



The Relevance of Food Biosecurity to USDA Nutrition Assistance Programs

**Food Safety Unit
Food and Nutrition Service**

The break-out session....

- Background
- FNS program sites
 - Risks
 - Preventive strategies
- Action steps
 - Identify your part
 - Tools and Resources



Why Are We Concerned?

- No specific information that attack on food supply is imminent
- Intelligence reports that terrorists considered components of food sector
- Manuals for intentional contamination of food are widely available
- Soft targets like food supply are a concern

Is there a problem?

- "For the life of me, I cannot understand why the terrorists have not attacked our food supply because it is so easy to do."

Secretary Tommy Thompson - press conference announcing his resignation, December 2004.

What could happen?

- Severity of attack depends on:
 - Agent
 - Attack scenario
 - Effectiveness of detection and response
- Biological or chemical weapons against food supply could cause mass casualties
- Ineffective attack could cause significant economic and psychological damage

States take it seriously...

■ Wisconsin

- School food biosecurity plan under development
- <http://dpi.wi.gov/fns/foodsafety.html>

■ Iowa

- School officials are taking steps
- New Center for Agriculture Security in the Iowa Dept. of Agric. & Land Stewardship

Select FNS program data

The National School Lunch Program:

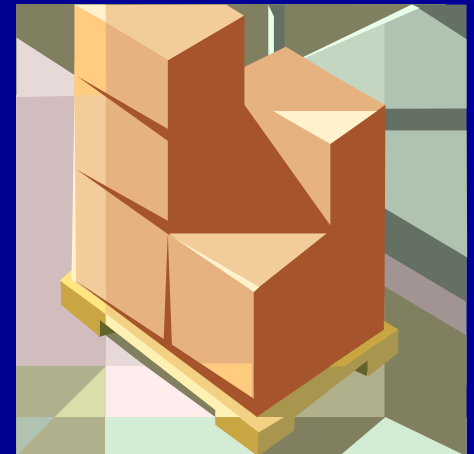
- Almost 100,000 public and non-profit private schools participate
- Over 8 million breakfasts, and 28 million lunches served daily to children (2003)
- *On an average school day, 1 out of every 2 students participates in the NSLP*

Volume of Commodities Used in the NSLP

- NSLP in 2004:
 - \$770 million
 - 1.1 billion pounds
- 20% provided by USDA
- 80% purchased commercially
- Protections afforded by AMS only go so far

Who Handles Commodities?

- State Distributing Agencies
 - State Warehouses
- Local Recipients
 - Public and private schools
 - Central Kitchens
 - Warehouses
 - Food Banks



Warehouses Receive Commodities

- Warehouses
 - About 150 state warehouses nationwide
 - Many large school districts have own warehouses
 - As many as 1,000 warehouses in all

Central Kitchens Handle Commodities

Large number in NFSMI NSLP survey:

>40% of schools used a combination of a central kitchen with satellite onsite preparation capabilities at local schools

Another 14% used only central kitchens

= 54% using central kitchens in some capacity

Of those 54 %, 78% reported hot food delivery to satellites (food that's ready to serve)

- Large quantity of food being moved = vulnerability, especially since most has no further preparation at service site

Food Banks Receive Commodities

- The Emergency Food Assistance Program (TEFAP)
 - 2003:
 - \$140 million for food
 - \$240 million for surplus commodities

What foods are at risk?

