

Concurrent Session

FOOD DEFENSE: ESSENTIAL TO A COMPREHENSIVE EMERGENCY MANAGEMENT PLAN

Douglas Conwell

Emergency Management
Specialist, Santa Fe Public
Schools (NM)

Marion Hinnert

Food Safety Specialist, USDA
Food and Nutrition Service,
Food Safety Staff, Office of
Emergency Management and
Food Safety

Edmund Kaminski,

Ph.D.

Managing Director, Homeland
Security, URS Federal Services

Purpose of Session

Present key considerations for schools to understand why school food safety and defense is a critical component of emergency management planning.

Overview of Session

- ♦ Provide overview of foodborne illness and threats
- ♦ Incorporate school food defense and food safety into emergency management plans
- ♦ Discuss response actions
- ♦ Outline recovery and after-action reviews
- ♦ Discuss barriers to planning
- ♦ Conduct an interactive activity
- ♦ Highlight available resources

Key Messages

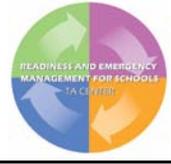
- ♦ While there may be instances that are outside of a school's scope of control, such as intentional contamination, food recall, etc., having a food defense and safety emergency management plan lessens the impact when a threat to the food supply occurs and allows a school to respond appropriately and quickly.
- ♦ Key considerations indicate that a well-designed plan will provide written descriptions for routine tasks, identify community and State resources, and include ongoing training.

About the Presenters

DOUGLAS CONWELL holds a Masters in Public Administration and Criminal Justice from the University of Colorado. He has worked with the Santa Fe, NM Public Schools for over 20 years in a variety of prevention programs and as the Emergency Management Specialist. Certified in Incident Command System (ICS) 100-700, he oversees hazard and vulnerability assessment, drills and debriefings, community collaboration, Crisis Response Plan training and implementation. A member of the District Incident Command Team, he is the district representative for emergency responders Unified Command Center during actual emergencies.



**U.S. Department of Education, Office of Safe and Drug-Free Schools
Readiness and Emergency Management for Schools (REMS)**



Final Grantee Meeting ♦ Boston, Massachusetts ♦ July 21 – 22, 2010

MARION HINNERS joined the USDA Food and Nutrition Service (FNS) in 1990 and the Food Safety Staff in June 2004. Her current projects cover food safety education, training and food defense initiatives for Child Nutrition Programs, and the USDA Foods electronic complaint and rapid alert systems. She represents FNS on the National Coalition for Food Safe Schools, a group that collaborated with CDC to produce the *Food-Safe Schools Action Guide*, and she has served as a Council member for the Conference for Food Protection. Ms. Hinnners received an M.S. degree in Human Nutrition and Foods from Virginia Tech.

EDMUND KAMINSKI, PHD has over 30 years experience in instruction, training, research, exercise development, and corporate leadership. Often maintaining dual careers, Dr. Kaminski has worked with various government programs since 1979, while also holding a number of academic positions, as well as senior leadership positions in Fortune 100 corporations. Since October 2002, Dr. Kaminski has been employed by URS Federal Technical Services as Managing Director, Homeland Security. URS is one of the contractors supporting the Department of Homeland Security's (DHS) *Homeland Security Exercise and Evaluation Program*. In his current capacity, Dr. Kaminski manages a national team of experts who provide support to Federal, State and local governments in the areas of prevention, response, and recovery from acts of terrorism and natural disasters.

For more than 20 years, Dr. Kaminski served as a consultant for the United States Department of Energy (DOE). Throughout this portion of his career, he served as a consultant with the protection force for Los Alamos National Labs (1994 – 2000), where his work primarily focused on the analysis of communication practices of the protection force, who were tasked with access control and the physical protection of DOE assets (classified and unclassified). Between 1989 and 1994, he worked with DOE's *Office for Security Evaluations* (OSE) where he assisted in the analysis of information collected during security inspections of DOE facilities, and wrote/edited technical reports for Congress. Finally, between 1979 and 1989, he worked closely with DOE's *Transportation Safeguards Division* (TSD) [Albuquerque Area Office]. During this period, he assisted in the development of training materials, evaluation of communication practices; and the conduct of numerous drills and field exercises in support of TSD's mission – the safe and secure transport of government-owned nuclear weapons and special nuclear material. Dr. Kaminski received his Doctorate and Master's degrees in Communication from Michigan State University. He received his Bachelors degree in Communication from Cleveland State University.



U.S. Department of Education
Office of Safe and Drug-Free Schools



Food Defense: Essential to a Comprehensive Emergency Management Plan

Douglas Conwell

Emergency Management Specialist, Santa Fe Public Schools (NM)

Marion Hanners

Food Safety Specialist, USDA Food and Nutrition Service, Food Safety Staff, Office of Emergency Management and Food Safety

Edmund Kaminski, Ph.D.

