

Food Safety @ FNS



**BRENDA HALBROOK, M.S., R.D.
DIRECTOR, FOOD SAFETY STAFF
OFFICE OF EMERGENCY MANAGEMENT AND
FOOD SAFETY**

**FD 101
MAY 2008**

Food Safety Has Been in the News



- February 2008 – Recall of 143 million pounds of ground beef
- January 2008 – Botulinum spores found in canned vegetables resulting in recall
- October 2007 -- *Salmonella* in pot pies caused some 272 illnesses and 65 hospitalizations
- October 2007 -- *E. coli* in beef patties caused 26 illnesses and 17 hospitalizations
- July-August 2007 -- Botulinum toxin in canned chili sauce caused eight illnesses
- April 2007 – Melamine found in pet food and animal feed
- Fall 2006 *E. coli* in spinach caused 205 illnesses and three or more deaths in 26 states
- Fall 2006 *Salmonella Tennessee* in peanut butter sickened some 400 individuals in 29 states

Why Food Safety is Important to FNS Programs



- Our programs serve vulnerable populations
- Impact
 - 76 million illnesses a year
 - 325,000 hospitalizations
 - 5,000 deaths
- Cost of foodborne illness
 - \$6.5 to \$34.9 Billion



MSNBC - How safe are your kids' school lunches? - Microsoft Internet Explorer

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DATELINE NBC

FREE VIDEO



LAUNCH

School lunch safety
April 30: Part one of Dateline's investigation of school lunch programs.

Dateline NBC

By Chris Hansen
Dateline NBC
Updated: 11:24 a.m. ET May 01, 2004

School lunches -- some 28 million -- are served up across the country each weekday. But there are growing questions about food safety in our nation's school cafeterias. Since 1990, more than 5,000

How safe are your kids' school lunches?

Dateline investigates food safety in 10 districts

School Food Safety in the News...

Leftovers suspected in death of boy, 10

By Chris Moran and Karen Kucher
STAFF WRITERS

More getting sick from school food

By ANDREW MOLLISON IN WASHINGTON
amollison@ajc.com
and ELIZABETH LEE IN ATLANTA
elee@ajc.com

that the rate of reported outbreaks of food poisoning in schools doubled during the 1990s.

Sen. Dick Durbin (D-Ill.) and Rep. Steve Horn (R-Calif.), co-chairmen of the hearing, asked them to stick around to hear what happened to Tyler Roberts of Comer, northeast of Atlanta, after he ate a few bites of an undercooked, contaminated hamburger at school.

Other students had milder symptoms of food poisoning. But for Tyler, a slender, 11-year-old diabetic, the pain, diarrhea and vomiting went on for days, testified his mother, Cheryl Roberts.

➤ Please see FOOD. A17

The Atlanta Journal-Constitution

WASHINGTON

Feds buy bad beef for low bid

E. coli outbreak results from School Lunch Program supply system

By Elliot Jaspin and Scott Montgomery
WASHINGTON BUREAU

Finley, Wash.

As battles go in the deadly war with E. coli bacteria, what happened last October in this dusty little town would seem a minor skirmish.

Twelve children got sick but no one died. Although state officials are convinced meat in a school lunch caused the outbreak, the source was never conclusively determined, and the supplier denies any fault. Today, five months later, the E. coli O157:H7 outbreak is remembered much like a bad summer storm that briefly threatened and then

out of business, not helping them stay in business," said Donley, whose six-year-old son died of E. coli poisoning in 1993.

Every public school in Georgia — about 1,800 in all — and some 35 private schools serve meat and other food purchased by the U.S. Agriculture Department for the federal School Lunch Program. Annette Bomar Hoppog, who oversees the program for the state Department of Education, said the food bought by the Agriculture Department makes up about 15 percent of food served to students at a typical school. The same plants that sell food to the federal program also sell to grocery stores, restaurants and other institutions, so the food is reaching much more people than

is thought to have been infected through contact with one of the schoolchildren.

"I'm shocked," said Alan Almqvist, father of one of the children sickened in the outbreak, when told about the USDA role. "It's like the government is approving of this."

"I didn't realize I was sending my child into a danger zone," Almqvist's wife added.

Almqvist's son was one of four children who had to be transferred to Seattle Children's Hospital over 200 miles away as their condition worsened. "I can't tell you how close my son came to dying," he said.

The parents' dismay was echoed by Robert Van Slyke, Finley's superintendent



JACKIE JOHNSTON / Special

ensure the wholesomeness of food bought for school lunches.