- FDA studies:
Operational Risk Management Assessments

- FNS vulnerability assessments:
 - Ground beef (FSIS and FNS)
 - Chicken nuggets (FSIS, FNS, AMS)



FDA Vulnerable Foods Using ORM*

- 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

*Food Defense: FDA's Role in Protecting America's Food Supply; International Symposium on Agroterrorism; May 3, 2005; LeeAnne Jackson, PhD; FDA

What agents might be used?*

Biological

- Heat resistant bacteria (e.g., *Bacillus anthracis*)
- Heat sensitive bacteria (e.g., *Salmonella*)
- Heat resistant bacterial toxins (e.g., *Staphylococcus aureus* toxin)
- Heat sensitive bacterial toxins (e.g., *Clostridium botulinum* neurotoxin)

*Food Defense: FDA's Role in Protecting America's Food Supply; International Symposium on Agroterrorism; May 3, 2005; LeeAnne Jackson, PhD; FDA

What agents might be used?*

Chemical

- Water soluble, heat resistant chemicals (e.g., cyanide)
- Lipid soluble, heat resistant chemicals (e.g., digoxin)
- Lipid soluble, heat sensitive chemicals (e.g., ricin)

*Food Defense: FDA's Role in Protecting America's Food Supply; International Symposium on Agroterrorism; May 3, 2005; LeeAnne Jackson, PhD; FDA

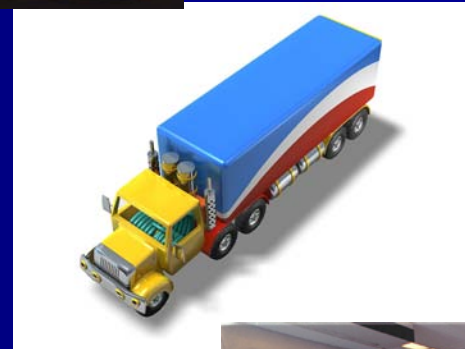
Lessons Learned

Common features of higher risk foods:

- Large batch size = large # servings
- Short shelf-life = rapid turnaround at retail and rapid consumption
- Uniform mixing of contaminant into food
- Highly accessible critical area (node)

Key links in the FNS food chain.....

- Production
- Packaging
- Transportation
- Storage
- Preparation/Service



FNS Program Sites - examples

- Central Kitchens
- Warehouses
- Food Banks



Central Kitchens - risks

Vulnerable points?

- Receiving and Storage
- Food Preparation
- Access to the facility



Central Kitchens

- Identified in vulnerability assessments
- Key areas:
 - Large batch size
 - Thorough mixing of ingredients
 - Short shelf-life (quick turn-around)
 - Wide distribution

Warehouses - risks

Potential vulnerable points:

- Receiving
- Storage
- Personnel
- Access within facility



Food Banks

Why would food banks be a target?

- Create fear
- Short shelf-life
- Undetected
- Poor tracking methods



Common Elements

- Employees
- Public and Visitors
- Facility Security
- Incoming Materials
- Storage
- Deliveries
- Mail and Packages
- Data Systems

Common Elements: Employees

- Screening
- Daily work assignments
- Identification
- Restricted access
- Personal items
- Training in security procedures
- Unusual behavior
- Staff health

Common Elements: Public & Visitors

- Restrict access to:
 - food handling areas
 - storage areas
 - locker rooms
- Restricted entry to the establishment
- Must have valid reason for visit
- Inspect incoming and outgoing vehicles

Common Elements: Facility Security

- **Protect perimeter access**
 - number of entrances
 - account for all keys
 - interior, exterior & emergency lighting
 - control vehicles, etc...

- **Restrict access**
 - Investigate missing stock/chemicals
 - Secure hazardous chemicals
 - Limit access to what's needed for normal operations
 - Secure & limit access to storage areas

Common Elements: Incoming Materials

- Reject suspect food
- Look for evidence of tampering or counterfeiting
- Investigate damage, loss & discrepancies
- Request locked & sealed vehicles/containers
 - Obtain & verify seal numbers
- Encourage suppliers/transporters to practice security measures

Common Elements: Storage

- Keep track of products (log in & out)
- Establish receiving, quarantine, & release procedures
- Investigate missing or extra stock & report any unresolved problems
- Minimize re-use of containers

Common Elements: Deliveries

- Request locked and sealed containers
- Establish pick-up and delivery schedules
- Question deliveries that are not on schedule