Managing Director, Homeland Security, URS Federal Services



Session Objectives

- Increase awareness and understand impact of food vulnerabilities in schools
- Make a case for school food defense and food safety being a part of emergency management plans
- Highlight available resources





Presentation Outline

- Overview of Food Safety and Food Defense
- Managing Threats Using the Four-Phases Approach
 - Conducting Assessments and Mitigating Threats
 - Developing a Team, Preparing a Plan, and Training
 - Response Actions
 - Recovery and After-action Reviews
- Barriers to Planning
- Tabletop Activity
- Resources



Common Acronyms

- DHS - Department of Homeland Security
- FDA - Food and Drug Administration (US Dept of Health and Human Services)
- FNS - Food and Nutrition Service (USDA)
- HSEEP – Homeland Security Exercise and Evaluation Program
- NSLP – National School Lunch Program
- TTX - Tabletop Exercise
- USDA - United States Department of Agriculture



What is Food Safety and Defense?

FOOD SAFETY is defined as the protection of food products from unintentional contamination by biological, chemical or physical hazards.

In contrast, **FOOD DEFENSE** is defined as the protection of food products from intentional adulteration by biological, chemical, physical or radiological agents.



Why Does It Matter?

- During the week of April 9, 2007, **91** people became ill at Central Junior High School in East Peoria, Illinois. Officials with the county health department concluded that norovirus in cafeteria food was the likely culprit.
- At Polk County High School in North Carolina, **24** students were sickened in September 2006 in a salmonella outbreak traced to sweet tea. At least one student was treated at an emergency room.
- A cafeteria worker from Trinity High School in Dickinson, North Dakota, spent part of her weekend vomiting and racked with diarrhea. But on Monday, May 2, 2005, she reported to work, chopping lettuce served for lunch. The next day, students began to feel sick, and by that Wednesday, **52** students and **8** faculty members had fallen ill with the same symptoms the sick worker had suffered.



What's In It For Schools?

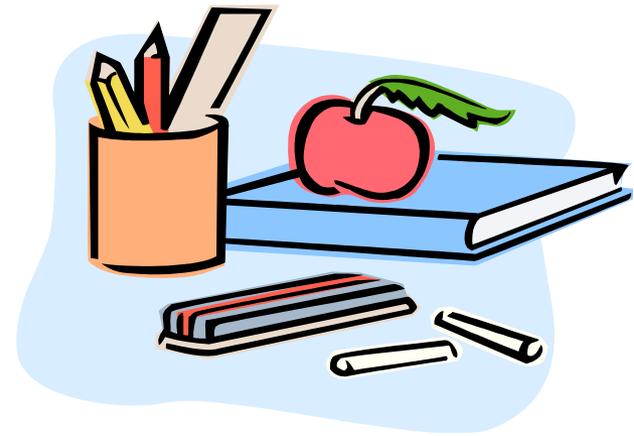
- Student and Teacher Health Safety
- Community Confidence





National School Lunch Program (NSLP)

- NSLP serves 31 million lunches and 10 million breakfasts per day
- Over 100,000 schools in over 20,000 school districts participate
- Safety record of NSLP is very, very good, but problems do occur





Food Defense in the NSLP

Why is the National School Lunch Program (NSLP) at risk?

- Vulnerable population
- Major emotional impact of harming children who are assumed to be safe at school
- Very large numbers of servings per day
- Very large batches of single food dispensed in any given day
- Transportation of foods





Foodborne Illness: What Do We Know?

CDC estimates that foodborne pathogens cause^a:

- 76 million illnesses per year
- 325,000 hospitalizations per year
- 5,000 deaths per year
- Estimated annual cost is \$5 billion dollars

Children are a high risk population for foodborne illness

Approximately 1/3 of the U.S. population attends, works for, or has children in schools

^A Mead, P.S., et al., Food-Related Illness and Death in the United States. Emerging Infectious Diseases, 1999. 5



Food-Borne Illness Outbreaks at Schools

Relatively rare in schools

- 195 outbreaks were reported in schools between 1990 and 1999
- Less than 4% of the total U.S. food-borne illness outbreaks reported are in schools

Schools represent larger percentages of illness

- Responsible for about 10% of all outbreak-related illnesses reported
- 67% of large outbreaks in schools were associated with Federal school meals programs

Source: GAO. 2003. *School Meal Programs: Few Instances of Foodborne Outbreaks Reported, but Opportunities Exist to Enhance Outbreak Data and Food Safety Practices*. GAO-03-530.



How Would You Know?

How would you know whether you had a foodborne outbreak at your school?

- What are the signs and symptoms?
- How quickly will symptoms appear?
- How do you determine whether food is the source?
- If food, which one is most likely?
- What should you do?



