailers.

Statutory Authority

FDA's regulatory authority for food and cosmetics comes from:

- The Federal Food and Drugs Act of 1906
- The Federal Import Milk Act (1927)
- The Federal Food, Drug, and Cosmetic Act of 1938, as amended
- The Public Health Service Act (1944)
- The Fair Packaging and Labeling Act (1966)
- The Infant Formula Act of 1980, as amended
- The Nutrition Labeling and Education Act of 1990
- The Dietary Supplement Health and Education Act of 1994
- The Public Health Security and Bioterrorism Preparedness Act of 2002
- Food Allergen Labeling and Consumer Protection Act of 2004
- Other related statutes.

Food and Agriculture Regulatory Agencies

FDA's responsibility in the food area covers generally all domestic and imported food. The exceptions are meat, poultry, and frozen, dried and liquid eggs, which are under the authority of the USDA's Food Safety and Inspection Service (FSIS); the labeling of alcoholic beverages (above 7% alcohol) and tobacco, which are regulated by the U.S. Department of the Treasury's Bureau of Alcohol, Tobacco, and Firearms (ATF), and items regulated by the U.S. EPA, which establishes tolerances for pesticide residues in foods and ensures the safety of drinking water.

FDA also maintains close communications with other federal agencies, such as

- U.S. Department of Commerce's National Marine Fisheries Service
- Centers for Disease Control and Prevention (CDC)
- U.S. Customs Service; the Federal Trade Commission (FTC)
- U.S. Department of Transportation (DOT)
- Consumer Product Safety Commission (CPSC)
- U.S. Department of Justice (DOJ)
- U.S. Department of Homeland Security
- Department of Defense.

In many instances, responsibilities are delineated in interagency agreements.

FDA regulates food products sold in interstate commerce, whereas products made and sold entirely within a state are regulated by that state. Center personnel work with state agriculture and health departments to resolve food safety concerns and economic fraud cases, for example.

Tools for Ensuring Food Safety

- Inspection of establishments
- Collection and analysis of samples
- Monitoring of imports
- Premarket review (e.g., food and color additives)
- Notification programs (e.g., food contact substances, infant formula)
- Regulations/agreements (e.g., memoranda of understanding)
- Consumer studies, focus groups
- Laboratory research
    - develop/improve methods for detecting pathogens and chemical contaminants in food
    - determine health effects of food contaminants
    - determine effects of processing on food composition
    - determine health effects of dietary factors
    - investigate factors that contribute to virulence of biological contaminants
- Pilot plant for food processing and packaging and biotechnology studies
- Cooperative activities/technical assistance
- Collection and analysis of information.

United States Department of Agriculture

Mission and Scope

President Abraham Lincoln founded the U.S. Department of Agriculture (USDA) in 1862. He called it the "people's Department," an acknowledgment of the fact that it served 58 percent of the populace—the nation's farmers, who needed good seeds and information to grow their crops. Today, USDA continues Lincoln's legacy, not only helping farmers and ranchers, but extending services to all Americans. USDA activities have expanded to include:

- Leadership in the Federal anti-hunger effort with the Food Stamp, School Lunch, School Breakfast, and the Women, Infants, and Children (WIC) Programs.
- Stewardship of 192 million acres of national forests and rangelands.
- Services as the country's largest conservation agency, encouraging voluntary efforts to protect soil, water, and wildlife on the 70 percent of America's lands that are in private hands.
- Extension of housing, modern telecommunications, and safe drinking water to rural America.
- Responsibility for the safety of meat, poultry, and egg products.
- Research leadership in areas ranging from human nutrition to new crop technologies that allow us to grow more food and fiber using less water and pesticides.
- Helping ensure open markets for U.S. agricultural products and providing food aid to needy people overseas.

Farm and Foreign Agricultural Services helps to keep America's farmers and ranchers in business as they face the uncertainties of weather and markets. They deliver commodity, credit, conservation, disaster, and emergency assistance programs that help improve the stability and strength of the agricultural economy.

Food, Nutrition and Consumer Services works to end hunger and improve health in the United States. Its agencies administer federal domestic nutrition assistance programs and the Center for Nutrition Policy and Promotion, which links scientific research to the nutrition needs of consumers through science-based dietary guidance, nutrition policy coordination, and nutrition education.

Food Safety ensures that the nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and properly labeled, and packaged. This mission area also plays a key role in the President's Council on Food Safety and has been instrumental in coordinating a national food safety strategic plan among various partner agencies including the DHHS and the EPA.

Marketing and Regulatory Programs facilitates domestic and international marketing of U.S. agricultural products and ensures the health and care of animals and plants. Agencies that participate in these programs are active in setting national and international standards.

Natural Resources and Environment ensures the health of the land through sustainable management, with work to prevent damage to natural resources and the environment, restore the resource base, and promote good land management.

Research, Education and Economics is dedicated to the creation of a safe, sustainable, competitive U.S. food and fiber system, as well as strong communities, families, and youth through integrated research, analysis, and education.

Rural Development is committed to helping improve the economy and quality of life in all of rural America by providing financial programs to support essential public facilities and services such as water and sewer systems, housing, health clinics, emergency service facilities, and electric and telephone service. Rural Development promotes economic development by providing loans to businesses through banks and community-managed lending pools, while also assisting communities to participate in community empowerment programs.

Office of Inspector General

Mission and Scope

The Secretary of Agriculture administratively established the Office of Inspector General (OIG) in 1962 following a major criminal fraud scandal affecting several agencies within USDA. OIG was later legislatively established by Congress under the Inspector General Act of 1978 (Public Law [P.L.] 95-452), as amended.

Pursuant to the Inspector General Act of 1978 and Section 1337 of the Agriculture and Food Act of 1981 (P.L. 97-98), OIG Investigations is the law enforcement arm of the Department, with Department-wide investigative jurisdiction. OIG Special Agents conduct investigations of significant criminal activities involving USDA programs, operations, and personnel, and are authorized to make arrests, execute warrants, and carry firearms. The types of investigations conducted by OIG Special Agents involve criminal activities such as frauds in subsidy, price support, benefits, and insurance programs; significant thefts of Government property or funds; bribery; extortion; smuggling; and assaults on employees. Investigations involving criminal activity that affects the health and safety of the public, such as meat packers who knowingly sell hazardous food products and individuals who tamper with food regulated by USDA, are also high-profile investigative priorities. In addition, OIG Special Agents are poised to provide emergency law enforcement response to USDA declared emergencies and suspected incidents of terrorism affecting USDA regulated industries, as well as USDA programs, operations, personnel, and installations, in coordination with Federal, State, and local law enforcement agencies, as appropriate. Finally, OIG Special Agents provide physical protection for the Secretary of Agriculture and respond to any threat, intimidation, or assault against the Secretary that occurs in his/her official capacity.

OIG Strategic Goals

- Support USDA in the enhancement of safety and security measures to protect USDA and agricultural resources and in related public health concerns.
- Reduce program vulnerabilities and enhance integrity in the delivery of benefits to individuals.
- Increase the efficiency and effectiveness with which USDA manages and employs public assets and resources, including physical and information resources.

Emergency Response Team

The OIG Emergency Response Team (ERT) provides the capability to safely and effectively respond to the scene of criminal acts and other incidents that threaten the food supply, agriculture infrastructure, USDA facilities and personnel, or USDA mission areas in general as defined in the OIG's and USDA's strategic plans. The ERT will also assess incidents, act as advisors to field personnel, and assist during the course of investigations that could quickly overwhelm OIG regional resources.

The ERT will respond to:

- Significant animal and plant disease incidents or outbreaks.
- Food safety matters involving serious injuries or fatalities.
- Incidents involving threats or attacks upon the food supply, agriculture infrastructure, USDA facilities, and organizations receiving USDA funding.
- Assaults upon USDA personnel or within USDA facilities involving serious injuries or fatalities.
- Other matters requiring special response as determined by OIG.
- Requests for assistance from USDA-OIG personnel; other USDA agencies; and other Federal, state, or local government agencies concerning matters under the purview of the ERT.

Food Safety Inspection Service

Mission and Scope

The Food Safety and Inspection Service (FSIS) serves as the USDA's public health agency, ensuring that the nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and correctly labeled and packaged.

FSIS operates under the Federal Meat Inspection Act (FMIA), the Poultry Products Inspection Act (PPIA), and the Egg Products Inspection Act (EPIA), in addition to Executive Orders, small business protection laws, and other guidance applicable to all Federal agencies.

The **Compliance & Investigation Division (CID)** manages and directs investigations, case development, and documentation of violations of inspection laws and regulations. CID consists of a Washington D.C. staff and six regions.

Under the FMIA, FSIS provides inspection for all meat products sold through interstate commerce, and re-inspects imported products to ensure that they meet U.S. food safety standards.

Under the PPIA, FSIS provides inspection for all poultry products sold through interstate commerce, and re-inspects imported products to ensure that they meet U.S. food safety standards.

