

The background of the slide is an abstract, colorful pattern. It features large, irregular shapes in shades of blue, red, and yellow, creating a complex, geometric design. The colors are vibrant and the shapes are interconnected, giving the background a textured, almost crystalline appearance.

Joint New York Agriculture &
Markets and Cornell University
Retail *Listeria monocytogenes*
Project

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Public Meeting on the Interagency Retail *Listeria monocytogenes*
Risk Assessment

June 23, 2009

Why?

- A bit of history
- Belief in being proactive
- No surrender for retail
- Public health issue



Listeria outbreak kills 13 in Northeast

Listeria infections have killed at least 13 people in the Northeast, and although health officials say contaminated food is the likely cause, they're still trying to determine the source of the infection. Since early September, cases have been detected in Pennsylvania, New York, New Jersey and Connecticut. Four people have died in Pennsylvania, four in New Jersey and five in New York state. One apparently related death was reported in Michigan. Because a specific food associated with the cases hasn't been identified, health officials recommend that children, the elderly and people with weakened immune systems avoid certain foods, including soft cheeses, hot dogs and luncheon meats (unless heated) and unpasteurized milk. Listeria can cause serious, sometimes fatal, food poisoning. Listeria sickens about 2,500 people and kills about 500 each year in the USA, according to the Centers for Disease Control and Prevention.

How?

- Scheduled Samples
- Enforcement
- Education
- Research on LM Distribution



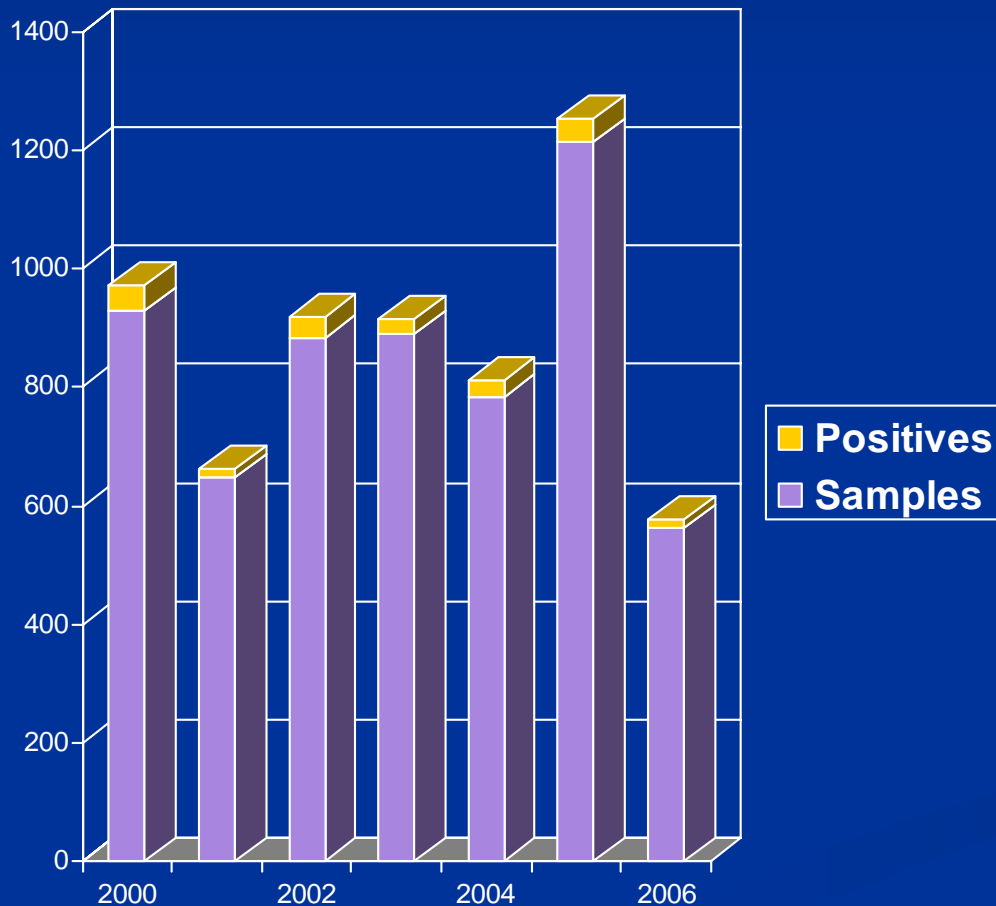
LISTERIA DATA IN NEW YORK STATE

NYSDA&M Listeria Sampling

- **Listeria Sampling since 1997**
- **Data collection since 2000**
- **Since 2000 – 5,900 Samples**
- **A multi-level approach**
 - **Identification through sampling**
 - **Enforcement Actions**
 - **Data Collection**
 - **Education**

