



**Controlling Listeria
Monocytogenes at Retail
(Regulatory Testing Program)**

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Albany, New York

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

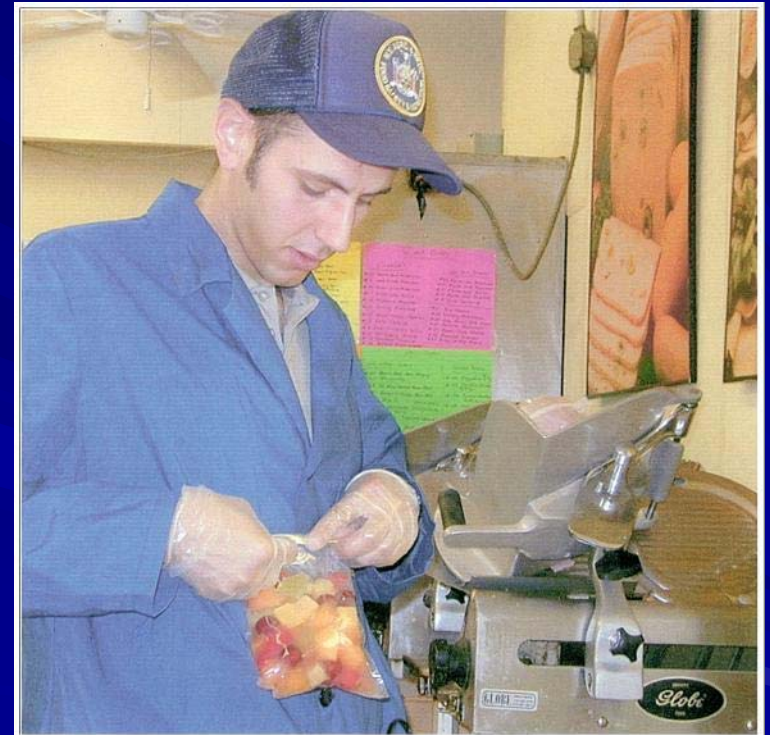
NYSDA&M Listeria Sampling

- **Listeria Sampling since 1997**
- **Data collection since 2000**
- **Since 2000 – 5,300 Samples**
- **A multi-level approach**
 - **Identification through sampling**
 - **Enforcement Actions**
 - **Data Collection**
 - **Education**

LISTERIA DATA IN NEW YORK STATE

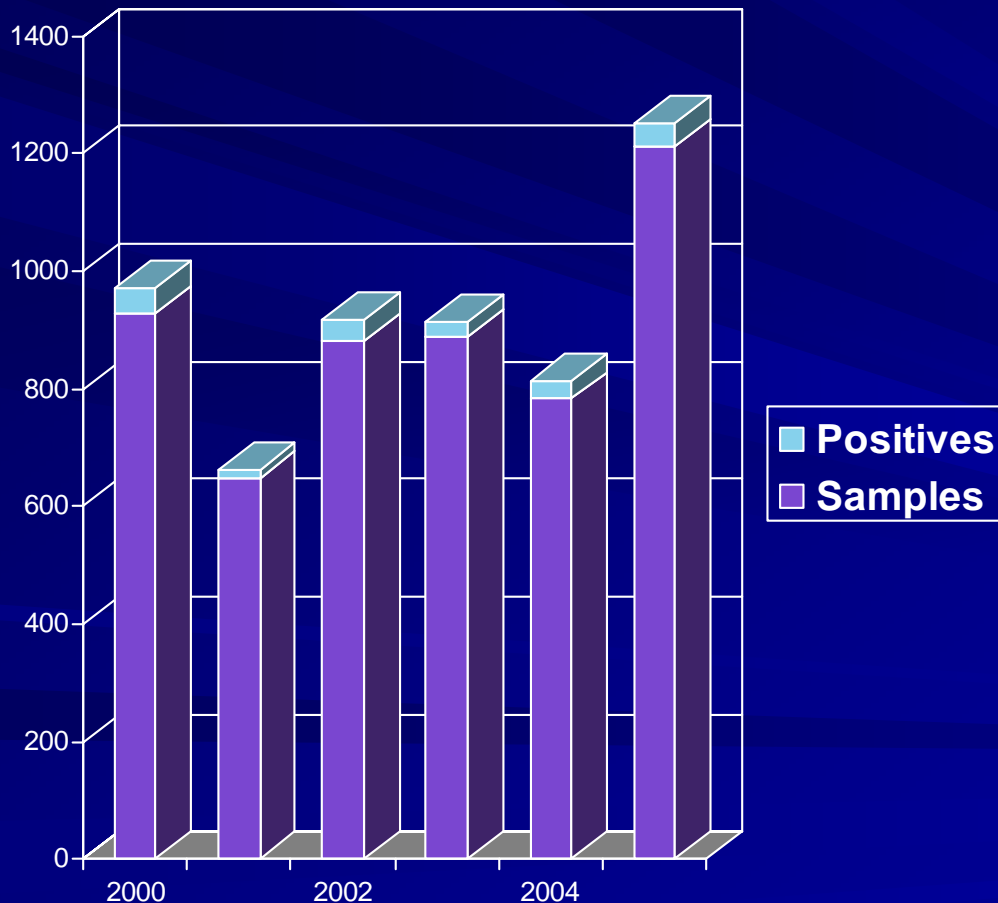
NYSDA&M Sampling Program

- **Scheduled Sampling**
 - Deli Meats & Sandwiches
 - Packaged Salads / Deli Salads
 - Seafood Products
 - Dried Sausage Products
 - Soft Cheeses (Dairy Div.)
- **Follow-up Sampling**
- **Random Sampling**
 - Based on the sanitation conditions observed
- **Environmental Swabbing**