Under the EPIA, FSIS inspects egg products sold through interstate commerce, and re-inspects imported products to ensure that they meet U.S. food safety standards. In egg processing plants, inspection involves examining, before and after breaking, eggs intended for further processing and use as food.

Animal and Plant Health Inspection Service (APHIS)

Mission and Scope

The Animal and Plant Health Inspection Service (APHIS) protects and promotes U.S. agricultural health, administers the Animal Welfare Act, and carries out wildlife damage management activities.

The APHIS mission represents an integral part of USDA's efforts to provide the nation with safe and affordable food. Without APHIS protecting America's animal and plant resources from agricultural pests and diseases, threats to the food supply and to the nation's economy would be enormous. For example, if major agricultural pests like the Mediterranean fruit fly and Asian longhorned beetle were left unchecked by APHIS, this country would suffer production and marketing losses of several billions of dollars annually. And, if APHIS did not maintain the first line of defense, 24 hours a day, 7 days a week, animal diseases like foot-and-mouth disease and bovine spongiform encephalopathy (mad cow disease) could devastate the livestock industry and the food supply. All plant and animal pests and disease threats could cost billions of dollars in lost domestic and international markets and greatly impact U.S. consumers. APHIS aggressively and successfully works to prevent and respond to these situations.

In recent years, the scope of APHIS' protection function has expanded beyond pest and disease management. With its technical expertise and leadership in assessing and regulating the risks associated with agricultural imports, APHIS has assumed a greater role in the global agricultural arena. Now, the agency must respond to other countries' animal and plant health import requirements and negotiate science-based standards that ensure America's agricultural exports, worth over $50 billion annually, are protected from unjustified trade restrictions.

Responding to needs expressed by the American people and Congress, APHIS' protection role also includes wildlife damage management, animal welfare, human health and safety, and ecosystems vulnerable to invasive pests and pathogens. Carrying out its diverse protection responsibilities, APHIS makes every effort to address the needs of all those involved in the U.S. agricultural sector.

APHIS Veterinary Services

The APHIS Veterinary Services protect and improve the health, quality, and marketability of our nation's animals, animal products and veterinary biologics by:

- Preventing, controlling and/or eliminating animal diseases.
- Monitoring and promoting animal health and productivity.

Law Enforcement

Law Enforcement Investigation Goals

As with the animal, plant, and food security communities, during an agroterrorism incident, the law enforcement community has a set of primary goals. These goals include the following:

1. **Protect public safety.** The overriding goal of law enforcement remains the protection of the public from terrorist threats or attacks. This goal is achieved by preventing the initial attack or apprehending a terrorist after an attack to prevent additional events.
2. **Prevent a criminal act.** The role of law enforcement begins with taking steps to prevent a terrorist from successfully executing an attack. Through ongoing surveillance and intelligence gathering techniques, law enforcement personnel seek to obtain information that identifies potential terrorists, their targets, and methods of attack before an incident can be executed. It is necessary to safeguard the sources of the intelligence information and the means in which it was gathered to avoid the inadvertent disclosure of sources and collection techniques, especially during ongoing productive operations. Inadvertent release of sensitive information might compromise not only the specific threat being investigated, but also future investigations.
3. **Identify, apprehend, and prosecute the perpetrators.** Once an attack against the food and/or agriculture sector occurs, law enforcement personnel seek to obtain sufficient evidence and information to first identify and then apprehend the individual or individuals responsible for the attack. Collection of evidence includes interviewing witnesses as well as obtaining and preserving physical evidence. A criminal investigation into an agroterrorism attack is not complete until there is a successful prosecution and conviction of those responsible for the attack. Law enforcement personnel must follow strict evidence collection procedures to obtain sufficient admissible evidence needed to achieve a conviction. Any abnormalities such as a break in the chain of custody in the collection or maintenance of the evidence may prevent the use of the incriminating evidence at the trial.

4. **Protect law enforcement personnel.** Law enforcement personnel are likely to encounter situations where they may be at risk for exposure to a hazardous material. Since some hazardous materials can be both infectious and contagious, highly transferable, and difficult to contain, law enforcement personnel must take precautions and wear appropriate personal protective equipment (PPE) when responding to and investigating an incident site. These precautions intend to protect uncontaminated areas, as well as the health of the surrounding human, animal, and plant populations. Sufficient information about the suspected or known agent must be obtained to help determine the safety precautions necessary to protect the investigators. Ideally, the FBI's Hazardous Materials Response Unit (HMRU) or field office Hazardous Materials Response Team (HMRT) will be involved in the collection of evidence. However, in the case of foreign animal diseases (FAD) specially trained foreign animal disease diagnosticians (FADD) will lead the collection of specimens.

Investigative Considerations

An attack involving the intentional release of agricultural pathogens to destroy or damage livestock or crops could be virtually indistinguishable from natural outbreaks, and would be difficult to tie conclusively to a state sponsored terrorist group. Consequently, differentiating between a natural or man-made disease outbreak remains a major challenge to defending against an agroterrorism attack. Use of agroterrorism agents under the cover of a naturally occurring epidemic could provide an attacker with deniability. Agroterrorism agents (pathogens/diseases) offer a hostile adversary a unique and significant advantage because of their ease of production, potential impacts, and ability to exploit U.S. vulnerabilities.

An agroterrorism attack may be surreptitious, in which case the first evidence of a biological agent may be the presentation of illness in humans and/or animals. In humans, the presentation of biological agents, both natural and deliberate, are often first detected through clinical or hospital presentations. In contrast, in animal populations, the first detection of biological agents often occurs in the middle of an outbreak. Once infected, animals can often act as the vector (source) for continuing to transmit the disease and facilitating an outbreak's spread.

An unusual increase in the numbers of sick or dying animals may be an indicator of an agroterrorism attack.

Indicators of Agroterrorism Attack

Indicators of an agroterrorism attack include observation of any of the following activities in a farming area or processing facility or near a suspect facility:

- Unusual increase in the numbers of sick or dying animals.
- Unusual disease of intoxication resulting in illness or death of plants or animals.
- Unscheduled or unusual spraying, particularly outdoors and/or during periods of darkness.
- Abandoned spray devices.
- Sudden increase in local market pricing on food items that are normally in plentiful supply.
- Local reporting of large crop or livestock losses and deaths unrelated to seasonal climatic conditions.

Other indicators that might be observed at crop fields, feed yards, processing plants, animal auctions, or animal fairs and trade shows include:

- A group or individual purchasing agricultural disease cultures, or a large amount of a highly toxic chemical with cash.
- A group or individual inquiring about obtaining samples of agricultural pathogens or asking specific questions about toxicity of a chemical.
- The theft or loss of agricultural disease culture or growth media from an academic research institution.
- Unusual travel activity noted in areas where agricultural or livestock disease outbreaks are occurring or have occurred previously.
- Shipments of supplies from a laboratory supply company that included growth media, such as blood agar culture dishes.
- Unexplained theft of agricultural animals or equipment, such as sprayers.
- Excessive curiosity about application equipment details, such as spray range.

- Unusual interest in the acquisition of vaccines and medications for a crop or livestock disease.
- Suspicious activities reported at or near livestock feedlots, processing plants, or poultry plants.
- Unexplainable loitering near pesticide storage areas.
- Interest in specific locations of agricultural asset concentrations, such as foreign requests for detailed data or travel plans to rural areas.
- Noxious or unusual odors, not routinely associated with the area.

Additional indicators might include locating any of the following equipment or materials in apartments, houses, garages, and so forth:

- Laboratory equipment, such as glassware, hoses, mortar and pestle, agar plates, incubators, pressure cookers, centrifuges, fermenters, autoclaves, carboys, and/or mason jars.
- Protective clothing, such as surgical or gas masks, self-contained breathing apparatus, respirators, rubber aprons, rubber gloves and boots.
- A fume hood, glove box, and/or high efficiency particulate air (HEPA) filter.
- Incinerator, incubator, large quantities of eggs, cell cultures, and/or small animals.
- Lyophilizer and/or freeze dryer.
- Agricultural sprayers, including spray nozzles of various sizes for aerosol dispersion.
- An improvised shower and eye bath located in an unusual area.
- Small atomizers, either empty or storing biological agents.
- Textbooks, journals, or materials in print or discovered online discussing microbiology, biology, medicine, chemistry, explosives, poisons, etc.
- Maps of agricultural asset concentrations.

Law Enforcement Criminal Investigations

Averting an Attack Against the Food and/or Agriculture Sector

Preventing an attack is the first line of defense and is the ultimate goal of law enforcement. In reality, not every criminal terrorist attack can be prevented; therefore, appropriate federal, state, and local agencies must be prepared to respond to an incident after-the-fact or during an ongoing event. The first step to prevent and prepare for an attack against the U.S. food and agriculture sector is to attempt to identify potential terrorists or terrorist organizations likely and capable of executing the attack. This information allows law enforcement officials to identify potential targets and possible modes of attack.

