MCAFDO Annual Conference, Branson, MO February 23, 2016

# Listeria Surveillance, Decision Making, and Corrective Actions at Retail

Alida Sorenson, MPH
Rapid Response Team Coordinator
Food and Feed Safety Division



## **Annual Surveillance Sampling**

- Why: Identify issues in potentially risky foods and environments
- What: Food and environmental samples at retail and manufacturing
- When: New assignments quarterly



#### Minnesota Department of Agriculture Dairy and Food Inspection Division

Document FOOD.30.26	Page 1 of 7
Version #: 1	Effective Date: 8/22/2014
Title: Surveillance - Routine Sampling SOP	ė –

#### **Table of Contents**

- 1. PURPOSE
- 2. SCOPE
- 3. BACKGROUND
- 4. RESPONSIBILITY
- 5. DEFINITIONS
- 6. PROCEDURES
- 7. RELATED DOCUMENTS (includes References, Attachments)
- 8. EQUIPMENT/MATERIALS NEEDED
- 9. SAFETY
- 10. CIRCULATION
- 11. APPROVAL/DOCUMENT HISTORY



# Determining Sampling Assignments

- Quarterly Meeting
  - Laboratory staff
  - Program management and supervisory staff
- Questions to Consider
  - Risky food item or environment?
  - Seen more frequently than normal in recent outbreaks?
  - Changes/updates to regulations?
  - Other national sampling assignments?
  - Collection schedule and number of samples?

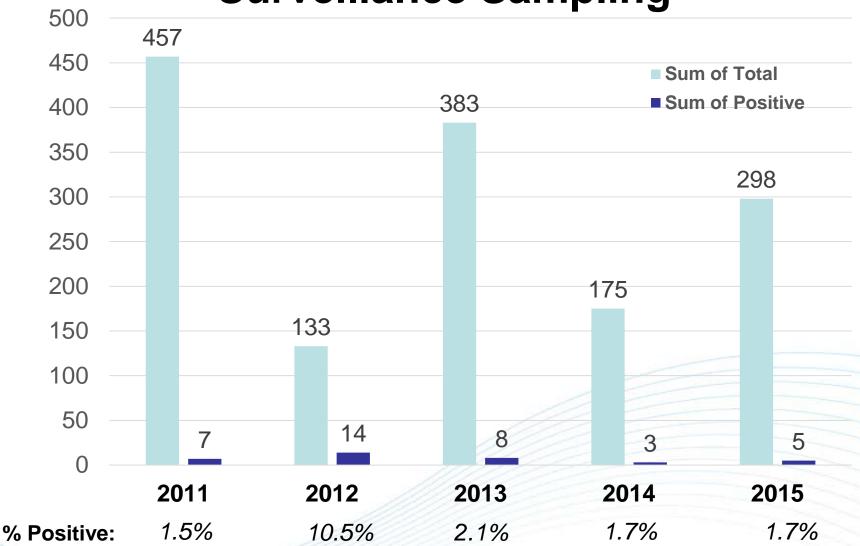


### **Examples of Past Assignments**

- Fin fish for mercury
- Fresh leafy greens for Salmonella and E. coli
- Fresh berries for Salmonella and E. coli
- Produce (stone fruits, peppers, celery, grapes, apples, berries) for insecticides
- Gluten-free products for gluten
- Processed cheese spread for Listeria
- Honey for mycocides
- Tahini or nut spreads for Salmonella
- Sliced deli ham for Shigella

