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# FSIS Compliance Guideline: Controlling Listeria monocytogenes in Post-lethality exposed Ready-to-Eat and Poultry Products

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# FSIS Compliance Guideline: Controlling *Listeria monocytogenes* in Post-lethality Exposed Ready-to-Eat Meat and Poultry Products

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http://www.fsis.usda.gov/PDF/Controlling_LM_RTE_guideline_0912.pdf

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# Background

- **After several large outbreaks of listeriosis starting in the 1980s,** FSIS and FDA worked together to implement strategies to decrease foodborne illness from Listeria monocytogenes.

- In 2001, FDA and FSIS published the draft **"Quantitative Assessment of Relative Risk to Public Health from Foodborne Listeria monocytogenes Among Selected Categories of Ready-to-Eat Foods."** (http://www.fda.gov/Food/ScienceResearch/ResearchAreas/RiskAssessmentSafetyAssessment/ucm183966.htm). This risk assessment indicated that deli meats and hotdogs posed the greatest per serving risk of illness/death from Lm. In February 2002, FSIS initiated the "FSIS Risk Assessment for Listeria monocytogenes in Deli Meats." (http://www.fsis.usda.gov/PDF/Lm_Deli_Risk_Assess_Final_2003.pdf.

- This FSIS risk assessment indicated that the use of a **combination of intervention methods to control Lm in deli meats exposed to the environment after the lethality treatment** has the greatest impact on lowering the risk of illness or death from Lm. The Agency used these risk assessments as resources in developing the regulations to control Lm in RTE meat and poultry products.

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# Background

- In 2003, FSIS issued 9 CFR part 430, Control of Listeria monocytogenes in Post-lethality Exposed Ready-to-Eat Products (the Listeria Rule) http://www.fsis.usda.gov/OPPDE/rdad/FRPubs/97-013F.htm.

- The Listeria Rule codified the regulations establishments are required to follow to produce safe RTE products.

- According to the Listeria Rule, Lm is a hazard that establishments producing post-lethality exposed RTE products must control.

- Establishments can control Lm in the product through their **Hazard Analysis and Critical Control Point (HACCP) plans,** or prevent Lm in the post-lethality processing environment through a **Sanitation Standard Operating Procedure (SOP),** or other **prerequisite program.**

- According to the Listeria Rule, post-lethality exposed **RTE products are considered adulterated if they contain Lm or come in direct contact with a food contact surface (FCS) that is contaminated with Lm.**

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| Table 1.1 *Listeria* Control Alternatives | |
|---|---|
| **Alternative 1 (Alt. 1)** | The establishment uses a post-lethality treatment (PLT) to reduce or eliminate *Lm* in the product and an antimicrobial agent (AMA) or antimicrobial process (AMP) to limit or suppress growth of *Lm* in the product. |
| **Alternative 2, Choice 1 (Alt. 2a)** | The establishment uses a PLT to reduce or eliminate *Lm* in the product. |
| **Alternative 2, Choice 2 (Alt. 2b)** | The establishment uses an AMA or AMP to limit or suppress growth of *Lm* in the product. |
| **Alternative 3 (Alt. 3)** | The establishment relies on sanitation alone to control *Lm* in the processing environment and on the product. There are separate requirements for deli meat and hotdogs under this alternative. |

# Routine Sampling Programme - **RLm**

- Implemented in April 2006 is a routine risk-based sampling program

- food contact, environmental and product samples taken during the production of RTE meat and poultry products exposed to the post-lethality environment.

# Routine Sampling Programme - **RLm**

- List of sites that will be sampled (all possible food contact sites should be identified for Alt.2b and 3 establishments).
  - Number and frequency of samples collected and explanation for this frequency
  - Size of each site that will be sampled.
  - Sampling and testing method
  - Step by step collection method.

- Type of analysis performed (detailed laboratory analysis methods should be maintained by the lab).
  - Sampling for non FCS and product (if performed).

- Number and frequency of samples collected.

- Response to positive results.

# Routine Sampling Programme - **RLm**

- Large establishments (500 or more employees): 3 sample units
- Small establishments (10-499 employees): sample units
- Very small establishments (< 10 employees): 1 sample units
- A **sample unit** consists of
  - 10 food contact surface swabs,
  - 5 environmental swabs (composited)
  - 3 intact product samples

# Routine Sampling Programme after LM detection - **IVT**

- after the establishment has taken its corrective and preventative measures in response to FSIS findings

- **sample unit** : 10 food contact surface samples, 5 environmental samples, and 3 product samples per post-lethality exposed RTE processing line in operation on the day of sampling.

- 1 brine sample per line

# Enhanced Sampling Programme

**Table 4.1 Timeframe for Follow-up Sampling, Intensified Sampling, and Hold and Test Performed in Response to Positive Food Contact Surface Results**

| Alternative | After the 1st positive | After the 2nd positive | After the 3rd Positive | After Multiple Positives |
|---|---|---|---|---|
| Alternative 1 | Follow-up sampling | Intensified sampling | | Hold and test recommended |
| Alternative 2 , Choice 1 (2a) | Follow-up sampling | Intensified sampling | | Hold and test recommended |
| Alternative 2, Choice 2 (2b) | Follow-up sampling | Intensified sampling | Hold and test **required*** (recommended after 3rd positive) | |
| Alternative 3 | Follow-up sampling | Intensified sampling | Hold and test **required*** (recommended after 3rd positive) | |
| Alternative 3 (deli or hotdog) | Follow-up sampling **required** | Intensified sampling<br>Hold and test **required** after 2nd positive. | | |

*Establishments in Alt. 2b and 3 (non-deli or hotdog producers) are **required** to identify when they will hold and test product. FSIS recommends that they do so after the **3rd** consecutive

# Changes RLm & IVT

- Federal Register vol 77 n. 185, sept 2012
- 3 > 5 da 25 g >>>> 125 g
- 1 lb= 450 g
- 460 campioni per anno 5 pos >>>> 760 campioni 8 pos