Criminal Investigation Process

Individuals conducting criminal investigations must operate within the applicable laws governing investigations and the ensuing prosecution. As information is compiled, a thorough understanding of the elements necessary to prove each offense being pursued will help guide the investigators to identify any missing or weak evidence. A brief summary of the criminal investigation process is provided below. Though the steps are presented sequentially, some aspects of the investigation may occur simultaneously.

Threat Assessment

Law enforcement personnel might face a non-credible threat, threatened incident, announcement that an incident has occurred (overt), or an unannounced incident that is discovered through non-law enforcement channels (covert).

In dealing with a claim that an incident either has occurred or will occur, the FBI, in consultation with recognized experts, will conduct a threat assessment to determine the credibility of the threat. If the threat is credible, law enforcement must take action to prevent or minimize the effect of the attack. If the threat

is deemed not to be credible, law enforcement personnel will initiate an investigation to identify and prosecute those responsible for the threat. Under federal law (18 U.S.C. §2332a, 18 U.S.C. 175, and 18 U.S.C. 229), a threat involving a chemical, biological, radiological, or explosive devise is a criminal act, whether or not the perpetrator actually possesses the agent.

In a covert attack, the surveillance systems overseen by the animal, plant, and food safety agencies – as well as public health – will be the key to identifying unexplained illnesses across the relevant populations or similar symptoms being reported by private practitioners and hospitals. As soon as these communities suspect that there is probably no natural cause for a disease outbreak, poisoning, infestation, or mass die-off, law enforcement personnel should be contacted in order to initiate a preliminary criminal investigation. If the food and agriculture sector officials and law enforcement have forged a working relationship prior to an unannounced attack, it is more likely that law enforcement will be contacted early in the investigation, permitting a cross-check preliminary inquiry to determine the likelihood of a criminal terrorist attack against the food and/or agriculture sector.

Gathering Evidence

The process of gathering evidence during the investigation of an agroterrorism incident involves collection of physical evidence such as samples of agent or material; dissemination devices; animal, plant, or food specimens; documents; photographs; and witness statements. Law enforcement personnel must consider several issues to ensure the evidence they gather can ultimately be used in a criminal prosecution. Some key issues are summarized below.

1. **Chain of Custody.** This process is an issue of significant concern for law enforcement personnel during a criminal investigation. Chain of custody is the methodology used to track and maintain control and accountability of all evidentiary items. This includes initial collection of the evidence through the final disposition of the specimens. Law enforcement and assisting personnel must provide accountability at each stage of collecting, handling, testing, storing, and transporting

the evidentiary items, as well as reporting any test results. Failure to properly maintain the chain of custody may prevent the evidence in question from being introduced at trial.

A distinction can be made between collecting samples for public, animal, plant, or food safety versus evidence collected for criminal prosecution. For instance, an overriding need might exist for authorities to identify agents or materials as soon as possible to ensure the implementation of proper response protocols to protect the responders, the public, and the industry. In some cases, the need for rapid collection and testing to save lives may outweigh the normal evidence collection procedures.

2. **Delivery of Samples to an Appropriate Laboratory.** Not all forensic laboratories that process criminal evidence have equipment to test for animal, plant, or food borne agents, and not all clinical laboratories can perform forensic testing on potential evidentiary samples.

   The Integrated Consortium of Laboratory Networks (ICLN), based in part on the Laboratory Response Network (LRN) established by the FBI and the CDC, is responsible for identifying labs across the country with expertise to conduct appropriate analyses in multiple matrices using validated equipment and protocols, qualified personnel, and accepted standard operating procedures. The laboratories belonging to the ICLN strive to provide timely, high quality, and interpretable results for early detection and effective consequence management of terrorist acts and other events requiring an integrated laboratory response. Therefore, only labs approved by the FBI in consultation with the appropriate responsible federal sector agency should be used to test collected materials. Submitting evidentiary samples to a non-approved laboratory will not only delay proper analyses, but might result in unintentional contamination of the samples.

   Current ICLN Members

   Laboratory Response Network (LRN)

   Food Emergency Response Network (FERN)

   National Animal Health Laboratory Network

   National Plant Diagnostic Network.

3. **Documents.** Original documents should be obtained when possible. Issues of authenticity and admissibility arise if copies are relied upon when original documents are available.

4. **Witness Statements.** Witness descriptions of dissemination devices, vehicles, suspects, odors, tastes, sounds, and other specific information must be obtained as soon as possible. Such information is time sensitive, and the sooner it can be obtained, evaluated, and disseminated, the higher its value to investigators. As time passes between the incident and the witness testimony, the potential for memories to fade increases and the influence of others can greatly erode the accuracy of the witness' recollection.

Evaluating Evidence

As investigators gather and collect evidence, an ongoing evaluation of that evidence must be part of the investigative process. An understanding of the types of evidence and the rules governing the admissibility of evidence will lead to better evaluations of evidence as the investigation progresses. Though not intended to be all-inclusive, Table 1 identifies and provides a brief explanation of some types of evidence collected during the investigative process.

During a terrorist incident, law enforcement personnel will need the results of any analyses or tests on evidence for them to properly focus their investigation. In major criminal and terrorist investigations, law enforcement officers are accustomed to a quick turnaround on lab results if the investigation involves a death or a high profile crime. For an agroterrorism event, however, the time required to detect and positively identify the agent may be considerably longer which could delay the progress of the investigation.

As with other investigations, during an agroterrorism event, the investigators never know what nuance or piece of information will serve as the crucial break needed to identify, arrest, and convict those responsible for the criminal act. For this reason investigations conducted jointly between the FBI, the USDA OIG and/or the FDA OCI will increase the ability to achieve respective objectives and in a coordinated manner.

From the outset of a criminal or terrorist investigation into an attack on the food and agriculture sector until the case is submitted to a jury for a verdict, all facts collected during the investigation must be verified and inconsistencies resolved

Table 1. Types of Evidence Collected During an Investigative Process

Type of Evidence	Explanation
Circumstantial Evidence	Facts, if proven, allow the investigator to draw conclusions. In most jurisdictions, circumstantial evidence has the same probative value as direct evidence. Example: Suspect is found in possession of a delivery device similar to type of device believed to have been used to disseminate biological agent
Direct Evidence	Documents, records, physical evidence, notes, computer data, videotapes, or other types of information that directly relate to the case. Example: Vehicle rental agreements, purchase receipts, phone records, eyewitness statements.
Trace Evidence	Minute particles of matter which can be examined microscopically, physically and/or chemically. Example: Agent or material residue.
Hearsay Evidence	Statements offered to prove the truth of the matter asserted and the declarant is unavailable for cross-examination. Example: A person who did not personally witness a suspect engaging in a particular manner but is reporting the observation based upon what someone else told him or her, and the person who actually made the observation is not testifying or available for the opposing party to cross-examine.
Eyewitness Testimony	Observation or sensation personally seen, smelled, heard, felt, or tasted. Example: Witness reporting smelling a particular odor or hearing a specific sound or seeing someone.

for submission to the prosecutor in the format and manner desired. Documents must be carefully analyzed to ensure that the information contained within is interpreted correctly. Occasionally, information derived from statements or reports is subject to differing interpretations. Investigators must examine the evidence for conflicting interpretations and resolve these issues as soon as possible or be prepared to explain the contradictions.

Equally important is the development of a mechanism to submit all information, statements, lab reports, documents, photos, and other evidentiary items to the prosecutor in an organized manner to ensure all facts are identified well before the trial. Sufficient time should be allowed to permit the prosecutor to meet with the investigators and witnesses as needed to review all reports, evidence, and anticipated testimony.

Apprehension of Suspects

Identification of suspects and construction of a prosecutable case against those responsible for the threat or attack are the top priority for law enforcement personnel. Suspecting or even knowing who bears responsibility for a biological attack differs from possessing sufficient evidence to charge and prosecute the perpetrators. Following an agroterrorism attack, law enforcement personnel will be pressured to identify, locate, and arrest the person(s) involved.

Law enforcement personnel involved in the arrest of the perpetrator(s) need to take precautions against possible injury during the apprehension of a suspect or group of suspects, especially if the perpetrators have already demonstrated or professed a willingness to kill, injure, or otherwise cause harm. In addition, the arresting officers may be confronted with a contaminated environment or with contaminated evidence. In this phase of the investigative process, the safety of the arrest team and innocent bystanders is paramount. Appropriate PPE must be utilized to prevent contamination caused by exposure to hazardous agents.

Rendering Testimony

Each potential government witness should be available to meet with the prosecutor prior to testifying at trial. This gives the prosecutor an opportunity to evaluate how each witness may appear to the jury, and discuss and resolve any issues, problems, discrepancies, or gaps in the evidence or testimony. To avoid loss of evidence or risk of rulings of inadmissibility, law enforcement officers must know and be able to access all sources of information and evidence so inconsistencies or discrepancies can be investigated and addressed.

Joint Operations

Joint Investigative Information

The successful execution of criminal terrorist investigations during an incident depends upon the efficient use of all available resources. When possible, animal, plant, and food security and law enforcement personnel should work in teams and jointly conduct interviews with victims and witnesses. Prior to the actual interview with a witness or victim, the joint investigation team should decide which person will lead the interview, thus reducing the possibility of interrupting the investigator or disrupting to the flow of the questioning.