LISTERIA DATA IN NEW YORK STATE

Food Sample Results



Year	# of Food Samples Tested	# Positive	% Positive
2000	929	42	4.5
2001	648	15	2.3
2002	882	35	4.0
2003	889	26	2.9
2004	783	29	3.7
2005	1213	38	3.1
2006	562	16	2.8

Type of Establishment	Number of Positives				
	2002	2003	2004	2005	2006
A = Store	20	8	10	23	7
B = Dairy Manufacturing Plant	0	2	2	0	0
C = Food Manufacturing	6	6	3	8	1
D = Food Warehouse	0	1	3	0	0
J = Multiple Operations	9	9	11	7	8
TOTALS	35	26	29	38	16

Implicated Products

- Smoked Fish – 31
- Other Processed Fish – 20 (Trimming, added handling)
- Fermented Sausage – 23 (Natural fermentation)
- Cold Cuts Deli Sliced – 36 (Includes Sandwiches)
- Processed Meats – 11
- Salads – 34
- Dairy - 7

Any Messages Here?

(Surveillance Program)

- Organism is very persistent
- Establishing a Listeria Action Plan
- Use of Starter Cultures
- Multiple Handling of Products
- Training of Employees

Collaborative *Listeria Monocytogenes* Project with Cornell University



Phase 1

Phase 2

Phase 3

Collaborative *Listeria Monocytogenes* Project with Cornell University

(A better understanding of the transmission and sources of
LM)

Phase 1

- 12 month project (10 retail food stores/month)
- Product samples – (deli meats and salads)
- Intact samples, also
- 8-10 environmental swabs
- Ribotyping of isolates

Prevalence of LM from Food and Environmental Sources

TYPE OF SAMPLE	# TESTED	# POS	% POS
Food	185	5	2.7%
Environment	1158	151	13.0%
TOTAL	1343	156	11.6%

Ham (1)

Tuna Salad (2)

Chicken Salad (1)

Turkey Salad (1)

Listeria Project

(Final Report September 7, 2006)

- 121 Establishments Sampled
- 73 Establishments-Positive Environmental Swabs
- 62 Cold Cut Product Samples Taken
 - 62 Found to be Negative
- 46 Cold Cut Intact Samples Taken
 - 1 Found to be Positive
 - 45 Found to be Negative
- 63 Salad Product Samples Taken
 - 3 Found to be Positive
 - 60 Found to be Negative
- 14 Salad Intact Samples Taken
 - 1 Found to be Positive
 - 13 Found to be Negative
- 1158 Environmental Samples Taken
 - 1007 Found to be Negative
 - 151 Positive Samples

73 of 121

Establishments

60%

Locations of the Positive Environmental Samples

- (2) Cutting Board
- (12) Dairy Case
- (4) Deli Case
- (1) Deli Slicer
- (15) Deli Sink Interior
- (15) Drain in Deli Area
- (24) Drain Produce Area
- (37) Drain in Raw Meat Area
- (10) Drain in Raw Seafood Area
- (9) Floor in Dry Aisle
- (1) Meat Case
- (2) Milk Cooler
- (9) Wheels of Grocery Carts
- (1) Salad Bowls/Utensils
- (1) Bakery Area Floor Drain
- (1) Packaging Table
- (2) Meat Dept Wash Sink
- (3) Salad Prep Floor Drain
- (1) Dairy Walk In Cooler
- (1) Floor in Walk In of Meat Grinding Area

Any Messages Here?

(NYS Agriculture & Markets/Cornell Project)

- Large retail chains appear to have effective sanitation programs
- Results are not surprising –
 - Lm is commonly found
 - Lm can be controlled
- Surveillance might best be applied in establishments where sanitation is poor

Phase 2

- 6 Month Project (10 Retail Food Stores/
Month)
- Smaller Stores Visited
- Product Samples (Deli Meats and Salads)
- Intact Samples, also
- 8-10 Environmental Swabs
- Ribotyping of Isolates

Listeria Project

- 60 Establishments Sampled
- 32 Establishments-Positive Environmental Swabs
- 28 Establishments-Negative Environmental Swabs
- 59 Cold Cut Product Samples Taken
 - 59 Found to be Negative
- 41 Cold Cut Intact Samples Taken
 - 41 Found to be Negative
- 51 Salad Product Samples Taken
 - 50 Found to be Negative
 - 1 Found to be Positive
- 6 Salad Intact Samples Taken
 - 6 Found to be Negative
- 661 Environmental Samples Taken
 - 576 Found to be Negative
 - 85 Found to be Positive