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

Type of Establishment	Number of Positives				
	2001	2002	2003	2004	2005
A = Store	13	20	8	10	23
B = Dairy Manufacturing Plant	1	0	2	2	0
C = Food Manufacturing	0	6	6	3	8
D = Food Warehouse	0	0	1	3	0
J = Multiple Operations	1	9	9	11	7
TOTALS	15	35	26	29	38

Implicated Products

- Smoked Fish – 31
 - Other Processed Fish – 20 (Trimming, added handling)
 - Fermented Sausage – 22 (Natural fermentation)
 - Cold Cuts Deli Sliced – 31 (Includes Sandwiches)
 - Processed Meats – 9
 - Salads – 25
 - Dairy - 7
- 54 Recalls
Since 2002**

LISTERIA DATA IN NEW YORK STATE

Common Issues

- **Multiple occurrences of Listeria**
 - Persistence
- **Sanitation concerns identified**
 - Swabs confirmed same ribotypes within the environment
- **Methods of Processing**
 - Natural Fermentation
 - Multiple Handling Steps



LISTERIA DATA IN NEW YORK STATE

Enforcement Actions

- **Penalty Assessment**
- **Recall**
- **Summary Suspension of the Food Processing License**
- **Injunction/Stipulation**



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

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

- 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	146	3	2.1%
Environment	912	106	11.6%
TOTAL	1058	109	10.3%

Tuna Salad (2)

Chicken Salad (1)

Listeria Project

(Revised June 1, 2006)

- 95 Establishments Sampled
- 51 Establishments-Positive Environmental Swabs
- 47 Cold Cut Product Samples Taken
 - 45 Found to be Negative
 - 2 Pending Results from Lab
- 35 Cold Cut Intact Samples Taken
 - 34 Found to be Negative
 - 1 Pending Results from Lab
- 51 Salad Product Samples Taken
 - 2 Found to be Positive
 - 48 Found to be Negative
 - 1 Pending Results from Lab
- 13 Salad Intact Samples Taken
 - 1 Found to be Positive
 - 12 Found to be Negative
- 912 Environmental Samples Taken
 - 767 Found to be Negative
 - 106 Positive Samples
 - 39 Pending Results from Lab

51 of 95

Establishments

54%

Locations of the Positive Environmental Samples

- (23) Floor Drain-Raw Meat Room
- (12) Sink
- (19) Floor Drain-Produce Prep Area
- (11) Floor Drain-Deli Area
- (7) Wheels of Shopping Carts
- (9) Dairy Case
- (8) Floor Drain-Seafood Area
- (5) Retail Dry Food Aisle
- (2) Deli Case
- (2) Salad Cutting Board
- (2) Floor in Produce Room
- (1) Floor Drain in Bakery
- (1) Salad Bowls/Spoons
- (1) Meat Display Case
- (1) Deli Slicer
- (2) Product Prep Area

A&M/CORNELL LISTERIA PROJECT

SWAB LOCATION		KNOWN RIBOTYPE AS OF 4/1/06
Floor Drain-Raw Meat Room	23	DUP 1039 (3), 1052 (3), 1056 (2), 1062 (2), 19191 (1), 19170 (2), 1027 (1), 1048 (1), 16619 (1), 18627 (1)
Sink	12	DUP 1042 (2), 1052 (2), 1039 (1), 1043 (1), 1062 (1), 16619 (1), 19170 (1), 19187 (1), 19188 (1)
Floor Drain-Produce Prep Area	19	DUP 1052 (4), 19170 (2), 19187 (2), 1062 (1), PENDING (1)
Floor Drain-Deli Area	11	DUP 1042 (2), 1052 (1), 16619 (1), 18611 (1), 19173 (1), 19170 (1)
Wheels of Shopping Carts	7	DUP 1042 (3), 19170 (2), 19165 (1), 1052 (1)
Dairy Case	9	DUP 19191 (1), 19165 (2), 19186 (3), 1046 (1), 19187 (1)
Floor Drain-Seafood Area	8	DUP 1038 (1), 1042 (1), 1053 (1), 19170 (1), 19171 (1)
Retail Dry Food Aisle	5	DUP 19170 (2), 1052 (1), 19165 (1)
Deli Case	2	DUP 1052 (1), 1062 (1)
Salad Cutting Board	2	DUP 1052 (1), 1062 (1)
Floor in Produce Room	2	DUP 1052 (1), 18596 (1)
Floor Drain in Bakery	1	DUP 19170 (1)
Salad Bowls/Spoons	1	DUP 1062 (1)
Meat Display Case	1	DUP 193-190-S-5 (1)
Deli Slicer	1	DUP 1052 (1)
Produce Prep Area	2	DUP 18611 (1), 19170 (1)

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



THE END