Foodborne Illnesses and Symptoms

Illnesses

- Bacteria
- Viruses
- Parasites
- Toxins/Chemicals
- Contaminants



Symptoms

- Diarrhea
- Vomiting
- Stomach Cramps
- Headache

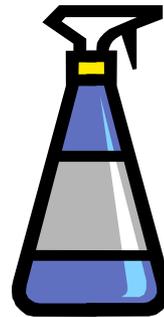




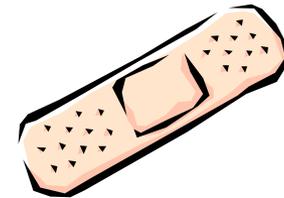
Types of Food Hazards



Biological
Bacteria
Viruses
Parasites



Chemical
Allergens
Pesticides
Sanitizers
Food additives



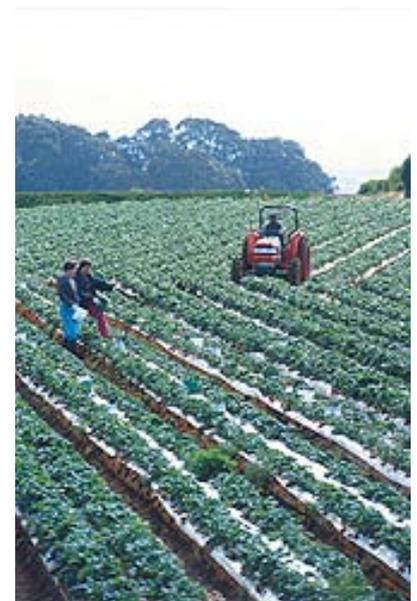
Physical
Plastic
Glass
Metal



Where are We Vulnerable?

The opportunity for attack exists at multiple levels:

- Crops
- Livestock
- Processing
- Distribution
- Storage
- Transportation
- Retail
- Preparation/Handling
- Serving





How is Food Contaminated?

Food can be contaminated when it is:

- In the field or on the farm
- Harvested, transported or processed
- Improperly handled at any stage
- Cross-contaminated
- Stored at incorrect temperatures
- Insufficiently cooked or cooled
- Deliberately contaminated





The Threats...

Unintentional contamination

- Example: Mislabeled ingredients

Deliberate contamination

- Open containers, unlocked storage

Transportation incidents

- Train/truck access

Natural disasters

- Floods, hurricanes, tornadoes, fires

Building events

- Explosions/ammonia leaks

Hoaxes





Unintentional

Most result from improper food handling at any stage:

- Operational negligence
- Poor employee training
- Poor process control

Threats can also occur outside of the NSLP:

- Food brought from home or other sources
- Food in the classroom
- Vending machines
- Concessions
- Use of facilities by outside groups
- Access to the school kitchen
- Natural disasters, i.e. tornado, floods, power outages



Intentional

- Attacks can be focused on a food product, process, company or organization.
- The agent may be biological or chemical and may cause severe public health consequences.
- The agent may be hard to distinguish from agents in unintentional incidents
- Examples of tampering with Federal school meal program commodities:
 - Cocaine in ground beef
 - Chicken fajitas





The Defense...

- **Emergency Management/Food Defense Plans**
- **Assess and Address Vulnerabilities**
- **Employee Training**
- **Recall Strategy**
- **Be Alert and Aware**
- **Encourage Communication**
- **Diligent Supervision**



Managing Threats Using the Four-Phases, All-Hazards Approach

- **Prevention-Mitigation**
 - Conduct vulnerability assessments
 - Implement preventive measures/strategies
- **Preparedness**
 - Add food service staff to your emergency management team
 - Develop plan
 - Training
- **Response**
- **Recovery**





Prevention-Mitigation

Conduct vulnerability assessments

Implement Prevention-Mitigation measures

- Focus efforts on risk
- Develop/implement managerial systems



Mitigating Internal Threats

Can be managed through:

- Diligent supervision
- Proper food preparation
- Secure storage
- Proper inventory control
- Controlled access to food supply
- Properly labeling food, supplies, chemicals
- Raising awareness through discussion and training
- Reporting suspicious activities





Mitigating External Threats

Threats can be mitigated by:

- Securing access to food supply and kitchens
 - Fencing
 - Access control
- Ensuring sufficient lighting to ward off nighttime vandalism
- Controlling vendor delivery points
- Instituting an identification system for all visitors to the school sites



School Foodservice Operations: Central Kitchens

Use of Central Kitchens:

- 54 percent of schools use Central Kitchens in some capacity
- 40 percent of schools use a combination of Central Kitchen and Satellite Preparation
- 14 percent of schools use Central Kitchens only



