Coordinating Agencies:	Mississippi Department of Public Safety (MDPS)
Madison County Department of Agriculture and Commerce	Mississippi Office of Homeland Security (MOHS)
Madison County Health Department	Mississippi Military Department (MMD)
	Mississippi Department of Transportation
County Support Agencies:	(MDOT)
	Mississippi State University
Madison County Emergency Management	Mississippi Forestry Commission (MFC)
Agency	Mississippi Veterinary Research and Diagnostic
Madison County Sheriff's Department	Laboratory (MSVRDL)
	Mississippi State Chemical Laboratory (MSCL)
State Coordinating Agencies:	Mississippi Department of Human Services (MDHS)
Mississippi Board of Animal Health (MBAH)	Mississippi Department of Wildlife, Fisheries &
Mississippi Department of Agriculture and	Parks (MDWFP)
Commerce (MDAC)	Mississippi Development Authority (MDA)
Mississippi State Department of Health (MSDH)	American Red Cross (ARC)

Introduction

Quality (MDEQ)

State Support Agencies:

Mississippi Emergency Management Agency

Mississippi Department of Environmental

Purpose

(MEMA)

The purpose of the Food and Agriculture Annex describes the roles and responsibilities associated with all incidents involving agriculture and food systems that require a coordinated response utilizing the five key principles in the National Response Framework (NRF) doctrine.

The five principles encompass:

- Engaged partnership.
- Tiered response.
- Scalable, flexible, and adaptive operational capabilities.
- Unity of effort through unified command.
- Readiness to act.

Scope

The protocols outlined in the annex apply to all actual or potential incidents requiring a coordinated response. Actions described in this annex may take place with or without a declaration by the Madison **County Board of Supervisors**, or a public health emergency declaration by the directors of the MS State Department of Health or the MS Department of Human Services.

Objectives

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

- Detect the event through the reporting of illnesses, 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.

A food and agriculture incident may threaten public health, animal health, food production, aquaculture, livestock production, wildlife, soil, rangelands, and agriculture water supplies, as well as having cascading effects, including significant psychological and economic impact. Responding to the unique attributes of this type of incident requires separate planning considerations tailored to specific health and agriculture concerns and effects of the disease (e.g. deliberate contamination versus natural outbreaks, plant and animal versus processed foods, etc.) Specific operational guidelines, developed by organizations with responsibility for the unique aspects of a particular disease or planning consideration, will supplement this annex and are intended as guidance to assist Federal, State, tribal, and local public health and agriculture authorities.

Special Considerations

- Detection of an intentional or unintentional contamination/adulteration of food, animals, or plants, or a pest outbreak may occur in several different ways and involve several different modalities.
- A terrorist attack on food or agriculture may initially be indistinguishable from a naturally occurring event; moreover, depending upon the particular agent and associated signs or symptoms, several days or weeks could pass before public health, food, agriculture, and medical authorities even suspect terrorism may be the cause.
- Depending on the incident, a disproportionate percentage of victims may be among the most vulnerable populations, including children, the elderly, immune-compromised individuals, and disadvantaged populations.

- A devastating attack or the threat of an attack on the domestic animal population and plant crops through highly contagious animal diseases, exotic plant diseases, foreign pest infestation, or other contaminants could result in severe economic loss and public health consequences, as illustrated in unintentional events. Early detection, allowing for early intervention, would come from food and agriculture experts, regulatory authorities, nongovernmental organization (NGOs) or Intergovernmental organizations (IGOs), and others that can provide early identification of unusual patterns in surveillance systems.
- A food or agriculture incident will, most likely compromise international trade given the increasing globalization of the food and agriculture supply chain.

Policies

- This annex supports policies and procedures outlined in the National Response Framework (NRF), the Emergency Support Function ESF #8 –Public Health and Medical Services Annex, the ESF #10 Oil and Hazardous Material Response Annex, the ESF #11 Agriculture and Natural Resources Annex, the Terrorism Incident Law Enforcement and Investigation Annex, and the Federal Food and Agriculture Decontamination and Disposal Roles and Responsibilities document.
- If an agency becomes aware of an overt threat involving biological, chemical, or radiological agents or indications that instances of disease may not be the result of natural causes, State Law Enforcement and the Federal Bureau of Investigation (FBI) will be notified. The FBI, in turn, immediately notifies the National Operations Center (NOC) and the National Counterterrorism Center (NCC).
- Participating County agencies may take appropriate independent emergency actions within the limits of their own statutory authority to protect the public, mitigate immediate hazards, and collect information concerning the emergency. This may require deploying assets before they are requested via normal County Emergency Operations Plan protocols.
- State, tribal, and local governments, often directed or coordinated by federal agencies, are 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.