When joint interviews are not possible, the separate investigative communities should be aware of the types of information their counterpart is seeking. For example, animal, plant, or food health personnel could obtain and provide information from their investigations to law enforcement personnel that would benefit a criminal investigation. Similarly, law enforcement personnel could provide data to animal, plant, or food health personnel to support their investigations. The objective of the joint investigation and joint interviews of victims and witnesses is to maximize the efficiency of both investigations through the exchange of real-time information.

Effective Information Exchange

One of the goals of this handbook is to encourage animal, plant, or food health officials and law enforcement officials to notify and involve each other early in an investigation, even if it evolves into a non-criminal event. Pre-incident communication mechanisms between the law enforcement and the public and animal health communities prove essential for the expeditious exchange of information during an actual agroterrorism incident. This exchange of information requires law enforcement and animal, plant, or food health personnel to be familiar with one another, and to know which people in each agency need and should receive certains kinds of information. Tables 2 and 3 give an overview of the kinds of information important to health officials and law enforcement, respectively, involved in a joint investigation.

Using WMD Roles and Responsibilities as a Model

It is essential to involve the appropriate agencies to fully benefit from personal interaction and ongoing dialogues with those who will be responding to an actual biological attack. Information sharing between law enforcement and animal, plant, or food health officials can be facilitated by using a process and structure similar to that of an Emergency Operations Center (EOC) or Joint Operations Center (JOC) that is designed to unite all of the elements necessary to respond to a WMD incident.

The concept of an EOC or JOC model provides a framework to structure and foster a communication capability that bridges the communities. One way to maximize this framework prior to an incident is to form an Agroterrorism Working Group (AWG) from the agencies represented in the EOC or JOC. The critical value an AWG offers is the development and fostering of ongoing relationships between the animal, plant, or food community and the law enforcement community before an agroterrorism incident occurs.

Additionally, the AWG enables the various jurisdictions to identify what information will be exchanged, when it will be exchanged, and to whom it will be provided based on individual and departmental needs. Ideally, the AWG would conduct regularly scheduled meetings to maintain a working relationship and a productive comfort level with one another.

Planning, training, and exercising prior to an actual food or agricultural attack can foster a comfort level of involving law enforcement early in the food and agriculture sector investigation. Without an established working relationship, food and agriculture officials might be reluctant to involve law enforcement until certainty exists that an incident is an actual terrorist attack. Determining criminal intent (agroterrorism) requires a joint FBI, USDA, and/or FDA assessment.

Table 2. Information Important to Public Health Personnel During an Investigation Into an Attack on the Food/Agriculture Sector

Animal/Plant Health Information
What symptoms are being expressed by the livestock or crops? When (date/time of onset) did the animals/plants begin to exhibit symptoms? What does the rancher/farmer believe is affecting his/her livestock or crops? Does the rancher/farmer know of any other ranchers/farmers whose livestock or crops are exhibiting similar symptoms? Has the rancher/farmer enlisted the services of a veterinarian in the last month? What is the name of the veterinarian? Was any treatment administered?
Activities Information
Is the rancher/farmer familiar with each individual that has entered the affected property within the last 30 days? Can the rancher/farmer account for all livestock movement within the last 30 days? Can the rancher/farmer account for all crop dusting or application of pesticides/insecticides/fertilizers, etc. within the last 30 days? Has the rancher/farmer noticed any unusual occurrences around the affected property within the last 30 days?
Agent Dissemination Information
Has the rancher/farmer detected any unusual odors or unscheduled or unauthorized spraying? Has the rancher/farmer noticed any sick or dead animals (not livestock, e.g., rodents, birds)?

Table 2. Continued.

Medical Information
Is the disease spreading throughout the livestock population or crops? Is the disease zoonotic? When did the farmer/rancher first request assistance in identifying the disease? What are the laboratory results? Who collected, tested, analyzed, and had access to the samples?
Personnel Safety Information
What precautions should criminal investigators take? What physical protection from the disease/agent is needed? Is the agent communicable by animal-to-person and person-to-person exposure? How is the disease spread?
Epidemiological Investigation Information
Who is the point of contact in the animal health and public health communities? Where should the sick animal/persons be referred? What makes this case suspect? What is the spectrum of illness the law enforcement community could be seeing (case definition)?

Table 3. Information Important to Law Enforcement Personnel during an Investigation into a Biological Attack

Personal Information
Victim's name Victim's age/date of birth /sex Victim's address Victim's social security number Victim's driver's license number Victim's occupation/employer Victim's religious affiliation Victim's level of education Victim's ethnicity/nationality Record any personal property (bag & tag) Common denominators among victims/patients (e.g., race, socio-economic status, socio-political groups and associations, locations, events, travel, religion, etc.).
Travel Information
Has the victim traveled outside of the United States in the last 30 days ? If yes, where? Has the victim traveled away from home in the last 30 days? If yes, where? What is the victim's normal mode of transportation and route to and from work every day? Summarize the person's activities for the last 30 days.
Incident Information
Has the victim heard any unusual statements (threatening statements, information about agricultural agents) Did the victim see an unusual device or anyone spraying something? Were there any potential dispersal devices/laboratory equipment/ suspicious activities? What is the basis for the identification of the biological/chemical agent; is the agent's identity suspected, presumed, or confirmed?

Table 3. Continued.

Summarize the victim's account of what happened or how the livestock or crops might have been exposed to the suspected biological or chemical agent. Estimate the time/date of exposure. Is the time/date suspected, presumed, or confirmed? Estimate the number of diseased animals or acreage of crops. Is the number suspected, presumed, or confirmed? Does anything suggest there is a cluster of casualties? Is the cluster suspected, presumed, or confirmed? Review the potential methods of exposure (ingested, inhaled, skin contact). Identify the exact location of the incident. Is this location suspected, presumed, or confirmed? Review whether the biological/chemical event is a single incident or involves multiple releases. Is this suspected, presumed, or confirmed? Review the case distribution. If additional properties have been affected, where are they located? Summarize the types of physical evidence that should be sought. Determine if there are any witnesses to a suspicious incident. What are their names, dates of birth, and addresses?
Safety Information
What makes this case suspect? Are there any safety or security issues for the animal health and public health personnel? Summarize any information that would indicate a suspicious event
Criminal Investigation Information
Who is the point of contact in the law enforcement community? To whom should potential witnesses be referred? Review any chain of custody needs.

FDA OCI Reporting Protocols

FDA's protocols for reporting a suspect food or drug tampering incident (suspected terrorism incident) to the FBI are the following: FDA's OCI field office will contact the WMD Coordinator in the local FBI office where the tampering occurred. They will also advise their FDA OCI HQ who would in turn notify the WMD Operations Unit (WMDOU), FBI HQ. WMDOU would then conduct a threat assessment with all appropriate entities and the pertinent response, sampling, evidence collection, and laboratory procedures would be discussed and provided.

If the FBI field office receives information regarding a food or drug tampering incident (including chemical or biological agents being placed in food), the following protocols would be followed: The field office would follow established protocols by notifying WMDOU. The field office would also contact their regional FDA/OCI office, if not already contacted. WMDOU would then conduct a threat assessment call with the FBI field office, the FDA/OCI regional office, FDA OCI HQ, HMRU and other necessary FBI units; and all other agencies, as needed. The appropriate response, sampling, evidence collection, and laboratory procedures would be discussed and provided. If the FBI does not need to be involved in the incident, the incident would be deferred to the FDA.

Using Example Scenarios as Models

Two scenarios have been provided to help response officials understand the function and processes of the AWG. Scenario 1 describes the recommended information flow if the law enforcement community is the first to identify a potential criminal/terrorist food or agricultural incident. Scenario 2 provides guidance in the event the food and agriculture sector is the first to suspect an incident. The process provided was designed to allow maximum flexibility for the affected jurisdictions. It should be noted that regardless of where the information enters the system, the information flow moves up the information chain. Additionally, each group identified in Figures 1 and 2 should be a conduit for information to the group immediately above and below it.

Scenario 1: Law Enforcement Community Receives Intelligence of a Threat to the Food and Agriculture Sector (Figure 1)

The local FBI office develops information of a possible threat to the food and agriculture sector and notifies FBI HQ. FBI HQ conducts a threat assessment based on preliminary information from the field. (In a suspected agroterrorism incident the FBI Threat Assessment will consist of an initial conference call between FBI HQ, the local field office, the relevant state or local agricultural first responder, the FBI HMRU, and other federal agency experts such as the USDA, or the FDA.) During the FBI Threat Assessment, a consensus is reached which indicates the likelihood that an intentional incident has occurred, or will occur. FBI HQ returns a credible threat assessment to the local FBI office and provides guidance to the local FBI office for conducting further investigations to validate the intelligence.