The law goes on to say that "... contracts for the purchase of commodities shall not be entered into unless previous history and current patterns of the con-

came from other plants.

Local health officials in Washington state are unanimous that the school lunch caused the outbreak.

"Rational thought leads you to the taco meat," said Dr. Larry D. Jerba, the dis-

Food Safety: An Evolving FNS Activity

- Created FNS Food Safety Staff (FSS) in 2004
- Purpose:
 - Focal point for Agency food safety activities
 - Coordinate within and outside of Agency
 - Liaison and outreach



Activities



- Overall Agency Support
- Commodity Food Safety Complaints
- Recall and Food Safety Matters
- Data Analysis
- Food Defense
- Education and Outreach

Overall Agency Support



- The Child Nutrition and WIC Reauthorization Act of 2004 mandated a school food safety program based on Hazard Analysis and Critical Control Point (**HACCP**) principles.
- In 2005, the FSS developed and distributed:
“**Guidance** for School Food Authorities:
Developing a School Food Safety Program Based on the Process Approach to **HACCP** Principles.”

Overall Agency Support



- In 2006, the FSS and the National Food Service Management Institute (NFSMI) developed:
 - Self-instructional video with complementary workbook and template to accompany “Guidance”
 - Download at:
http://www.nfsmi.org/Information/school_fs_program.html

Overall Agency Support



- **Mandatory second inspections**
- **In 2006, the FSS provided:**
 - Education and outreach to regulators concerning the requirement for two health inspections
 - 19 presentations around the country informing States and health officials of the new requirement
 - 135 presentations made to school officials by the NFSMI under a grant provided by the FSS.

Commodity Food Safety Complaint System



The FSS monitors and analyzes food safety complaints for:

- Vendor performance
- Need to modify commodity specifications
- What food handling or safety messages are needed