Common Elements: Mail and Packages

- Ensure the security of incoming mail and packages
- U.S. Postal Service guidance at:
[www.usps.com/news/2001/press/mail
security/postcard.htm](http://www.usps.com/news/2001/press/mail_security/postcard.htm)

Common elements: Data Systems

- Restrict access
- Eliminate access immediately when staff member leaves
- Adequate virus protection systems
- Back-up procedures
- Validate computer security system
- Traceability of computer transactions

Action Steps

- Identify your part
- Use available tools and resources

4 Phases of Emergency Management

- Prevention/Mitigation
- Preparedness
- Response
- Recovery

Emergency Management Case Study Scenario

- No training for cafeteria staff in 5 years
- Cafeteria back door left open
- Push bar to cooler is broken – risk of entrapment
- Students/teachers ill after lunch
- All with same symptoms
- Foodborne illness on 6pm news
- Parents calling school: is food safe?
- School District working with Public Health

Scenario: Prevention/Mitigation

What could have prevented/mitigated this occurrence, given the facts as stated?

Scenario: Preparedness

What could they have done to be better prepared?

Scenario: Response

How could/should they have improved response?

Scenario: Recovery

What should they do in the aftermath of the crisis?

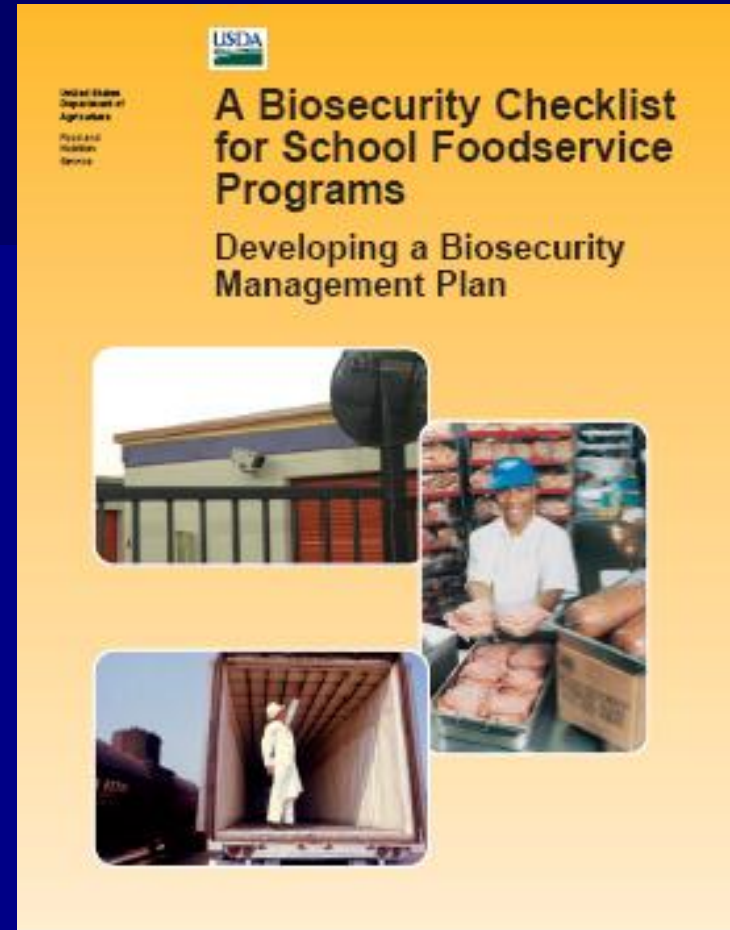
Your Part

- Increase awareness
- Assess risks
 - Your unique operation
- Develop plans
 - Utilize tools and resources
- Training and practice drills are critical components



Biosecurity Checklist

- Checklists to help you determine priorities
- A tool to help you develop a biosecurity management plan