Once a credible threat has been established through the FBI Threat Assessment process, the USDA or FDA will pass that information to their state representatives. Again, depending on the quality and sensitivity, certain information may be retained within agencies that currently possess it. At this point, the local FBI office would coordinate with the state or local emergency management agency to convene the appropriate AWG and begin to exchange pertinent information. Depending on the extent and quality of the intelligence or investigative results, the information may be held at this level, pending further investigation.

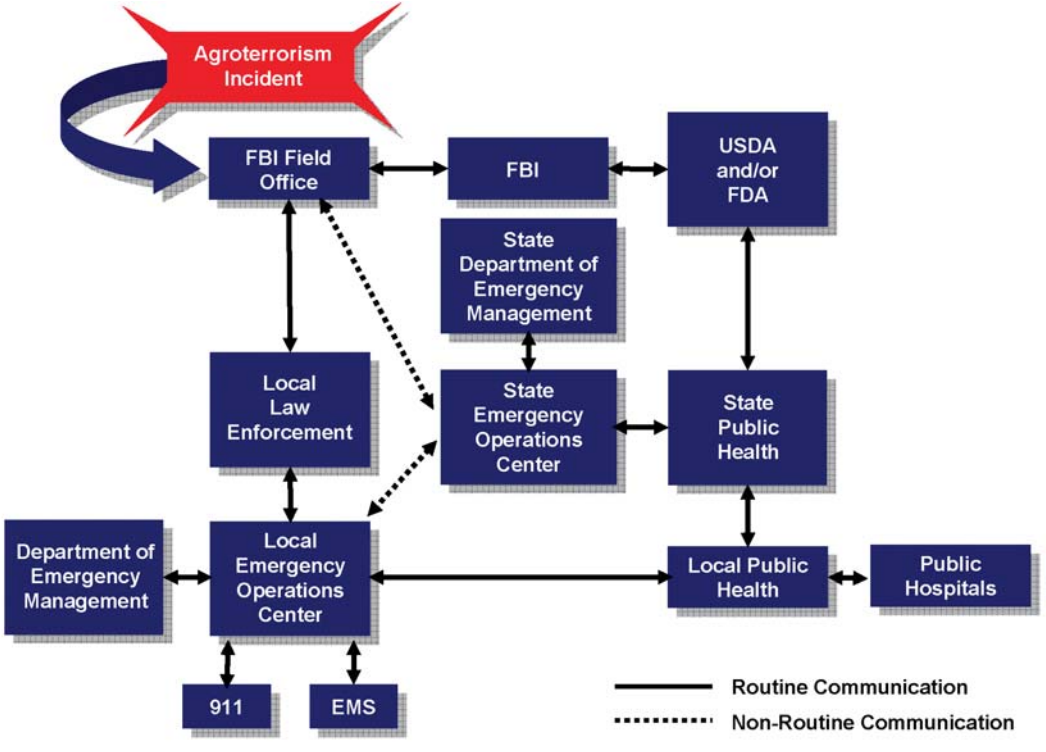


Figure 1. Law Enforcement Community Identifies an Agroterrorism Incident

Scenario 2: Unexplained Incident Emerges and Is Identified by the Food and Agriculture Community (Figure 2)

A local veterinarian observes unusual symptoms in a swine herd. Based on a preliminary diagnosis, the veterinarian takes samples for testing and begins treatment. Once the samples are received and analyzed, it can be determined if there are any triggers suggestive of a potential biological incident. When local health officials observe triggers that indicate a potential biological attack, they should coordinate with the emergency management agency and the state health department to activate the AWG, which includes the FBI WMD Coordinator for that geographical jurisdiction.

Once the AWG has been assembled (virtually or in person), information will be exchanged concerning the potential threat or the unusual phenomenon observed in the animal health system. Based on the information provided to law enforcement through the AWG, a decision will be made regarding whether or not a criminal investigation is warranted. In most cases, an epidemiological investigation will be initiated to determine the source of the unusual circumstance observed in the animal health system. The benefit of conducting joint interviews should be considered at this point; however, the known facts of the situation at the time will drive this decision.

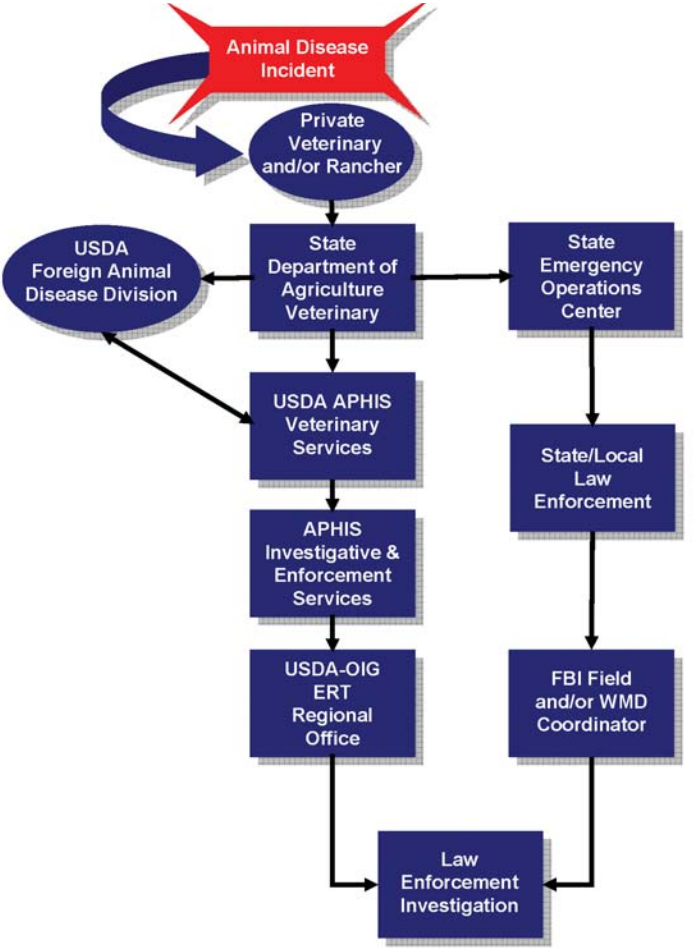


Figure 2. Food and Agriculture Community Identifies an Agroterrorism Incident

Information Exchange Triggers

During an incident, certain information or a specific event should trigger the exchange of information between the law enforcement and the food and agriculture sector. For example, the law enforcement community conducts criminal investigations every day. In recent years, the number of hoax incidents has increased. What should prompt the law enforcement community to contact their food and agriculture counterparts and involve them in the investigation of such an event? Similarly, food and agriculture investigations take place routinely. Most epidemiological investigations have nothing to do with terrorism per se. At what point in an investigation should the food and agriculture community be prompted to contact law enforcement? Both communities are legitimately concerned about overreacting and further stretching their already over-burdened infrastructure and resources.

Many factors could indicate clues that an individual or group is potentially targeting food and agriculture to carry out terrorism goals. For example, one of the difficulties of trying to use definitive criteria for FADs is that many mimic other diseases in their early presentation. Furthermore, many classic bioterrorism/anti-agriculture agents are rare, non-endemic, or eradicated diseases; most veterinarians may not recognize the disease until it has progressed to the more serious and unique symptoms associated with it. The following tables provide a preliminary list of factors that the food and agriculture sector (Table 4) or law enforcement (Table 5) communities could use to exchange information. These tables are not intended to be all-inclusive for the potential triggers. Each agency or jurisdiction may want to mutually add or remove triggers to suit their individual needs. These lists are intended to provide a starting point to tailor or improve individual requirements. The most important aspect of this information is to overcome the reluctance to share information before all of the facts are known. The early notification will be seen as proactive and providing an early warning that will not be viewed negatively.

Table 4. Indicators and Observations

- Unusual increase in number of sick or dying animals
- Unscheduled or unusual spraying, particularly outdoors or during periods of darkness
- Abandoned spray devices
- Odd delivery requests
- Group or individual purchasing agriculture disease cultures or large amount of chemicals with cash
- Unexplained thefts of cultures, equipment, etc.
- Increased applicants for low level jobs
- Unsolicited phone calls asking vague questions about specific processes
- Contractors unfamiliar with basic procedures
- Any specimen samples submitted to animal/public health for analysis that tests positive for a potential bioterrorism or anti-agriculture organism
- Higher than expected morbidity and mortality associated with a "common" disease and/or failure to respond to traditional therapy
- Disease with an unusual geographic or seasonal distribution (tularemia in a non-endemic area)
- Similar genetic type among agents from geographically distinct sources
- Unusual, atypical, genetically engineered, or antiquated strain of a biological agent
- Endemic disease with unexplained increase in incidence
- Simultaneous FAD outbreaks in non-contiguous areas of the country
- Disease agents transmitted through aerosol, food, water, or fomites

Table 5. Law Enforcement Targets

- Any intelligence or indication that any individual or group is unlawfully in possession of any anti-animal, anti-crop or food contaminant agents
- Seizure of any processing equipment from any individual, group, or organization
- Seizure of any potential dissemination devices from any individual, group, or organization
- Identification or seizure of literature pertaining to the development or dissemination of anti-animal, anti-crop, or food contaminating agents
- Any assessments that indicate a credible threat in an area
- A Hazardous Materials (HAZMAT) response which involves the presence of anti-animal, anti-crop, or food contaminating agents

Sharing Sensitive Information

Information Matrices

The timely exchange of information is critical to an effective response to an agroterrorism incident. Yet, there are concerns within law enforcement and the food and agriculture sector about the types of information that each group will freely exchange. Both communities feel that there are circumstances that may necessitate withholding certain types of information from each other. In order to help lower barriers to the free exchange of information, matrices were developed to assist members of the agriculture sector and law enforcement communities to understand the types of information each seeks and potential means to obtain that information. Each of the categories in the matrices is defined below.