National Food Service Management Institute
(NFSMI) study



How to Protect Central Kitchens*

High-risk areas in Central Kitchen operation:

- Transport
- Ingredients
 - Measuring liquid and dry
- Mixing and Cooking – large batch
- Storage
 - Dry
 - Cooler
 - Freezer



* Strategic Partnership Program in Agroterrorism (SPPA) Initiative



Central Kitchen SPPA: Best Practices*

- Dual control – 2 people always present for accountability
- Retrofit open systems (kettles, mixers) to avoid accidents
- Monitor temperature fluctuation to avoid undercooking
- Restrict access in critical areas; secure when not in use
- Color-coded smocks/uniforms for work areas for easier identification
- Employee background investigations and re-investigations
- Employee education and training on Food Defense
- Develop policies and procedures
- Note changes in staff health condition

* SPPA Initiative



Preparedness

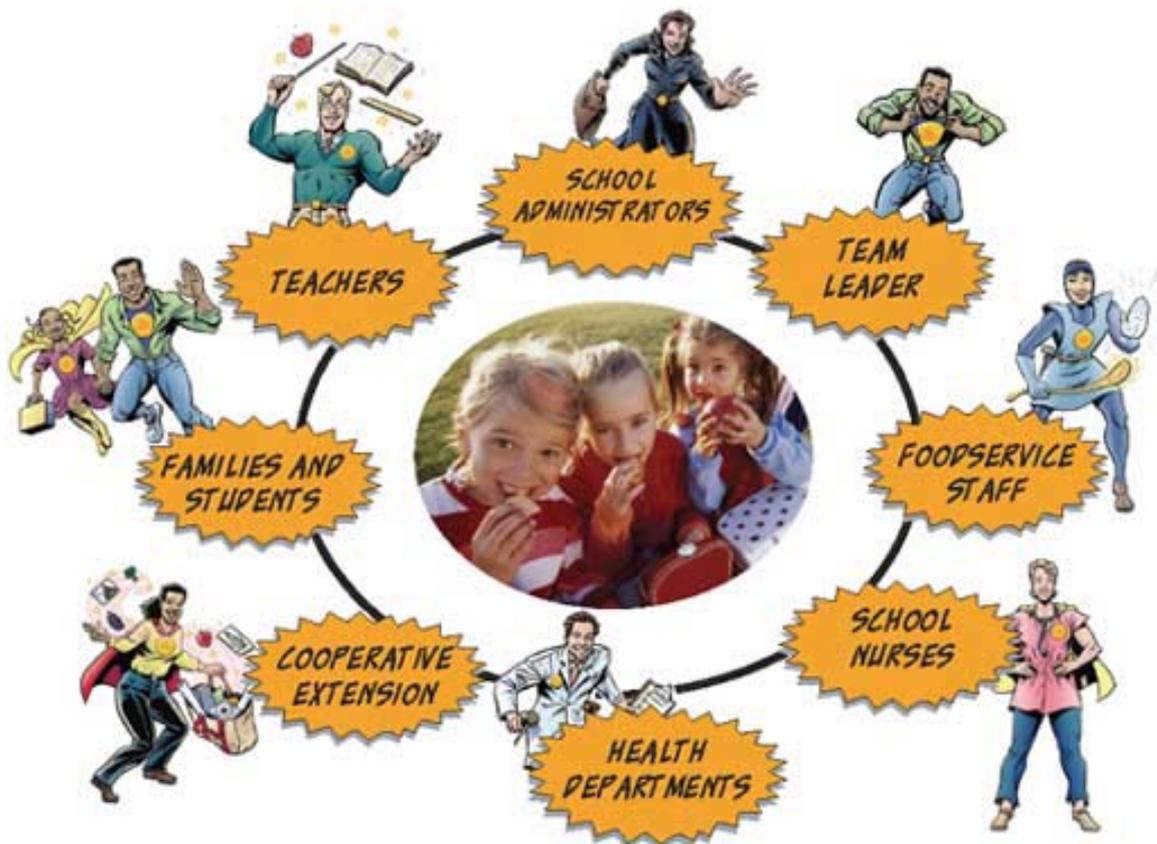
- **Develop an emergency management team and contacts**
- **Develop a Food Defense Plan**
- **Provide ongoing training to staff**





Assemble a Team

Everyone Has a Role in the Safety of Food





Develop a Team and Contacts

- Interdepartmental contacts
 - Local and State Health Departments
 - Local, State and Federal law enforcement agencies
 - State Education Agencies
- Intra-departmental school system contacts
 - Board of Education
 - Central Office Administration
 - School Food and Nutrition Services
 - Facilities Services
 - Transportation
 - Student Health Services



Develop a Food Defense Plan

Components of a food defense plan:

- Coordination with state/county/district plan
- Communication of a surveillance plan
- Identification of the chain of command
- Contact information for key staff
- Clear identification of roles and responsibilities
- Drills or tabletop exercises



Develop a Food Defense Plan (cont'd)

- Stand-alone plan not necessary
- Component of the All-Hazards School Emergency Management Plan, which could include the following:
 - Foodborne illness: intentional or unintentional causes
 - Food recalls
 - Natural disasters
 - Pandemic
 - Civil unrest



- Food defense topics should be included in food safety and facilities security training
- Heighten employee awareness
- Dispel myth, “It can’t happen here”
- Enhance preparedness
- Increase timeliness of response
- Build confidence of trainees as well as public



Potential Training Components

- Basic food safety training
- Standard operating procedures for food safety and food defense:
 - Purchase specifications/receiving procedures
 - Equipment/facility design and maintenance
 - Monitoring procedures
 - Record keeping
- Employee health policy
- Bioterrorism awareness

U.S. FDA offers an online course covering the basics of food defense awareness. Available online at <http://www.fda.gov/Food/FoodDefense/default.htm>



Response: Considerations During Emergency

- **Food contamination**
- **Food recall**
- **Serving as a relief shelter after disaster**





Food Contamination: Responding to An Incident

- Report incident to local health department
- Suspend operations until product and/or agent has been identified
- Destroy and dispose of contaminated products according to instructions
 - Consider that some should be held for analysis
- Clean and sanitize facilities and equipment
- Communication with parents and the school community



Food Contamination (cont'd)

- Do you have a plan or standard operating procedure detailing the actions you take if you suspect or discover your food has been contaminated?
 - State or School district administrative responsibilities
 - Policy
- Are any authorities different if the event is an act of terrorism?
- When should law enforcement get involved?



Food Recall: Administrative Actions

- Ensure procedures already developed for your school district
- Notify the local health department
- Work closely with school district's public communication contact person to notify parents and the community
- Employ procedures for locating, counting, segregating, and securing the food product
- Document actions, submit data and appropriate forms

Excerpted from *Responding to a Food Recall*, available online at <http://www.olemiss.edu/depts/nfsmi/Information/recallmanual.pdf>



Food Recall: School-Site Actions

- Identify the recalled food product immediately
- Physically separate the product
- Determine if the product was used and account for usage:
 - date it was received
 - when it was used/who it was served to
 - any health problems reported
- Submit information to central office
- Follow instructions for destruction of the recalled product
- Submit any necessary data, reports and forms

Excerpted from *Responding to a Food Recall*, available online at <http://www.olemiss.edu/depts/nfsmi/Information/recallmanual.pdf>



Relief Efforts: Serving as a Designated Relief Shelter

Considerations:

- Level of involvement in the relief effort
- Administrative authority
- Agreements with community agencies
 - Costs reimbursed to school foodservice
 - Use of equipment and commodities
- Communication plan, including responding to questions from relief organizations



Do food defense plans include:

- Written recovery plans?
- Plans for disposal of solid waste?
- Sanitization and disinfection procedures?
- Aftermath review and lessons learned?
- Process to implement corrective actions?



After-action Review:

- Review processes and identify where the vulnerability occurred
- Revise procedures
- Re-train employees
- Re-fit and up-grade facilities



Barriers to Food Defense Planning

- Not a priority, not a requirement
- No time
- Employee turnover
- Financial limitations (resources)
- Lack of administrative support
- Lack of local leadership/coordinator
- Lack of expertise or guidance
- Limited training



Santa Fe Public Schools Tabletop (TTX) Exercise

Tabletop exercise:

- Conducted April 13, 2010
- Players included:
 - Santa Fe Public Schools
 - Santa Fe Public Schools Student Nutrition Services
 - New Mexico Department of Health, Division of Public Health
 - City of Santa Fe Office of Emergency Management
 - CHRISTUS St. Vincent Regional Medical Center



Santa Fe Public Schools TTX

Lessons Learned

Strengths identified:

- Recovery plans exist that are applicable to a food safety incident
- NM Dept. of Health and NM Environment Dept. recognized the importance of the school lunch program and the public health implications of the program
- Student Nutrition Services keeps food temperature logs during preparation and during holding per the protocols in their Food Safety Plans
- Once the contaminant was identified, NM Dept. of Health had appropriate response policies, plans and procedures to respond to the event



Santa Fe Public Schools TTX Lessons Learned (cont'd)

Areas for Improvement:

- Neither Santa Fe Public Schools nor Student Nutrition Services has a Food Defense Plan
- Santa Fe Schools Crisis Response Plan does not include specific information and notification protocols addressing a food safety incident, Student Nutrition Services are not included in the plan
- There are no formal food safety incident communication protocols between Student Nutrition Services and other departments within the Santa Fe School District
- Formal notification of the City Emergency Manager did not occur, no triggers for activation of local Emergency Operation Plans
- Need to identify the lead agency for a food safety incident



In Conclusion: What You Can Do

- **Assemble a food defense team**
- **Develop a food defense plan**
- **Incorporate it into overall emergency management plan**
- **Practice with all internal and external partners**



Intentional Contamination Tabletop Exercise



Why Develop a Food Defense Tabletop Exercise (TTX)?