Assumptions

- The first evidence of dissemination of an agent may be the presentation of disease in humans, animals, or plants. This could manifest either in clinical case reports to state and local public health or agriculture authorities or in unusual patterns of symptoms or encounters within state and local human and animal health and crop production surveillance systems.
- Food and agriculture surveillance systems may detect the presence of a radiological, chemical or biological agent and trigger directed environmental and product sampling and intensified human and animal surveillance to rule out or confirm a case. If a case is confirmed, then these systems may allow for mobilization of a public health, medical, and law enforcement response in advance of the appearance of the first human and/or animal cases, or quick response after the first human and/or animal cases are identified.
- A food and agriculture incident often will be distributed across multiple jurisdictions. Response to these incidents could require the coordination of multiple "incident sites" simultaneously from local, tribal, State, regional and national levels, as well as requiring private-sector partnership.

- An act of intentional food contamination, food tampering, or agro-terrorism, particularly an act directed against large sectors of the industry within the county, will potentially have major consequences that will overwhelm the capabilities of many State, tribal, and local governments to respond and may seriously challenge existing Federal response capabilities.
- A food or agricultural incident may include biological, chemical, or radiological contaminants, which may require concurrent implementation of other Federal, state or county plans and procedures.
- Food and agriculture incidents may not be immediately recognized as such until the biological, chemical, or radiological agent is detected or the effects of exposure to the public, animal, or plants are reported to proper authorities.
- No single entity possesses the authority, expertise, and resources to act unilaterally on the many complex issues that may arise in response to a food or agriculture incident, especially given the increasingly global nature of the food and agriculture system.

Concept of Operations

General

The primary functions of the Food and Agriculture Incident Annex are to:

- Support effective and coordinated communication between State, tribal, local, and Federal responders to a potential or actual incident that requires a coordinated response impacting food and agriculture.
- Minimize public health and economic impacts of a food and agriculture incident.
- Provide transition from response to rapid recovery following a food and agriculture incident.

The key elements for an effective response to a food and agriculture incident include the following:

- Rapid identification, detection, and confirmation of the incident.
- Implementation of an integrated response to a food attack/adulteration, highly contagious animal/zoonotic, or exotic plant disease or plant pest infestation.
- Identification of the human and animal population and/or plants at risk.
- Determination of how the agent involved was transmitted, including an assessment of the efficiency of transmission and further risk of transmission.
- Determination of the public health and economic implications.
- Control, containment, decontamination, and disposal to ensure effective recovery of the infrastructure impacted.
- Protection of the population(s) and/or plants at risk through appropriate measures.

- Dissemination of information to advise the public of the incident.
- Communication with all relevant stakeholders.
- Assessment of environmental contamination and extent of cleanup, decontamination, and disposal of livestock carcasses, plants, or food products involved.
- Identification of the law enforcement implication/assessment of the threat.

Incident Detection and Identification

Determination of incident

Local authorities are likely to be among the first to recognize the initial indication of intentional or naturally occurring contamination of food, of highly infective plant or animal disease, or of an economically devastating plant pest infestation or animal disease. Recognition may come from a significantly increased number of people reporting ill to public health care providers, increased reporting of sick animals to veterinarians or animal health officials, or numerous plant anomalies reported by County officials, agricultural extension agents, inspection reports, consumer complaint systems, and various hotlines. Therefore, the most critical information requirements are surveillance information, identification of the cause of the incident, a determination of whether the incident is intentional or naturally occurring, and the identification of the human or animal population and/or plant at risk.

Laboratory Testing

Identification and confirmation of contaminated food or environment, highly infective animals and plants, or an economically devastating plant infestation may occur through routine surveillance and laboratory testing.