Known Information—Information that each group has during the specific phase of the incident.

Needed Information—Information that each group needs to obtain to effectively conduct its investigation during the specific phase of the incident. It is the information that the food and agriculture sector would need from the law enforcement community or the law enforcement community would need from the food and agriculture sector.

Actions—Steps that should be taken by each community to obtain the information or to identify what information can be readily obtained. In the stated example, the law enforcement community identifies requirements for the food and agriculture sector to obtain the information from the criminal investigation.

Animal, plant, food sector and law enforcement experts were assembled to identify potential barriers to the exchange of information; the law enforcement and food and agriculture sector personnel were asked to identify the information

they would either possess or need according to the four different phases listed below.

1. Pre-Suspicion. Both communities may be receiving unusual information, but there is nothing to raise suspicion of a criminal act or a disease outbreak.

2. Suspicion. The law enforcement community has information that leads it to believe a criminal act may be committed or has been committed, or the public health community suspects an outbreak of a biological agent. Law enforcement personnel would initiate measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a biological attack.

3. Incident Management. Measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. Public information management/coordination.

4. Recovery. Gradual return to normal operations. In general, law enforcement and public health communities appear to be more hesitant to share information in the early stages (Pre-Suspicion and Suspicion) of the incident than they are in the latter stages (Incident Management and Recovery). In most instances, each community is reluctant to exchange sensitive information based solely on the incomplete criminal or epidemiological investigative information it would have in the first two phases. Because of this, there appears to be two general phases:

1. Pre-confirmation of a criminal act or diagnosis of an agroterrorism incident, and
2. Confirmation of a criminal act or diagnosis of an agroterrorism incident.

The matrices are filled out for animal, plant, and food information in Table 6, and law enforcement information in Table 7.

Table 6. Animal, Plant, and Food Information

Routine Surveillance	
Known	Surveillance data regarding reportable diseases Aggregate information about the individual cases Medical findings (unusual symptoms) Test result data Potential recognition of chemical, biological or radiological agents
Needed	Potential of material being in the area Potential list of suspect agents/materials Agreement about what information can be released
Actions	Can freely provide aggregate data (numbers and types) Can freely provide assessments and analyses Medical data on fatalities to prosecutor; no subpoena necessary No specific case data released Food or agriculture personnel does not report to law enforcement directly; immediately report up the chain to respective agency Follow state laws for reporting diseases
Suspicion of an Agroterrorism Incident	
Known	Routine Surveillance Knowns, listed above Analysis of the incident Aggregate data; network laboratory results Clinical data/confirmation and data on incident Contact information on other potential cases via interviews
Needed	Medical and/or scientific information Threat assessments Material dissemination method Specific case data (potential targets, agent characteristics) Any information on the hazardous material used
Actions	Analyses freely provided to all response groups Coordinated release of information through a JIC A subpoena ensures the release of information and legally protects from liability Prosecutors can obtain medical information Information is reported to FDA, USDA, CDC, etc. Report to state/local agricultural offices and health department

Table 6. Continued.

Incident Management	
Known	Routine Surveillance and Suspicion Knowns, listed above
Needed	Routine Surveillance and Suspicion Needs, listed above Authority to quarantine Extent and nature of incident
Actions	Routine Surveillance and Suspicion Actions, listed above
Recovery from Incident	
Known	Routine Surveillance, Suspicion, and Incident Management Knowns, listed above
Needed	Routine Surveillance, Suspicion, and Incident Management Needs, listed above Update on the outbreak
Action	Routine Surveillance, Suspicion, and Incident Management Actions, listed above

Table 7. Law Enforcement Information

Routine Pre-Incident	
Known	General open source information Data concerning potential terrorist groups Data concerning potential anti-food or anti-agricultural agents
Needed	General background or baseline information Information about any unusual incidents (i.e., disease outbreak, food poisonings, malicious crop destruction) Identifying information
Actions	Law enforcement will openly reveal general information No specific case information will be revealed
Suspicion of an Incident	
Known	Specific case data Suspect name(s), location(s) Group name(s), capabilities Sources of threat Methods of attack
Needed	Identifying information Hazardous material identification Agent symptomology
Actions	Routine Pre-incident Knowns, listed above The FBI WMD Interagency Threat Assessment; this information will be For Official Use Only (FOUO) and will not be released to the public unless specified by FBI Coordinated release of information through a JIC

Table 7. Continued.

Incident Management	
Known	Specific case data with more detailed information Investigation methods and source data Potentially have suspect in custody
Needed	Suspicion Needs, listed above Location of incident Medical/scientific threat assessment Special and routine lab information for prosecution Epidemiological data
Actions	Law enforcement will alert food and agricultural officials and the AWG and share known information to minimize the animal, plant, or public health risk
Recovery from an Incident	
Known	Incident Management Knowns, listed above
Needed	All potential suspects Ongoing victim report, list of victims, identifying information, regular release of information Any information on any criminal activity, regardless of time frame
Actions	Provide threat information after FDA, USDA or Public Health review

Once the public health community has made a diagnosis or the law enforcement community has confirmed a criminal act, both groups appear to be more willing to exchange information. The underlying goal throughout this handbook is to foster early notification of the law enforcement community by the public health community and vice versa. Actual biological attack investigations have demonstrated that the sharing of information can and does occur willingly when the threat is real and not an abstract concept.

Public Information Release

Media reports can have a significant impact on the response and reaction of the public to an agroterrorism incident. As a result, the public health community and the law enforcement community should use a single point of contact (spokesperson), to be identified by each agency and/or jurisdiction, to coordinate and disseminate the response to queries, which will help ensure that the appropriate information, especially sensitive information, is released to the media at the proper time. The matrix in Table 8 provides general guidance concerning a jurisdiction's interaction with the media.

Recommendations to Improve the Information Exchange

As noted above, the law enforcement and the food and agriculture sector are more willing to exchange information once they have confirmed the existence of a criminal act or a terrorism incident. However, an exchange of available information in the early stages of an incident is critical to effectively apprehend the perpetrators and contain the severity of the incident. The matrices (Tables 6 and 7) provide general guidance on how to obtain sensitive information. However, the steps required to obtain the information may result in loss of valuable time in both communities in the conduct of their investigations. Table 9 provides some guidance on how jurisdictions can improve information sharing. The recommendations in Table 9 are intended to be general so that any jurisdiction can tailor the recommendations based on local needs.

Table 8. Release of Information to the Media and Public

Information for the Media	
Pre-Incident	Not Applicable
Suspicion of an Incident	Confirm something unusual Need to provide rumor control Prepare to respond to inquiries Do not release any threat assessments
Incident Management	Alert media to the communicability of the biological agent (if known or suspected) Confirm and announce any protective actions Provide rumor control Use risk/crisis communication to address psychological issues of biological terrorism
Recovery from an Incident	Focus on closure issues Media/public needs reassurance that things are "back to normal"
Who Releases the Information	
Pre-Incident	Not Applicable
Suspicion of an Incident	Designate a single POC (point of contact) for law enforcement and a single POC for public health agencies to coordinate information release between each other. Have POCs work together on any response to query Develop and agree upon rules of information release to public
Incident Management	FBI and public health agencies coordinate response; develop a joint public health/law enforcement press release
Recovery from an Incident	Put emphasis on local law enforcement and public health actions in support of the community Focus on the federal investigation and prosecution

Table 9. Information Exchange Recommendations

1. Establish Routine Information Exchange Mechanisms.	This can be established by utilizing an existing group, such as the WMD or AWG, and consists of all the potential players that may be involved in a response to a food or agriculture incident. This forum permits each response group to identify who can provide what information to them and to whom they should provide information. Moreover, this group helps foster personal ties between response officials, facilitating less formal information-exchange relationships.
2. Develop Close Personal Relationships.	Strong personal ties between the law enforcement personnel and the food and agriculture sector tend to foster information exchange. Law enforcement and animal, plant, and food security personnel indicate they are more likely to provide information to their counterparts early in process if they have worked, talked, or met with them on a regular basis and trusted them.
3. Include a Veterinarian (FADD) and/or Epidemiologist in the Criminal Investigation.	This individual(s) could be a member of the law enforcement staff or someone detailed to the law enforcement staff on a part-time basis. Law enforcement and animal/human health personnel indicate that this liaison could help identify criminal information needed by the animal, plant, or public health community and provide the necessary information to the law enforcement community.
4. Enhance Awareness of the Emergency Response Community.	This can be done through training courses or professional associations. Building this awareness helps to heighten the community awareness of the potential triggers that would prompt the exchange of information early in an incident.