- **Purpose:** Enhance the ability to respond to a district-wide food contamination event, exercise participants' knowledge and understanding of current food defense emergency plans, policies, and procedures
- **Goal:** Evaluate food defense policies, plans, and procedures for response following a serious/major food contamination event involving the public school lunch program



Benefits to Participants

- Discuss decisions and actions required to respond to a food defense incident via a realistic scenario of food-borne illness due to contamination
- Test and find gaps in current food defense plan or food defense component of emergency management plans
 - Highlight components that should be part of a food defense plan or food defense component of emergency management plans



Benefits to Participants (cont'd)

- Network and make connections with other food defense partners; create a framework to identify key partners, contacts, and connections that will lead to the development of an all-inclusive, reality-based, practical food defense plan
- Exercise communication network and identify communication needs during an event or incident
- Participate in a hot wash at the end of the exercise to determine specific future actions steps



What is the DIY TTX Package?

- A turn-key tabletop package that States or districts can use to conduct a tabletop exercise concerning food contamination in schools
- The package will be compliant with DHS requirements so that grant funding could be sought from DHS to conduct the exercise



What is the DIY TTX Package? (cont'd)

Contains a self-guided DVD that provides:

- Instructions on how to conduct the planning meetings and TTX, set evaluation criteria, and write an After-action Report
- Templates for all meetings and reports
- Resource links to funding, training, and additional resources



Why Use the DIY TTX?

A national, Do-It-Yourself training program:

- Reaches a larger number of districts and children compared to limited training
- Provides States and districts the tools necessary to conduct training saving local resources
- Encourages all States and districts to achieve a level of readiness to address food safety
- Raises awareness among the emergency response community about the need for and importance of a food defense plan



Basic DIY TTX Structure

- Scenario: Contamination of a food product in the school lunch program with a focus on response
- Three Modules:
 - Module 1: Identification & Communication
 - Module 2: Internal & External Communication & Coordinated Response/Public Information
 - Module 3: Long Term Response/Recovery
- One day (5 hours) facilitated discussion and participant feedback



Food Defense Activity

National School Lunch Program Food Defense Tabletop Exercise



Food Defense Activity

Tabletop Exercise

Module 1

Identification and Communication



Food Defense Activity

Module 1: Scenario

Tuesday:

8:00 a.m. – 1:30 p.m.

- The district is conducting statewide school testing Tuesday, Wednesday, and Thursday
- A favorite school lunch is prepared consisting of chicken nuggets, tossed salad, apple slices, a whole grain roll, and milk

11:00 a.m. – 1:30 p.m.

- All schools in the district serve lunch



Food Defense Activity Module 1: Video Vignette

**Video vignette of activities for
Tuesday – Wednesday morning**



Food Defense Activity Module 1: Events Summary

As of Wednesday 6:30 p.m. (T+34:30 hours)

- Several youth and adults have sought medical care after experiencing symptoms including nausea, headaches, blurred vision, and unexplained fatigue after a normal night's rest
- Many patients have reported to local hospitals, emergency care centers, and physician offices seeking medical assistance



Food Defense Activity

Module 1: Events Summary (cont'd)

As of Wednesday 6:30 p.m. (T+34:30 hours)

- Lack of insurance, access to transportation, or mild symptoms may be delaying medical treatment
- Number of potential exposures: 14,500
 - Number of students and staff in 27 schools that served lunch
- Number of probable exposures: 8,500
 - Number of students and staff who ate lunch on Tuesday



Food Defense Activity

Module 1: Sample Questions

- Based on the information presented, what are your top priorities at this time?
- Would you activate any formal plans and procedures at this point?
 - What triggers the activation or implementation of these plans and procedures?
- How will you recognize the potential outbreak within the school or district?
 - How will you track that information?
 - What are the current reporting mechanisms?



Food Defense Activity

Module 1: Sample Questions (cont'd)

- What are the staff notification procedures following identification and confirmation of disease outbreaks
 - Who is in charge of providing accurate and timely information to the internal staff?
 - Who will be notified?
- What are the key messages at this point?
- What specific information will be given to staff, students, and parents?
- Who will be the spokesperson(s) for this incident?
 - How will they be selected?



Food Defense Activity

Module 1: Sample Questions (cont'd)

- What are the key messages at this point and who is the audience?
 - What specific information on the situation would be disseminated to students, staff, and parents?
 - Who will be the spokespersons for this incident?
 - How will they be selected?
- Which agency(ies), department(s), or organization(s) will disseminate “official” information to the public and the media?