**32 of 60
Establishments
53%**

Locations of the Positive Environmental Samples

- (1) Slicer
- (3) Utensil #1
- (2) Utensil #2
- (4) Deli Case
- (7) Sink Interior
- (5) Drain #1
- (7) Drain #2
- (3) Drain #3
- (13) Cold Storage Room Floor
- (4) Cold Storage Room Shelves
- (5) Floor in Dry Aisle
- (8) Dairy Case
- (9) Floor or Mat Entrance
- (7) Milk Crates
- (2) High Risk Area-Floor at Deli Counter

NYSAGM Retail LM Ribtype Report - July

JULY REPORT:

CUFSL ID #	NYSAGM ID#	FL	EST	TYPE	PROD	SPONGE DESCRIPTION	RIBOTYPE (CUFSL)
ESTABLISHMENT 560110							
FSL F8-355 (June)	07B03884M-1	293988	560110	ENVIRON	Swab, Surface, Bacterial	Floor or floor mat near store entrance	DUP-1042C
ESTABLISHMENT 610479							
FSL F8-373	07B04613N-6	297293	610479	ENVIRON	Swab, Surface, Bacterial	Optional high risk area #1-plastic milk crates	DUP-1038B
ESTABLISHMENT 550550							
FSL F8-374	07B04975B-6	302120	550550	ENVIRON	Swab, Surface, Bacterial	Utensil used for prep #1-cutting board	DUP-1042B
FSL F8-375	07B04975C-6	302120	550550	ENVIRON	Swab, Surface, Bacterial	Utensil used for prep #2-meat dept.	DUP-1042B
FSL F8-376	07B04975E-6	302120	550550	ENVIRON	Swab, Surface, Bacterial	Sink interior	DUP-1042B
FSL F8-377	07B04975G-1	302120	550550	ENVIRON	Swab, Surface, Bacterial	Drain-kitchen	DUP-1042B
FSL F8-378	07B04975H-1	302120	550550	ENVIRON	Swab, Surface, Bacterial	Drain-raw meat	DUP-1042B
FSL F8-379	07B04975I-1	302120	550550	ENVIRON	Swab, Surface, Bacterial	Cold storage room-floor	DUP-1042B
FSL F8-380	07B04975K-6	302120	550550	ENVIRON	Swab, Surface, Bacterial	Floor in dry aisle	DUP-1052A
ESTABLISHMENT 624181							
FSL F8-381	07B04979L-1	297300	624181	ENVIRON	Swab, Surface, Bacterial	Dairy case	DUP-1039C
FSL F8-382	07B04979M-1	297300	624181	ENVIRON	Swab, Surface, Bacterial	Floor or floor mat near store entrance	DUP-1042C
ESTABLISHMENT 400045							
FSL F8-383	07B05380M-6	295414	400045	ENVIRON	Swab, Surface, Bacterial	Floor or floor mat near store entrance	116-239-S-2
ESTABLISHMENT UNKNOWN							
FSL F8-384	07B04128N-1						DUP-1052A

Any Messages Here?

- Fewer small stores implicated than large supermarkets
- More widespread distribution of organisms
- Surveillance might best be applied in establishments where sanitation is poor

Phase 3

- 6 - 8 Month Project – 60 Retail Stores
- Retail Stores will have failed its last 3 consecutive inspections for unclean equipment and/or cross contamination issues in the deli or salad prep area
- Prepared and intact products collected and analyzed [Antipasto salad positive]
- 8 – 12 environmental samples

39 of 60 Establishments – 60%

95 Locations of the Positive Environmental Samples

- 6 -Deli Case
- 3- Deli Slicer
- 10 - Deli Sink Interior
- 2- Drain in Deli Area
- 1- Drain Cold Storage
- 2- Drain in Deli Floor
- 1-Drain in Produce Area
- 12- Drain in Raw Meat Area
- 1- Drain in Raw Seafood Area
- 4-Floor in Dry Aisle
- 3-Basement-Dry Storage, conveyer belt,
Basement
- 15- Deli Cold Storage Room- Floor
- 8-Dairy Case
- 1- Raw Poultry Board

95 Locations of the Positive Environmental Samples

8 -Floor Mat

6 - Milk Crates

1- Milk in Retail Area

2-Cutting board

1-Cutting board –Sandwich prep

1- Salad Bowl

1-Open salad case interior

1-Deli Prep Kitchen

2-Cold Storage Meat

1-Basement Walk-in Box

1-Raw Meat Walk-in

1-Cold Storage Room Shelves



THE END