Mississippi State Chemical Laboratory (MSCL) tests for such substances as pesticides and residues. There is a seed lab which audits package contents against package labels. There is a petroleum products lab which tests samples of petroleum products for content and quality. There is a metrology lab which is the state standard for weights and measures.

The State also has access to the Integrated Consortium of Laboratory Networks (ICLN). The ICLN can provide timely, high-quality, and interpretable results for early detection and effective consequence management of terrorism and other events requiring an integrated laboratory response. The ICLN provides an interagency organizational structure for the Nation's advanced-capacity laboratories to detect, respond to, and recover from incidents involving human health, animal health, food, agriculture and plants. The collective national network of the Food Emergency Network (FERN), the Laboratory Response Network (LRN), the National Animal Health Laboratory Network (NAHLN), the National Plant Diagnosis Network (NPDN) and additional laboratory networks within Federal agencies also have responsibilities for laboratory preparedness and response.

The Mississippi Veterinary Research and Diagnostic Laboratory (MSVRDL) assist the livestock and poultry industries, private veterinarians, and animal owners of Mississippi by diagnosing and monitoring animal diseases that can:

- affect humans
- reduce the productivity or marketability of animals
- threaten animal populations
- affect the safety or quality of animal products

The laboratory also participates in federal cooperative disease programs and works with other state agencies to provide veterinary diagnostic testing, disease surveillance, animal health monitoring, drug testing, collaborative research, and animal health education.

The Mississippi Veterinary Research and Diagnostic Laboratory (MSVRDL) is accredited by the American Association of Veterinary Laboratory Diagnosticians (AAVLD). The AAVLD establishes acceptable criteria for quality assurance, safety, personnel qualifications, and laboratory facilities.

Notification

A potential or actual incident requiring a coordinated county or State response involving contaminated food, infected animals or plants, or economically devastating plant pest infestation shall be brought to the immediate attention of the State's Board of Animal Health, Department of Agriculture and Commerce, and/or the MS State Department of Health (MSDH). These departments will then notify, as appropriate, the MS Office of Homeland Security (MOHS) and appropriate industry segments.

International Notification

Once a confirmed contaminated food and agricultural product produced outside the borders of the United States crosses into the U.S. and subsequently into Mississippi, the United States Department of Agriculture (USDA) notifies the U.S. State Department and other international organizations as appropriate (e.g., World Health Organization (WHO). In addition, if an international trading partner positively confirms that a food or agriculture product exported from the United State, with origin in Mississippi, is contaminated/adulterated, the affected trading partner will notify USDA, Health and Human Services(HHS), and/ or the Department of State. In either situation if it is suspected that the contamination/adulteration is a result of criminal and/or terrorist activity, the Federal agencies will notify the FBI, and/or the appropriate law enforcement and health agencies.

Activation

Once notified of a credible threat of contamination/adulteration or a natural or intentional disease outbreak in humans, plants, or animals, Mississippi State Department of Health (MSDH), Mississippi Department of Agriculture (MDAC), and Mississippi Board of Animal Health (MBAH) will coordinate with Federal agencies (who will coordinate internationally), tribal and local authorities and key industry entities to determine the extent of which resources are needed and can be provided. MSDH, MBAH, and MDAC will coordinate with ESF #8 and ESF#11 partners to assess the situation and determine appropriate public health, food, and agriculture actions. Some or all of the ensuing actions may include:

- Targeted epidemiologic investigations.
- Increased surveillance for patients and animals with certain clinical signs and symptoms.
- Increased surveillance of plants for signs of disease or pest infestation.
- Targeting inspection of human food and animal feed manufacturing, distributing, retail, and other facilities, as appropriate.
- Increased inspection of plants and animals for contamination.

Actions

The following steps are required to contain and control a food or agriculture incident:

- MSDH, MBAH, and MDAC will assist local, tribal and state authorities to:
 - Ensure the safety and security of the food and agriculture infrastructure in the affected areas, as needed.
 - Inspect food and agriculture facilities in affected area, as needed, to ensure that they can continue to operate.
 - Conduct laboratory testing to identify contaminated food, animals, or plants.
 - Embargo, detain, seize, or condemn affected food, animals, or plants.
- Environmental Protection Agency/Mississippi Department of Environmental Quality (EPA/MDEQ) will approve as appropriate, requests from Federal and State authorities and industry for the use of pesticides to control or mitigate plant pest and decontaminate animal, agricultural, and food facilities from biological organisms of concern.
- MSDH, MBAH, MDAC, and MDEQ will:
 - Provide technical assistance and guidance to local and Tribal authorities who are coordinating food facility cleaning and decontamination, depending on the nature of the contaminating agent.
 - Provide technical assistance and guidance to local and tribal authorities who are coordinating the disposal of contaminated food, animal carcasses, or plants.
 - Coordinate with local and tribal authorities as well as the food and agriculture industry during the investigation, response, decontamination, disposal, and recovery efforts.
 - Coordinate with Mississippi Office of Homeland Security, local, tribal and other State agencies and ESF #15-External Affairs, if activated, on public messaging to ensure that communications are consistent and accurate.
- MDAC, MBAH, and MSDH will determine the availability of efficacious registered pesticides to control or mitigate a biological agent, and, if necessary, prepare a request to EPA for emergency exemption of pesticide registration.
- During an event within the capacity of MDAC, MBAH or MSDH to control, MEMA will coordinate potential further Federal support to this event.
- MSDH will coordinate the Federal Government resources if food or agriculture incident is associate with a terrorist attack, or becomes a major disaster, or is an emergency as defined by Homeland Security Presidential Directive 5 (HSPD 5). MDAC, MBAH and MSDH will maintain the authority and responsibility for incident as described in the section below.

Additional roles and responsibilities of cooperating agencies are provided on Table 1 on the following page.

Function	MBAH	MDAC	MSDH	MEMA	MSVRDL	MDEQ	MSCL	MNG	MDPS	MSU		FEMA	USDA	CDC	FDA
Coordination	•	•	•	•								•	•	•	•
Security		•						•	•						
Rapid ID of			٠		•		•	•					•	•	•
Agent															
Laboratory Confirmation	♦	•	•		♦		•	•					♦	•	
Outbreak															
Transmission Information	*	*	♦		♦					•		*	♦	•	•
Control and Contain Outbreak	•	•	٠		•			٠	•	•			•	٠	•
Decontamination and Disposal	♦	•	*		*	•		•		*			*	•	•
Food Safety and Food Defense	♦	•	•		♦								•	•	•
Public Health			•		•	•		•		•		•	•	•	•
Public Information	♦	•	٠	*	*	•				•		•	•	•	•
Law Enforcement Issues		*						•	•				•		
Economic/Market Issues	♦	•								•			٠		
Support Services (Feeding, Facilities, Counseling, Transport					*			•				•	*	•	

 Table 1. Agency roles and Responsibilities Matrix

*Additional information may be found in ESFs #8 and #11

Appendix A – Acronym List

AAVLD	American Association of Veterinary Laboratory Diagnosticians
ARC	American Red Cross
EPA	Environmental Protection Agency
ESF	Emergency Support Function
FBI	Federal Bureau of Investigations
FERN	Food Emergency Network
HHS	Health and Human Services
HSPD 5	Homeland Security Presidential Directive 5
ICLN	Integrated Consortium of Laboratory Networks
IGO	Inter-Governmental Organization
LRN	Laboratory Response Network
MBAH	Mississippi Board of Animal Health
MDA	Mississippi Development Authority
MDAC	Mississippi Department of Agriculture and Commerce
MDEQ	Mississippi Department of Environmental Quality
MDHS	Mississippi Department of Human Services
MDOT	Mississippi Department of Transportation
MDPS	Mississippi Department of Public Safety
MDWFP	Mississippi Department of Wildlife, Fisheries & Parks
MEMA	Mississippi Emergency Management Agency
MFC	Mississippi Forestry Commission
MMD	Mississippi Military Department
MOHS	Mississippi Office of Homeland Security
MSCL	Mississippi State Chemical Laboratory
MSDH	Mississippi State Department of Health

MSU	Mississippi State University
MSVRDL	Mississippi Veterinary Research and Diagnostic Laboratory
NAHLN	National Animal Health Laboratory Network
NCC	National Counterterrorism Center
NGO	Non-Governmental Organization
NOC	National Operations Center
NPDN	National Plant Diagnosis Network
NRF	National Response Framework
USDA	United States Department of Agriculture
WHO	World Health Organization

Appendix A – Acronym List Continued...