Food Defense Activity

Tabletop Exercise

Module 2

Internal/External Communication

Coordinated Response/Public Information



Food Defense Activity

Module 2: Scenario

Thursday:

6:30 a.m. – 8:00 a.m.

- Hospitals see a dramatic increase in school-aged children with similar symptoms
- A 10-year-old girl is admitted to a Regional Medical Center and placed on a ventilator - she is not expected to live
- All youth at hospital emergency departments display similar symptoms that seem to be progressing
- A custodian from a local elementary school returns to the hospital displaying elevated symptoms, including difficulty breathing; he is placed on a ventilator





Food Defense Activity Module 2: Scenario (cont'd)

Thursday:

8:00 a.m. – 9:00 a.m.

- Schools report a 50% absentee rate and a 30% increase in staff absenteeism
- Schools unable to find substitutes
- Public Health staff arrive at schools to begin investigation
- Area schools have decided to close until further notice



Food Defense Activity

Module 2: Scenario (cont'd)

Thursday:

10:00 a.m.

- The local public health department suspects possible food-borne connection and have narrowed it down to the school lunch
- State Dept. of Education, Dept. of Agriculture, and Dept. of Health are contacted to pursue epidemiological investigation





Food Defense Activity Module 2: Noon News

**Local news broadcast of events leading up to Noon
on Thursday**



Food Defense Activity

Module 2: Scenario

Thursday:

12:00 p.m. – 4:00 p.m.

- Mayor requests Governor declare a state of emergency – Governor's office complies
- Reports of illness increase – including the “worried-well”
- Emergency rooms have become overwhelmed



Food Defense Activity Module 2: Scenario (cont'd)

Thursday:

4:00 p.m. – 8:00 p.m.

- Lab tests conclusive for botulism
- State Governor requests and is granted a Federal Disaster Declaration
- A Public Health Emergency is declared and federal resources are notified to deploy





Food Defense Activity

Module 2: Scenario (cont'd)

Monday:

8:00 a.m.

- Schools remain closed until further notice

10:30 a.m.

- Three other similar outbreaks reported in the United States indicate national food contamination – FBI begins investigation for criminal activity
- USDA and CDC confirm chicken nuggets as the possible source of outbreak





Food Defense Activity

Module 2: Scenario (cont'd)

Monday:

3:00 p.m.

- The newspaper's headline announces a special school board meeting to discuss next steps for the community
- Parents of a 10-year-old girl who was the first person to die are interviewed by the newspaper
- They want to know why the botulism was not found sooner and beg other parents to never let their children eat school lunch again



Food Defense Activity Module 2: Events Summary

As of Monday 3:00 p.m. (T+151:00 hours)

- Estimated potential exposures, including students and school system employees:
 - 14,500 (number of students and staff at the schools that received food deliveries)
- Estimated probable exposures:
 - 8,500 (number of students and staff who ate lunch on Tuesday)



Food Defense Activity

Module 2: Events Summary (cont'd)

As of Monday 3:00 p.m. (T+151:00 hours)

- More than half of the student population and staff in the school district have sought medical care
- Dozens are reporting additional symptoms, including paralysis and respiratory distress
- Many are hospitalized and on ventilators



Food Defense Activity

Module 2: Sample Questions

- Given the positive confirmation of botulism and possible bioterrorism, how does this change the priorities during this escalating situation?
- What are your response actions at this point in the event?
 - What triggers the activation or implementation of these plans and procedures?
 - How is your operation coordinated?
- What essential elements of information do you need to collect in this situation?
 - How do you collect this information and from whom?
 - What reports will you generate from this information?



Food Defense Activity

Module 2: Sample Questions (cont'd)

- How has the role of law enforcement changed given the scenario developments in the last module?
 - What is the impact of law enforcement involvement on the communications and information sharing process?
- How would crime scene investigation requirements be managed and coordinated?
 - Which agencies are responsible for this?
 - How is this managed with the responding agencies?
- How will coordination of Federal, State, and local efforts and resources be handled?



Food Defense Activity

Tabletop Exercise

Module 3

Long Term Response/Recovery



Food Defense Activity Module 3: Evening News

Local evening news broadcast – Six weeks later



Food Defense Activity Module 3: Events Summary

Six weeks post event:

- 5% of the population who became ill (425 students and staff) died as a result of the exposure
- Several hundred suffered permanent damage to their respiratory and nervous system
- Dozens remain on respirators and in long-term care facilities



Food Defense Activity

Module 3: Sample Questions

- What are your priorities six weeks post-event?
- What was the impact of the event on your department?
 - What did this do to staffing, budget, supplies, etc.?
- How will you help restore the public's confidence in the school food and nutrition program?
- How will you manage students' nutritional needs in the event large numbers of students enrolled in free or reduced meal programs are not consuming school provided meals?