Table 9. Continued.

5. Pre-Establish Agreements on Sensitive Information.	Establishing agreements that identify the rules for the exchange and release of information could alleviate some of the concerns raised by both communities. These agreements should identify what information will be shared and how it will be restricted to limit unintentional release to unauthorized personnel.
6. Pre-Identify and Liaison with Laboratory Facilities.	These arrangements will help to establish what circumstances would necessitate specific laboratory involvement. Additionally, determine what tests might be needed for criminal investigations.
7. Conduct Chain of Custody Training.	This training should be designed to inform the food and agriculture sector to identify when they need to initiate the chain of custody for evidence in an agroterrorism incident. This information helps to ensure evidence has been handled properly for the eventual prosecution of the criminal case.

Summary

Summary

This handbook provides an overview of the legal bases for mounting a joint investigation of agroterrorism events and general recommendations for fostering information sharing and cooperation to ensure the investigation is conducted successfully. However, the recommendations should not be viewed as policy directives from the federal government for immediate implementation. Individual jurisdictions should modify this guidance to accommodate their individual needs and the special characteristics of their emergency response procedures.

The primary goal of this handbook is to encourage law enforcement and food and agriculture sectors to establish effective information exchange procedures to improve their criminal and animal, plant, or food investigations. Team members who are aware of each other's information needs and concerns about disclosure in the course of a joint investigation will be better prepared to save lives, avoid panic, and work together for successful prosecutions and convictions of the terrorists responsible for waging attacks on the food and agricultural sectors of the United States.

Appendix A
Decision Trees

Appendix A —Decision Trees

Each jurisdiction's response capabilities differ; hence, responses to an agroterrorism incident will vary. However, there are common key decisions that each jurisdiction is likely to make when confronted with an actual incident. The decision points that have been identified are general and are intended to assist law enforcement and animal, plant, and food health personnel in responding to an incident in a consistent manner. The decision trees that follow help ensure that critical decisions, actions, or steps are not omitted in a jurisdiction's response. Additionally, decision trees help integrate investigations and direct where and when the law enforcement and food and agriculture communities interact.

The following two decision trees reflect how FDA's Office of Criminal Investigation (OCI) and USDA's Office of Inspector General (OIG) would respond to criminal incident in their respective jurisdictions.

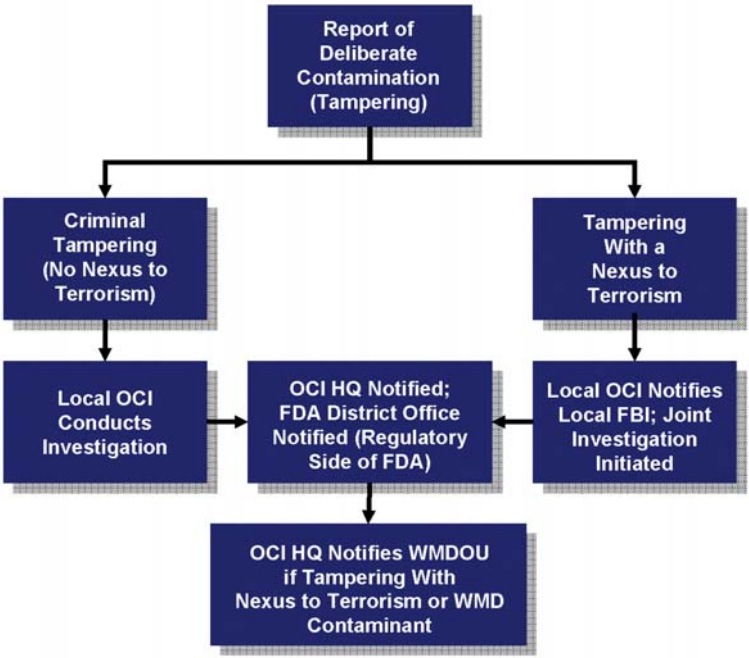


Figure A-1. FDA, Office of Criminal Investigations Normal Operations Decision Tree.

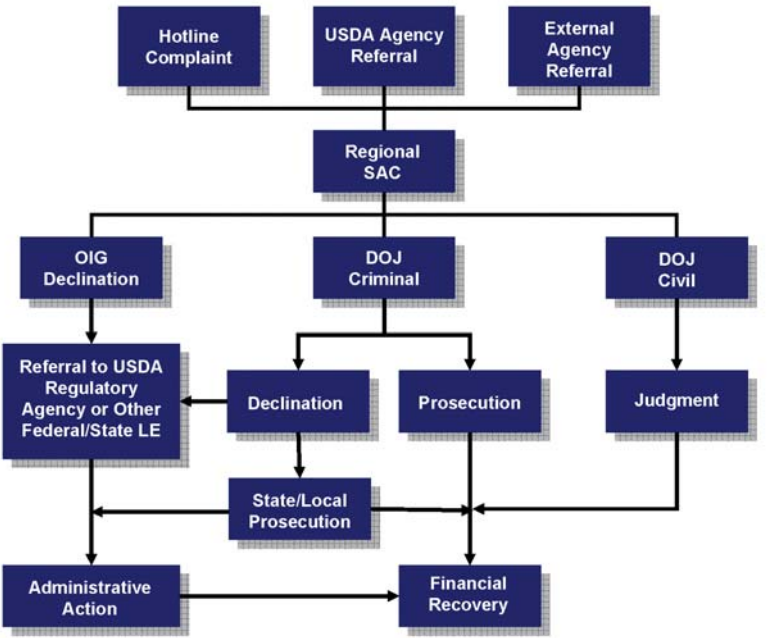


Figure A-2. USDA, Office of Inspector General Investigations Complaint Processing, Referral, and Prosecution Decision Tree.

Appendix B
Statutes and Directives

Appendix B —Statutes and Directives

While not intended to be all-inclusive, the following table of federal terrorism and WMD statutes is provided to give the investigator a starting point in finding the specific laws that are applicable in prosecution of acts of terrorism.

Statutes	
10 USC §382	Emergency situations involving chemical or biological weapons of mass destruction
18 USC §32	Destruction of aircraft or aircraft facilities
18 USC §37	Violence at international airports
18 USC §81	Arson within special maritime and territorial jurisdictions
18 USC §113C	Torture
18 USC §175-178	Biological Weapons Anti-Terrorism Statute of 1989 (BWAT)
18 USC §175(b)	Exemption for development, production, transfer, retention, or possession of biological agent, toxin, or delivery system for prophylactic, protective, or other peaceful purposes
18 USC §229	Chemical Weapons Convention Implementation Act of 1998
18 USC §229F	Definition - Chemical Weapons
18 USC §351	Congressional, Cabinet, and Supreme Court assassination, kidnapping, and assault
18 USC §831	Prohibited transactions involving nuclear materials
18 USC §842(i)	Explosives without detection agents (4)(l)(m)(1) & (n)(1)
18 USC §842(p)	Teaching WMD
18 USC §844	Penalties for threats or use of explosives to damage (e), (f), (i) or destroy U.S. property
18 USC §871-879	Extortion and threats
18 USC §921	Destructive device
18 USC §930(c)	Possession of firearms and dangerous weapons in federal facilities
18 USC §956	Conspiracy to kill, maim, injure, or damage persons or property in a foreign country

18 USC §1111	Murder (includes use of poison)
18 USC §1112	Manslaughter (lesser included offense of §1111)
18 USC §1114	Protection of officers and employees of the United States
18 USC §1116	Murder or manslaughter of foreign officials, official guests, or internationally protected persons
18 USC §1203	Hostage taking
18 USC §1361	Government property or contracts
18 USC §1362	Communication lines, stations, or systems
18 USC §1363	Buildings or property within special maritime and territorial jurisdictions
18 USC §1365(g)(3)	Tampering with consumer products
18 USC §1366	Destruction of an energy facility
18 USC §1751	Presidential and Presidential staff assassination, kidnapping, and assault penalties
18 USC §1956	Laundering of monetary instruments
18 USC §1958	Use of interstate commerce in the commission of murder-for-hire
18 USC §1992	Wrecking trains
18 USC §2151-2156	Sabotage
18 USC §2152	Fortifications, harbor defenses, or defensive sea areas
18 USC §2155	Destruction of national-defense materials, national-defense premises, or national-defense utilities
18 USC §2156	Production of defective national-defense material, national-defense premises, or national-defense utilities
18 USC §2280	Violence against maritime navigation

18 USC §2281	Violence against fixed platform
18 USC §2284	Sabotage of nuclear facilities or fuel
18 USC §2331-2339B	Terrorism (Chapter 113B)
18 USC §2332a	Use of Weapons of Mass Destruction Statute
21 USC Chapter 9	Food, Drug, and Cosmetic Act
42 USC §2011-2284	Atomic Energy Act of 1954
49 USC §46502	Aircraft piracy
49 USC §60123	Criminal penalties for pipeline destruction or damage
50 USC §2301-2367	Defense against Weapons of Mass Destruction
	Directives
HSPD-5	Management of Domestic Incidents
HSPD-9	Defense of United States Agriculture and Food

Appendix C
Acronyms

Appendix C—Acronyms

The following list of acronyms is provided to help the investigator become familiar with some of the acronyms that may be encountered during an investigation involving WMD agents. Not all of these acronyms appear in this handbook.