Commodity Food Safety Complaint System

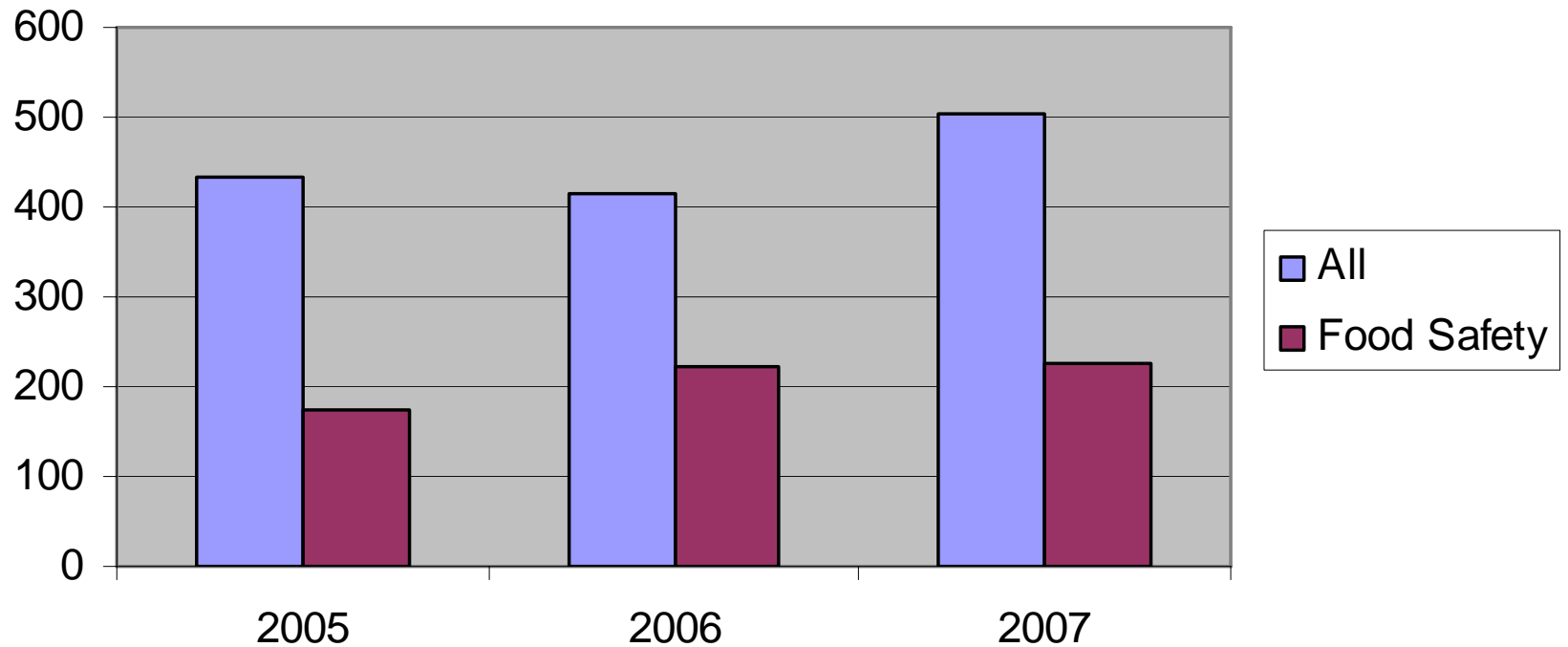


When the FSS receives a complaint that might be a food safety concern, it:

- Determines whether it is a food safety concern, and if so, how serious
- Contacts the appropriate procurement and regulatory agencies
- Finds resolution to the problem
- Records the information in a database for further analysis

Food Safety Complaints vs. Total Complaints

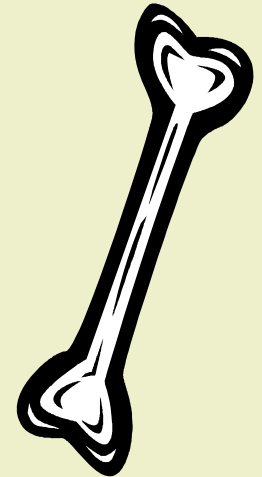
Number of Food Safety Complaints Compared to Total



Commodity Food Safety Complaints



- Things to consider when reporting:
 - Identification of the product
 - ✦ Establishment numbers and lot numbers (meat and poultry)
 - ✦ Brands and Lot numbers (other than meats)
 - Foreign Materials
 - ✦ Dimensions!!
 - ✦ Details
 - Illnesses (if applicable)
 - Send us a photo if possible (leaking cans, infestation, foreign material, etc.) and show the identifying information on the carton



Illness Complaints



- **Things to consider when reporting complaints of illness**
 - Is the illness confirmed?
 - Has the local health agency been contacted?
 - **Details**
 - ✦ Why was the commodity suspected of causing illness?
 - ✦ Symptoms?
 - ✦ Report?

Recall and Food Safety Issues



- Commodity recalls tracked through Electronic Commodity Ordering System (ECOS)
- Announced through Rapid Alert System (RAS)

Rapid Notification Needed



- FNS established a Rapid Alert System in 2006
- Piggy-backed onto ECOS
- Two components – call down notification and response forms



Holdings and Recalls



- **Rapid Alert System in ECOS**
 - Alerts State Agency contacts affected by commodity holds and recalls
 - Announcements can come at any time – weekends, evenings....
 - Details and instructions provided
 - Allows for reporting online

Communication



- Who handles holds and recalls for your program?
- Do you have a recall coordinator?
- Can you contact your recipients quickly?
- Do you have a procedure for recipients to report information in the event of a hold or recall?

Traceability



- **FNS Identification**
 - Contract and Delivery Order Numbers
 - Multi-food orders

- **Be Prepared!**
 - Will you be able to find product during a recall?
 - Do you have a tracking system in place?
 - Can you identify product by the FNS delivery order number?
 - Do you have a plan for securing and removing product from the food chain during a recall?

Hold & Recall Data



- Used to inform upper managers and respond to Congressional & media inquiries
- Become basis for reimbursement of costs and product replacement



2007 – 2008

Recall Management Using RAS



- **May 2007: beef stew – exploding cans. Replaced small quantity**
- **July 2007: beef stew administrative recall at the same time as an FDA and FSIS recall on other products from the same plant**
- **December 2007: hold placed on potato rounds for odor, taste and texture issues. Transient report of possible illness in Nebraska.**
- **January 2008: green beans – risk of botulism**
- **January/February 2008: beef put on hold and subsequently recalled. Largest recall in history.**

Notices Posted to ECOS Home Page



- **Non-commodity Recalls**
- **General Food Safety Messages**
- **2006 -2007**
 - Frozen meat pizzas - *E. coli* O157:H7 contamination
 - Chicken/turkey pot pies - *Salmonella* contamination
 - Ground beef - *E. coli* O157:H7 contamination
 - Spinach – *E. coli* O157:H7 contamination
 - Peanut butter – *Salmonella* contamination
 - Food Safety Information from FSIS and FDA