Food Defense Activity

Module 3: Sample Questions (cont'd)

What recommendations would you make to strengthen your agency or system response?

- What immediate changes can be made?
- What long-term changes can be made?
- How will these recommendations be funded?
- How will you determine the cost?



Discussion



Resources



Reporting Resources

- Local and/or State Health Department
- Local Law Enforcement
- Local Fire Department

Elevated Concerns:

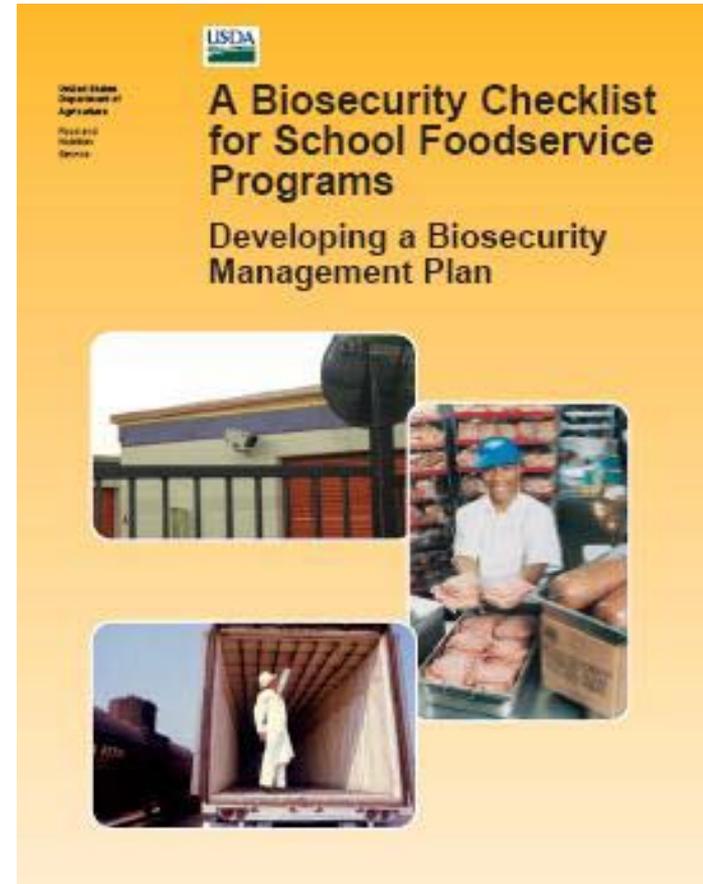
- FSIS – Office of Food Defense and Emergency Response
 - (800) 333-1284
- FDA – Office of Emergency Operations
 - (301) 443-1240





Resources Biosecurity Checklist

- Checklists to help determine vulnerabilities and priorities
- A tool to help develop a food defense plan
- Interactive CD-ROM and video also available



<http://healthymeals.nal.usda.gov/hsmrs/biosecurity.pdf>



Future Resources

Do-It-Yourself Food Defense TTX Kit

- Developmental Pilot exercises at 3 sites (2009-2010)
- 3 Field Test exercises – planned for 2010-2011
- Do-it-yourself TTX kit will be available in Fall 2011
 - Meets DHS HSEEP grant guidelines
 - Will be posted online for downloading



FDA's ALERT Initiative

- Intended to raise awareness of food defense
- Applies to all aspects of the farm-to-table continuum
- Identifies 5 key food defense points:
 - Assure - supplies and ingredients are from safe and secure sources
 - Look – keep an eye on the security of your ingredients and products
 - Employees – use strategies to monitor staff and visitors
 - Report – document the security of your products
 - Threat – know how and who you notify about threats or suspicious activities



FDA's FIRST Initiative for Front Line Staff

- Follow company food defense plans and procedures
- Inspect your work area and surrounding areas
- Recognize anything out of the ordinary
- Secure all ingredients, supplies, and finished product
- Tell management if you notice anything unusual or suspicious
- Web link for ALERT and FIRST:
 - <http://www.fda.gov/Food/FoodDefense/default.htm>



Presentation Credits

Thank you to the following persons for their role as lead authors of this presentation:

- **Doug Conwell**, Emergency Management Specialist, Santa Fe Public Schools
- **Marion Hanners**, MS, Food Safety Specialist, Office of Emergency Management and Food Safety, FNS, USDA
- **Edmund Kaminski, PhD**, Managing Director, Homeland Security, URS Federal Services

Special thanks to the following person for providing review and comment to these materials:

- **Grady Bird**, Centre for Emergency Management, Policy, Information Technology and Communications