AG	Attorney General
APHIS	Animal and Plant Health Inspection Service
ATF	Alcohol, Tobacco, and Firearms
AWG	Agroterrorism Working Group
CDC	Centers for Disease Control and Prevention
CFSAN	Center for Food Safety and Applied Nutrition
CID	Compliance and Investigation Division
CONPLAN	Concept of Operation Plan
CPSC	Consumer Product Safety Commission
DHS	Department of Homeland Security
DHHS	Department of Health and Human Services
DOJ	Department of Justice
DOT	Department of Transportation
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
EPIA	Egg Products Inspection Act
ERT	Emergency Response Team
FAD	Foreign Animal Diseases
FADD	Foreign Animal Diseases Diagnosticians
FBI	Federal Bureau of Investigation
FDA	Food and Drug Administration

FEMA	Federal Emergency Management Agency
FERN	Food Emergency Response Network
FFDCA	Federal Food, Drug, and Cosmetic Act
FMIA	Federal Meat Inspection Act
FOUO	For Official Use Only
FRP	Federal Response Plan
FRERP	Federal Radiological Emergency Response Plan
FSIS	Food Safety and Inspection Services
FTC	Federal Trade Commission
HAZMAT	Hazardous Materials
HEPA	High Efficiency Particulate Air
HHS	Department of Health and Human Services
HMRT	Hazardous Materials Response Team
HMRU	Hazardous Materials Response Unit
HQ	Headquarters
HSPD	Homeland Security Presidential Directive
ICNL	Integrated Consortium of Laboratory Networks
JIC	Joint Information Center
JOC	Joint Operations Center
LFA	Lead Federal Agency
LRN	Laboratory Response Network
NGO	Non-governmental Organization

NIMS	National Incident Management System
NJTTF	National Joint Terrorism Task Force
NOC	National Operations Center
NRF	National Response Framework
NRP	National Response Plan
OCI	FDA's Office of Criminal Investigations
OIG	Office of Inspector General
PPIA	Poultry Products Inspection Act
PFO	Principal Federal Official
POC	Point of Contact
PPE	Personal Protective Equipment
SCBA	Self-Contained Breathing Apparatus
USC	United States Code
USDA	U.S. Department of Agriculture
WIC	Women, Infants, and Children

Appendix D
Glossary

Appendix D—Glossary

The following glossary is provided to help the investigator become familiar with some of the terms that may be encountered during an investigation involving WMD and anti-agriculture agents. Not all of these terms appear in this handbook.

Anthrax	Disease caused by the bacteria *Bacillus anthracis*
Asthenia	Weakness or debility
Ataxia	Inability to coordinate muscle activity during voluntary movement
Botulinum Toxin	Toxin produced by *Clostridium botulinum*
Brucellosis	Caused by infection with number of Brucella bacteria, notably *Brucella suis*, *Brucella abortus*, and *Brucella melitensis*
Cutaneous	Relating to the skin
Cyanosis	A dark bluish or purplish coloration of the skin and mucous membrane due to deficient oxygenation of the blood
Distal	Situated away from the center of the body, or from the point of origin; specifically applied to the extremity or distant part of a limb or organ
Dysphagia	Difficulty in swallowing
Dyspnea	Shortness of breath/difficulty breathing
Edema	An accumulation of an excessive amount of watery fluid in cells, tissues, or cavities
Encephalitis	Inflammation of the brain
Endotoxemia	Presence of endotoxins in the blood
Epistaxsis	Bleeding from the nose
Erythema	Redness of the skin caused by capillary dilation
Exanthema	Skin eruption occurring as symptom of acute viral or coccal disease
Fomite	Items such as articles of clothing or eating utensils that may harbor a disease and are capable of transmitting the disease

Glanders	An infection caused by the bacteria *Burkholderia mallei*
Hantavirus	Viral disease transmitted to humans by the inhalation of dust contaminated with rodent excreta (Bunyaviridae)
Hematuria	Blood or red blood cells in the urine
Hemoptysis	Spitting blood from the lungs or bronchial tubes because of pulmonary or bronchial hemorrhage
Hypotension	Low blood pressure
Hypothermia	Low body temperature
Meiosis	Constriction of the pupil
Melioidosis	Caused by infection with the bacteria *Burkholderia pseudomallei*
Myalgia	Muscular pain
Mydriasis	Dilation of the pupil
Polymerase Chain Reaction (PCR)	Technique for the amplification of DNA; used in diagnostic procedures to identify biological agents.
Prostration	Marked loss of strength; extreme weakness
Pulmonary Edema	Fluid in the lungs
Pyrogenic	Causing fever
Rhinorrhea	Watery discharge from the nose
Mycotoxins	Toxin produced by filamentous fungi (molds) of the genera Fusarium, Myrotecium, Trichoderma, Stachybotrys, and others; mycotoxins have been referred to as "yellow rain"
Tularemia	Caused by the bacteria *Francisella tularensis*
Venezuelan Equine Encephalitis (VEE)	Virus is communicated to humans by mosquitoes
Viremia	Presence of virus in the blood

Zoonosis	Disease of humans acquired from animal source
Zoonotic	A disease which can be transmitted between animals and people

APPENDIX E
INFRAGARD

What is InfraGard?

Collaboration for National Infrastructure Protection

From drinking water to communications systems, chemical production to agricultural resources, Americans depend on critical infrastructures to enjoy our way of life. Most of these services and systems are owned and operated by private industry, thus protecting our nation's infrastructure cannot be accomplished by the federal government alone. It requires coordinated action between all of the stakeholders. InfraGard is the critical link that forms a relationship across all levels. Each InfraGard chapter is geographically linked with an FBI field office, giving stakeholders access to law enforcement, industry, academic and government agencies

Who Is InfraGard?

Subject Matter Experts

InfraGard's strength is based on the subject matter expertise of its membership. InfraGard members are private-sector volunteers with a concern for national and industrial security. InfraGard members connect to a national network of experts, communicate with federal law enforcement and government agencies, and contribute to the security of our national infrastructure from threats and attacks.

What Does InfraGard protect?

Critical Infrastructures and Key Resources

Critical infrastructures are physical and cyber-based systems that are essential to the minimum operations of the economy and the government. Key resources are individual targets whose destruction would create local disaster or damage national morale.

Critical Infrastructure and Key Resources (CIKR)

- Agriculture and Food
- Banking and Finance
- Chemical
- Commercial Facilities
- Communications
- Dams
- Defense Industrial Base
- Emergency Services
- Energy
- Government Facilities
- Information Technology
- National Monuments and Icons
- Nuclear Reactors, Materials and Waste
- Postal and Shipping
- Public Health and Healthcare
- Transportation Systems
- Water

Membership to InfraGard

Membership allows you to communicate on a local and national level with experts on topics such as computer intrusion, infrastructure vulnerabilities, and other critical assets. Any United States citizen is invited to apply for an InfraGard membership at no cost. Please visit www.infragard.net for membership information.

Food-Agriculture InfraGard

The Food-Agriculture InfraGard Special Interest Group (SIG) is a resource dedicated to the safeguarding of the food and agriculture sectors of both private industry and government through information-sharing networks and a private secure portal of communication. It is a collaborative effort of the WMD Directorate and Cyber Divisions of the FBI. The Food-Agriculture InfraGard SIG is intended to enhance the sharing of information among private sector stakeholders who can be called on to assist the FBI in detecting, deterring, assessing, and preventing threats and attacks targeting the food and agriculture sectors of our nation's critical infrastructures. It aims to be a consortium of agriculture security professionals and law enforcement officials with the common goal of protecting America's farmland, food products, animals, and industry.

Participation in the Food-Agriculture InfraGard SIG requires membership in the national InfraGard Program and affiliation with the agriculture industry. Visit www.infragard.net for national membership. Once a participant in the national program, a member may request access to the Food-Agriculture InfraGard SIG by submitting an e-mail containing answers to questions about his/her association with the agriculture industry.

Assessments, news, relevant links, and up-to-date information on protection issues related to the agriculture community are available to Food-Agriculture InfraGard SIG members. Members may submit articles for posting on the site and communicate on the message board about food and agriculture sector issues in a secure environment. The site is also broken into areas specific to law enforcement, industry, food/agriculture agencies, animal/human health organizations, and academia. The Food-Agriculture SIG is a unique opportunity for you to belong to the fastest growing network dedicated to agriculture-specific information sharing, driven to protect the food and agriculture infrastructure of the United States.

For membership or questions, please visit www.infragard.net