Food Bioterrorism: Schools as a Target

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What is Food Defense?

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

In contrast, FOOD SAFETY is defined as the protection of food products from unintentional contamination by agents.
Why target the NSLP?

- NSLP offers:
  - Vulnerable population
  - Major emotional impact of harming children
  - Very large numbers of servings per day
  - Very large batches of single food dispensed in any given day
  - Transportation of foods
  - Approximately 1/3 of the U.S. population attends, works for, or has children in schools
Who?

- Terrorists
- Activists
- Disgruntled insiders
How?

- Choose:
  - A contaminant
  - A food
  - A place
FDA Vulnerable Foods

- Infant formula
- Breaded food
- Baby food
- Milk
- Yogurt
- Ice cream
- Soft drinks
- Water, bottled
- Produce
- Canned food
- Honey
- Peanut butter
- Seafood, cooked
- Deli salad
- Fruit juice
- Flour
Where are we vulnerable?

- Opportunity for Attack at Several Levels
  - Crops
  - Livestock
  - Processing
  - Distribution
  - Storage
  - Transportation
  - Foodservice
Central Kitchens as a Target

- 4 Factors make certain operations a more likely target:
  - Large Batches
  - Uniform Mixing
  - Short Shelf-Life
  - Easy Access
Central Kitchens Vulnerabilities

- High-risk areas in Central Kitchen operation:
  - Transport
  - Ingredients
    - Measuring liquid and dry
  - Mixing and Cooking—large batch
  - Storage
    - Dry
    - Cooler
    - Freezer
Central Kitchen
Counter Measures

Highlights:

- Dual control – 2 people always present
- Retrofit open systems (kettles, mixers)
- Restrict access in critical areas; secure when not in use
- Develop Policies and Procedures
Warehouse Vulnerabilities

- Personnel
- Receiving
- Storage/Access
Counter Measures: Personnel

- Screening
- Daily work schedules
- Identification
- Training
- Unusual behavior
Counter Measures: Receiving

- Request locked and sealed vehicles/containers
- Look for evidence of tampering or counterfeiting
- Reject suspect food
- Establish pick-up and delivery schedules
Counter Measures: Storage/Access

- Establish product tracking procedures
- Secure and limit facility access
- Investigate missing or extra stock/chemicals
- Secure hazardous chemicals
We All Have a Part in Food Defense

- Your Part
  - Train
  - Plan
  - Drill
  - Repeat
Train

Food Defense Training:

- Include food defense in food safety and facilities security training
- Heighten employee awareness
- Be proactive rather than reactive

ALERT and FIRST - FDA materials
ALERT: The Basics

The ALERT initiative is intended to raise the awareness of state and local government agency and industry representatives regarding food defense issues and preparedness. It is generic enough to apply to all aspects of the farm-to-table supply chain and is designed to spark thought and discussion with a variety of stakeholders. ALERT identifies five key points that industry and businesses can use to decrease the risk of intentional food contamination at their facility.

Select each link below for additional background information in support of each letter of the ALERT acronym.

In today's world it is important to be ALERT to protect your business.

A How do you ASSURE that the supplies and ingredients you use are from safe and secure sources?

L How do you LOOK after the security of the products and ingredients in your facility?

E What do you know about your EMPLOYEES and people coming in and out of your facility?

R Could you provide REPORTS about the security of your products while under your control?

T What do you do and who do you notify if you have a THREAT or issue at your facility?
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
Plan

Components of a food defense plan:

- Assessment of operation
- Identification of strategies
- Implementation
- Coordination with state/county/district
- Includes training schedule and drills or tabletop exercises

‘Creating Your School Food Defense Plan’ – template on the USDA/FNS website
Drill

Why Conduct a Table Top Exercise (TTX)?

- Dispels the myth “It can’t happen here”
- Provides good first step to exercise plans and identify strengths and gaps
- Defines stakeholder roles and responsibilities for food safety/food defense
- Establishes your contacts in the event of a real incident
What is the TTX Package?

- A turn-key TTX package that States or districts can use to conduct a TTX concerning food contamination in schools
- Compliant with Department of Homeland Security requirements so grant funding could be sought from DHS to conduct the exercise
- Available mid-2013
Food Defense Activity
Terrific Town School District

- 106 schools in the district
- 85,000 students enrolled
- NSLP participation (avg) = 60,000
Week 1 – Current Status

- Week 1 absenteeism in Terrific Town school district including students, teachers and food service staff. Symptoms: nausea, vomiting, diarrhea

- Total number ill = 200
1. What do you do and who do you report to regarding this level of absenteeism?

2. Are there existing plans, policies, or procedures that might be triggered by an increased level of absenteeism?
Week 2 – Current Status

- 50 deaths of ill children
- Total number ill = 5000
- Food histories point to food served in school
- Food samples are being tested
- Parents stop sending children to school
Week 2 – Discussion

1. Do you have plans that cover handling a large foodborne illness outbreak?

2. What actions do you take? What other state/local agencies are involved?

3. Who is the lead spokesperson and who decides what the key message is?
Week 3 – Current Status

- 300 deaths of children or adults who had been ill with the symptoms
- Total number ill = 12,000
- Schools in the district are closed by the superintendent
- A terrorist group claims responsibility for contaminating a food product shipped to schools
- CDC confirms a substance found in the suspect food product was an agent that could cause death.
1. Do you have plans, policies, and procedures to respond to food defense issues? How are activities coordinated? Are law enforcement agencies involved?

2. What actions are taken to track, locate and recall food products? Who is involved?

3. Where does the community go for information? What information is released? How is that determined and coordinated? Authorized?
Week 10 – Current Status

Ten weeks post-event

- 1,000 deaths (5% of the 20,000 who fell ill)
- Suspects arrested
- No new cases, many still hospitalized
  - Several hundred suffered permanent damage to their respiratory and nervous system
  - Dozens remain on respirators and in long-term care facilities
1. What actions are taken to recover from the incident? What has to occur to allow the schools to re-open and provide food again?

2. What was the impact on your department? What did this do to staffing, budget, supplies, etc.?

3. What triggers local, state or federal support for recovery operations? What support is available?

4. How can you regain the confidence of the community?
In conclusion

To protect vulnerable populations:

Add food defense to your professional tool box
FNS Resources

http://www.fns.usda.gov/fns/food_safety.htm
THANK YOU!

Questions?

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