Building a Science Base for Food Safety Education



FNS Data analysis

- **ECOS commodity complaint data**

- **CDC Electronic Foodborne Outbreak Reporting System (eFORS)**

Data Analysis: Findings

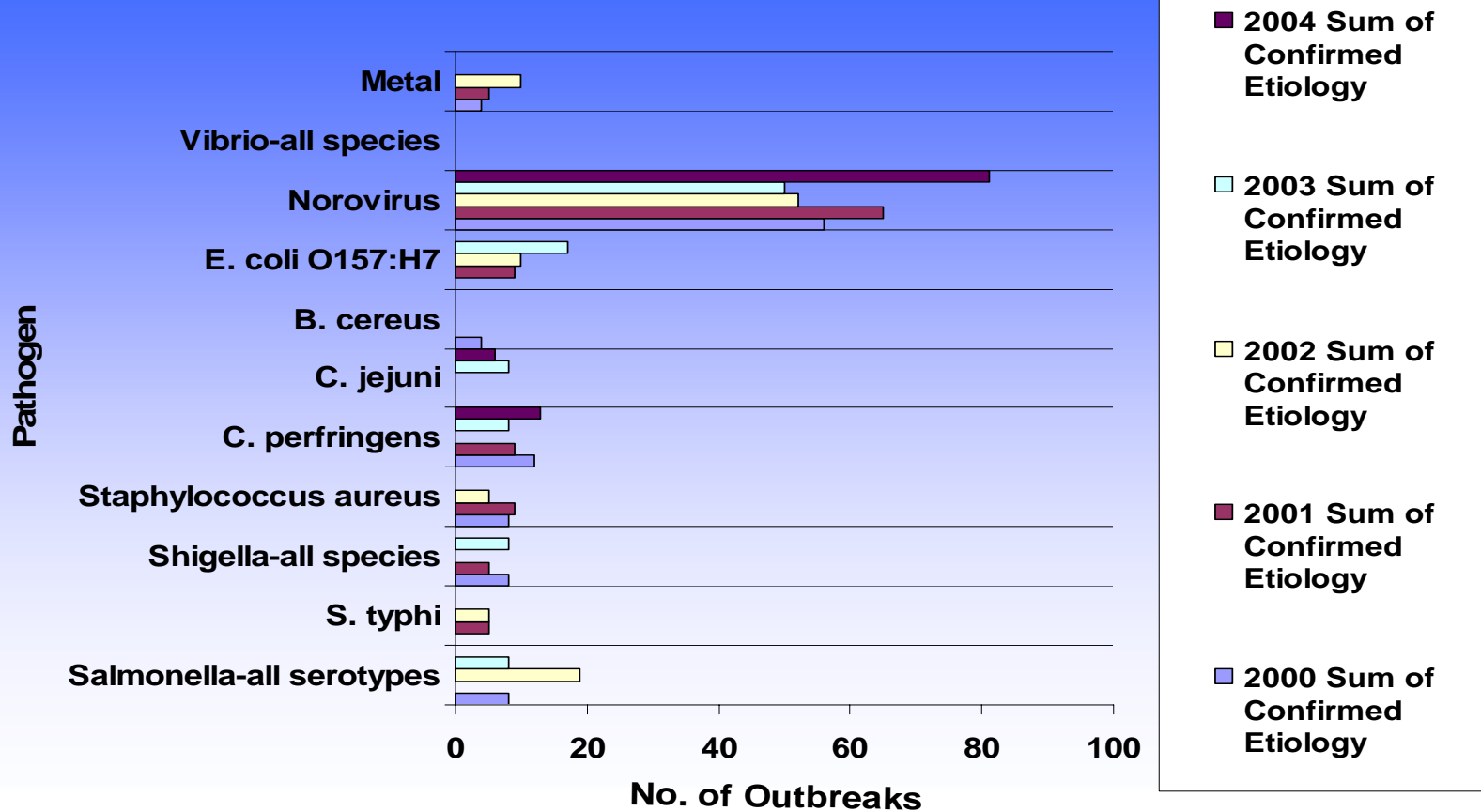


- School foodborne illness reported in eFORS)
 - **Tells where problems are**
 - **Provides direction for educational approaches to correct problems**
 - **Findings: Norovirus is the leading cause of foodborne illness in schools**

Data Analysis Findings



NUMBER OF OUTBREAKS OF CONFIRMED ETIOLOGY IN SCHOOL SETTINGS BY PATHOGEN (2000-2004)



Data Inform Projects



- Article on norovirus submitted to *Journal of School Health*
- Working with FDA on an approach to address norovirus