FNS Resource Links

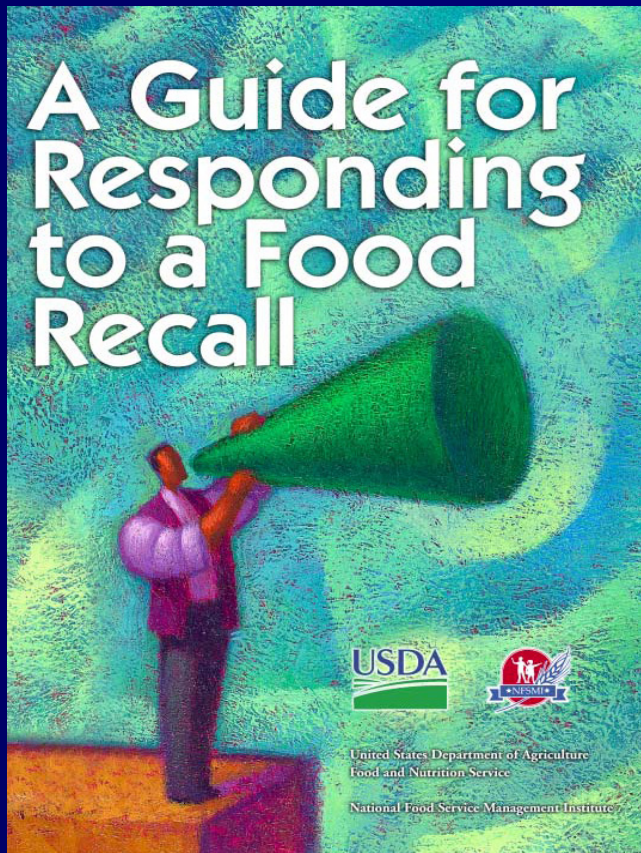
Biosecurity Checklist:

<http://schoolmeals.nal.usda.gov/Safety/biosecurity.pdf>

Biosecurity Video for schools:

<http://130.74.84.77/launcher.php?file=%2Fomo%2Fcmp%2Fbio.wmv>

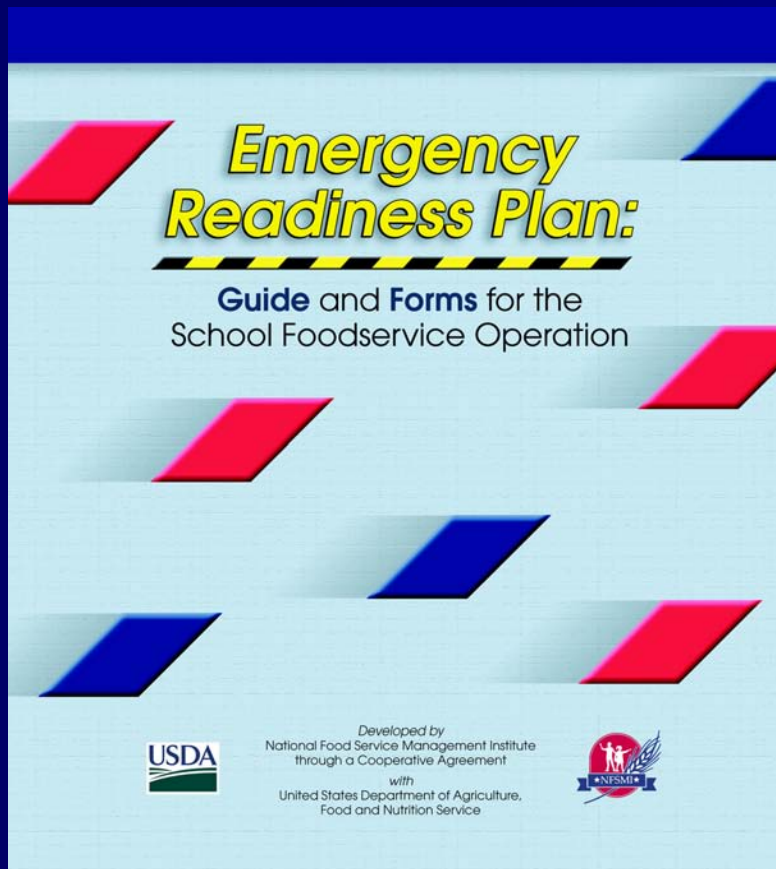
Responding to a Food Recall



The Guide is a resource for foodservice directors and managers.