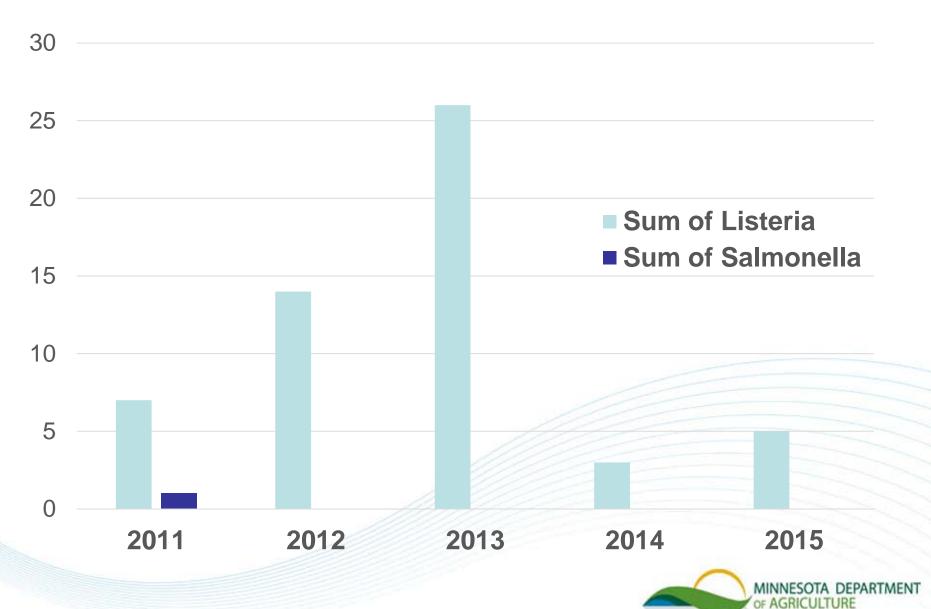


## Micro Samples by Year – All Surveillance Sampling





#### Positives by Year – All Sampling



# Non-Retail *Listeria* Sampling Assignment

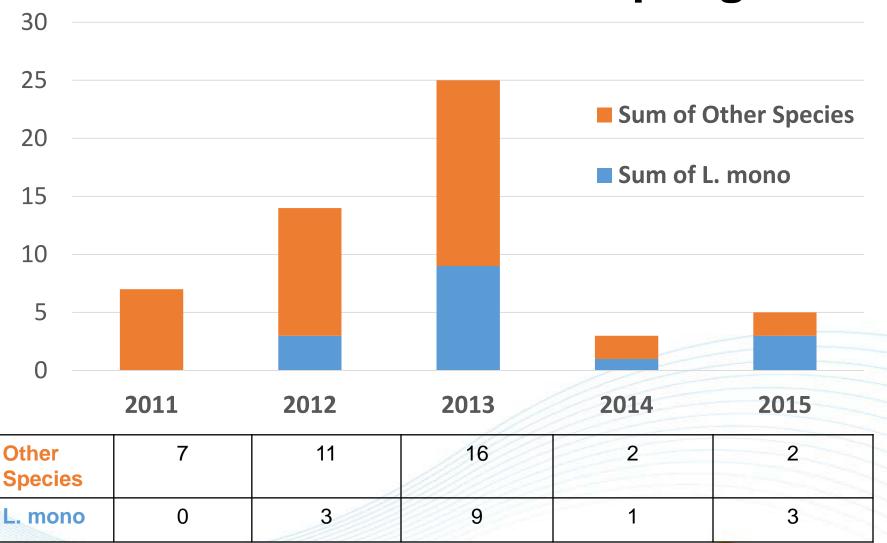
- Sliced fruit of vegetable "snack packs"
- Issues with Listeria in manufacturing facilities
- 1/20 positive for *L. monocytogenes*
- Sliced apple snack product produced in WA



## Listeria Positives by Year – Environmental Sampling

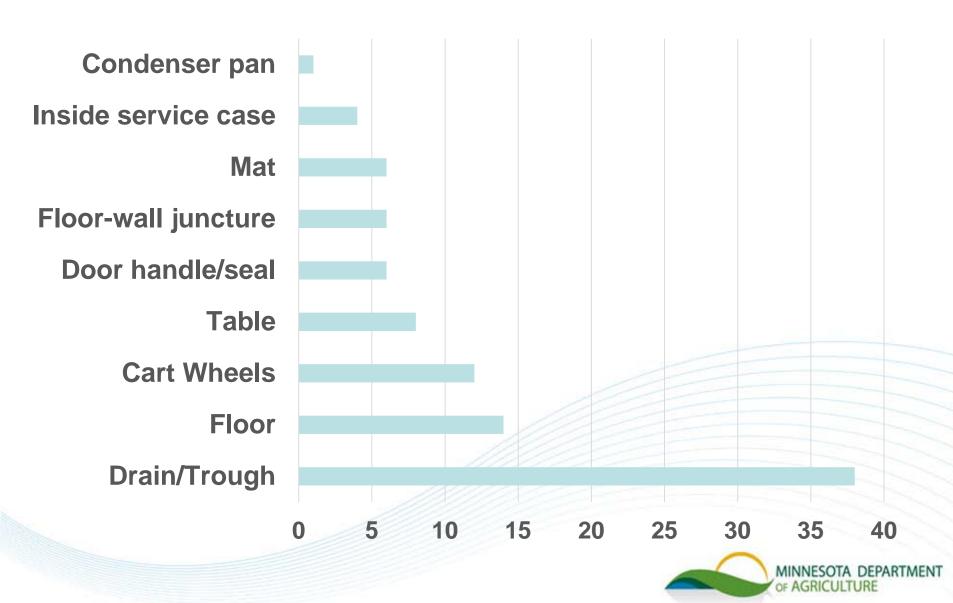


# Listeria Species – Environmental Sampling





#### Locations of *Listeria* 2010-15



## Why does MDA look for Listeria at Retail?

 Monitor operator's control for risks where RTE foods are prepared, handled, or stored

Prevent adulteration and possibility for

adulteration





## Where does MDA look for Listeria at Retail?

- Locations missed by routine cleaning
- Areas historically associated with Listeria
- Non-FCS locations
- Deli items made or sliced in-store