Food Defense Activities



- Intentional contamination of the food supply
- Federal initiatives
- FNS Activities

Contamination Happens Intentional vs. Unintentional

- Unintentional = Food Safety
 - e.g., spinach, Topps ground beef
- Intentional = Food Defense
- Department of Homeland Security:
 - Groups are interested in chemical or biological agents that could use food as a vehicle
 - No credible nor imminent threat of terrorist food contamination
 - Sector and the Homeland should remain vigilant (DHS)

Food Defense



Concerned with :

- **Illnesses and/or deaths**
- **Financial losses**
- **Disruption of the industry or reputation**
- **Disruption of food availability**
- **National impact**

White House Directives: Homeland Security Presidential Directives (HSPD) 7 & 9



HSPD 7:

- Vulnerability Assessments on Specific USDA Commodities – ground beef & chicken nuggets
- Strategic Partnership Program on Agroterrorism (SPPA) – central kitchen in NC

HSPD 9:

- Surveillance and Communication -- checklist
- Food Defense Training and Tools -- TTX

Central Kitchens: Vulnerability Assessment Findings



- **Central kitchens have most, if not all, of the characteristics of a vulnerable target**
 - Large Batches
 - Thorough Mixing
 - Short Shelf-Life
 - Wide Distribution

How to Protect Central Kitchens*



- **High-risk areas in CK:**
 - **Transport**
 - **Ingredients**
 - ✦ **Measuring liquid and dry**
 - **Mixing and Cooking— large batch**
 - **Storage**
 - ✦ **Dry**
 - ✦ **Cooler**
 - ✦ **Freezer**

* **SPPA Initiative**

NC Central Kitchen SPPA

Best Practices*



Highlights:

- **Dual control – 2 people always present**
- **Retrofit open systems (kettles, mixers)**
- **Monitor temp fluctuation**
- **Restrict access in critical areas; secure when not in use**
- **Color-coded smocks/uniforms for work areas**
- **Employee background investigations and re-investigations**
- **Employee education and training on Food Defense**
- **Develop Policies and Procedures**
- **Note Changes in Staff Health Condition**

HSPD-9 Requirement: Surveillance



- **Surveillance** -- through constant monitoring of food safety complaints in ECOS
- Complaints alert the FSS to potential threats to commodity foods
- In 2006: Complaint of possible tampering in chicken fajita meat
 - FSS alerted other agencies to the problem
 - Resulted in a full investigation by FSIS and OIG
 - Removal of the product from service to students

FSS Food Defense Training



- FSS speaking engagements for program operators.
- In 2006, in cooperation with NFSMI, developed and distributed a Food Defense Resource Kit containing a video and an interactive CD-ROM to more than 20,000 school districts
- <http://foodbiosecurity.nfsmi.org/>

Table Top Exercises



- Pilot in Des Moines, IA September 21, 2007
- Scenario: food in NSLP in multiple sites in State
- Communication:
 - Local agencies
 - Emergency managers
 - State partners
 - Federal partners
- Need to conduct 2 more in different states
- Ultimately a packaged program for different sizes of school systems
- Grants from Department of Homeland Security

Food Safety Education and Training



- National Food Service Management Institute
- www.nfsmi.org



- FSIS Food Safety Education Staff
- Other partners – NCFSS, PFSE

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/](http://foodsafeschools.org/)

Assemble a Team

Everyone Has a Role in Food Safety



FNS Resources



- http://www.fns.usda.gov/fns/food_safety.htm
 - Updated FNS Food Safety information
 - Links to other Federal resources (FSIS, FDA)

- Foodsafety@fns.usda.gov
 - Mail box
 - ✦ Additional information on complaints
 - ✦ Questions
 - ✦ Comments

Other USDA Resources



- Meat and Poultry Hotline
 - 1-888-MPHOTLINE
 - Mphotline.fsis@usda.gov
- Be Food Safe
- Thermy
- FightBAC!
- Is It Done Yet?
- http://www.fsis.usda.gov/Food_Safety_Education

On The Horizon ...



- **Revise “Responding to a Food Recall,” originally released in 2002**
- **Work with program operators to develop a tracking system for commodities**
- **Make adjustments to the Rapid Alert System based on lessons learned**
- **Continue development of educational messages and initiatives based on feedback and data**

THANK YOU!



QUESTIONS?

<http://www.fns.usda.gov/fns/safety/annualreport06072007.pdf>

brenda.halbrook@fns.usda.gov