Contains a checklist with procedures for responding to a food recall.

Emergency Readiness



Resource Components:

**Guide for School Foodservice
CD-ROM with guide
and
Copy-ready forms
Video: "When Disaster Strikes"**

FNS Resource Links

Responding to a Food Recall:

<http://www.nfsmi.org/Information/recallmanual.pdf>

Emergency Readiness Plan: A Guide to Forms for School Foodservice Operations:

<http://www.nfsmi.org/Information/e-readiness.html>

Healthy School Meals Resource web page:

<http://schoolmeals.nal.usda.gov/Safety/EmergencyReadiness.htm>

Food Distribution Program web page:

<http://www.fns.usda.gov/fdd/>

Other Federal Resource Links

FDA's "Food Tampering: An Extra Ounce of Caution"

<http://www.cfsan.fda.gov/~dms/fstamper.html>

FBI International Symposium on Agroterrorism Presentations:

<http://www.fbi-isa.org/>

Department of Education

www.ed.gov/admins/lead/safety/emergencyplan

Department of Education Resources

- **School Emergency Response and Crisis Management Plan Discretionary Grant Program**
- **Program Type: Discretionary/Competitive Grants**
CFDA Number: 84.184E

PROGRAM DESCRIPTION

Funds will be available to local education agencies to strengthen and improve emergency response and crisis management plans – including food

DoE Grantees in 2004

- DC = \$99,065
- MD = \$246,345
- NJ = \$250,000
- PA = \$743,400 to 4 school districts
- VA = \$666,671 to 2 school districts

Food-Safe Schools Action Guide



Brought to you by the Centers for Disease Control and Prevention
and the National Coalition for Food-Safe Schools

Web link: <http://foodsafeschools.org/>

Assemble a Team Everyone Has a Role in Food Safety



Food Defense Plans for Schools

Biosecurity Checklist Highlights:

1. Establish a team
 - in-house
 - external
 - practice drills
2. Add food security measures unique to school
 - part of school district's emergency preparedness plan
3. Put it together
 - establish emergency contacts, phone #s, e-mails
 - prioritize protective measures
 - e.g., staff security, perimeters

Value of School Food Safety Teams

- For food defense
- For emergency preparedness and response
- For food safety
- For school health policies

Other Resources

- National Restaurant Association –
 - Food Security Publication:
<http://www.nraef.org/foodsecurity/>

- Food Products Association –
 - Center for Food Security and Emergency Preparedness:
<http://www.fpa-food.org/content/security/program.asp>

Other Resources

Table Top Exercises:

- <http://healthlinks.washington.edu/nwcphp/edu/phe/>
- <http://www.vmc.wvu.edu/hrsa/tabletops.htm>
- <http://www.k12coordinator.org/onlinece/onlinenevents/responding/id77.htm>

Reporting Resources



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

- FSIS – Office of Food Defense and Emergency Response – 800-333-1284
- FDA – Office of Emergency Operations – 301-443-1240
- CDC gateway web site:
<http://www.cdc.gov/nceh/emergency.htm>

Training Resources



- USDA/FDA Training
- FDA online course –
www.fda.gov/ora/training/orau/FoodSecurity/startpage.html
- National Food Service Management Institute
www.nfsmi.org
- FNS Food Safety Unit web site
http://www.fns.usda.gov/fns/food_safety.htm



Understand Your Power

- Identify your part
- Find the resources that work best for you
- Use all of the measures available to you



Summary



- *Increase Your Awareness*
- *Consider Your Unique Operation*
- *Utilize Tools and Resources*

Your Role

Think like a terrorist

Identify the gaps

Implement a plan