### Listeria Sampling in Retail

- In the food preparation/processing environment, targeting moist, cool areas
- MDA does not sample Zone 1 (FCS)
  - Focus on Zones 2 and 3
  - Collect at least 15 environmental samples
  - Five RTE finished product samples





#### The MDA Inspection Team

- Must be trained in sample collection and environmental swabbing
- Teams of at least two
  - Location recording & zone mapping, photo collection, aseptic collection technique







## MN Delegated Agency Sampling

- Winter 2014-15
- Local city/county government participants
  - Ramsey County
  - Hennepin County
  - City of Brooklyn Park
- Pre-sampling training
- Paired with MDA staff
- 6 additional retail locations



# Winter 2015 – Environmental Sampling for Listeria in Retail Delis

- Conducted jointly with Delegated Agency partners
  - Brooklyn Park
  - City of Minneapolis
  - Ramsey County
- 119 environmental swabs or RTE food samples collected
  - 89 swabs
  - 30 deli food samples
- 5 positive samples all swabs
  - Floor drain (x2)
  - Bottom bracket of door
  - Cove base under 3-compartment sink
  - Floor trough in kitchen





#### What happens when Listeria is found?

- Assess whether firm has lost control of their process
- Bring operator back into compliance adulteration statues
  - Minn. Stat. 34A.02 (Adulteration),
  - Minn. Stat. 31.02 (Prohibited Acts), and
  - Minnesota Administrative Rule
     Chapter 4626.0015 (Food Safety under Food Code)
- Corrective Action Plan best guidance for accomplishing this

## **Guidance and Expectations**

Letter to firm with CAP guidance

Other resources provided depending on facility



#### Corrective Action Plan

This document helps define the expectations of what items need to be addressed and corrected in your food production operation. The following are items that you must address in writing and submit to our department:

#### Sanitation Standard Operating Procedures

The following are necessary components of sanitation standard operating procedures:

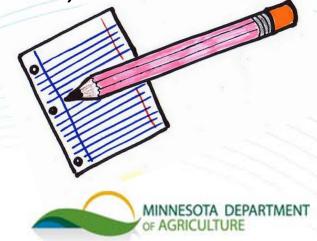
- Identifying cleaning chemicals and sanitizers that you will use. Include location, methods and frequency of use for each chemical.
- Monitoring and evaluating the effectiveness of the sanitation program. Include the
  methods, the frequency and the personnel assigned to monitoring and evaluating your
  program. This may include but is not limited to sanitation pre-operational inspections,
  supervision of sanitation processes, sanitizer concentration verification, and an
  environmental sampling and testing program.
- Sanitation monitoring records that are specific in identifying what is monitored, who is

# Control of Listeria monocytogenes in Retail Establishments Contents Background 2 Overview of Foodborn 1.8 sand Listeria monocytogene 1.8 sources of Listeria monocytogene 1.8 sources 0.8 sources 0.



### **CAP Components**

- Sanitation Standard Operating Procedures
- Environmental Monitoring Program
- Finished Product Sampling
- Process Flow and Cross Contamination
- Product Traceability
- Employee Training
- Finished Product Coding (Recall Plan)
- Operational Records
- Compliance with GMPs
- Compliance with Orders Issued



# Firm Actions: Cleaning, CAP, and Verification

- Intensely clean and sanitize
- Assess causes and contributing factors
- Write a Corrective Action Plan (CAP)
  - Cleaning and Sanitizing how? where?
  - Equipment and employee flow
  - Repairs to equipment or structure
  - Employee training
- Verify that actions have been effective = firm sampling

#### Minnesota Department of Agriculture Dairy and Food Inspection Division

Document Food.90.01 and RRT.90.01	Page 1 of
Version#: 1	Effective Date:
Title: Response to Listeria in Retail Environments	

#### Table of Contents

- Purpose
- Scope
- Background
- Responsibility
- Definitions
- Procedures
  - 6.1. During sample collection
  - 6.2. Communication with firm after initial results
  - 6.3. Expectation of firm for any presumptive or confirmed Listeria species
  - 6.4. Consideration for FCS vs. other surfaces
  - 6.5. DFID follow up
  - 6.6. Frequently Asked Questions
- Related Documents (includes References, Attachments)
- Equipment/Materials Needed
- Safety
- Circulation
- Approval/DocumentHistory



#### **MDA Actions**

- #1 priority: protecting public health
  - Recalls/consumer advisories
- Provide guidance to facility (but not act as QA)
  - Timely communication of laboratory results
  - Review CAP
  - Confirmatory sampling
  - Visit operator to observe whether control measures were implemented





#### Questions?

Alida Sorenson

alida.sorenson@state.mn.us

651-201-6025

