

# FSIS *Listeria* Risk Assessment

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- **Good morning.**
- **It's a pleasure to be here today.**
- **I want to thank you on behalf of the USDA for attending this information sharing meeting on *Listeria***
- **This session is focused on risk assessment.**
- **First I'd like to present some of the current FSIS risk assessment activities in this area.**
- **This will be followed up by two presentations.**
- **At the end of this session we will entertain questions.**
- **Please hold your questions until the end.**

# FSIS *Listeria* Risk Assessment

- **Risk Management Questions**
  - What is the effectiveness of testing and sanitation of food contact surfaces on mitigating product contamination, and reducing the subsequent risk of illness?
  - What is the effectiveness of other interventions (e.g. pre- and post-packaging interventions)?
  - How frequently should establishments test and sanitize food contact surfaces for *Listeria* spp.?
- **Type of Model (Two Major Components)**
  - Dynamic “in-plant” *Monte Carlo* model predicts LM concentrations at retail
  - Coupled with an updated version of the FDA/FSIS *Listeria* risk assessment model to predict human health impacts
  - Conducted on deli meats (“high risk”)
  - Considers contamination only from food contact surfaces



• So, what is FSIS doing now?

• We are working with FDA to revise the relative risk ranking based on public comment and review, as well as more recent data including some provided by industry.

• Well, based upon:

1) the fact that deli meats and hot dogs indicated a higher risk of listeriosis in the FDA/FSIS assessment;

and

2) the fact that these products were implicated in large outbreaks; and

3) the source of these outbreaks have been associated with environmental *Listeria*

• We are developing a risk assessment to examine the effectiveness of environmental testing (food contact surface) and sanitation on product contamination, and the subsequent risk of illness

• Type of Model...

- Dynamic model “in-plant model” coupled with the FDA/FSIS *Listeria* risk assessment model

- deli meats (“high risk”) and frankfurters (“medium risk”)

- considers contamination only from food contact surfaces

• Timeline....

January 17, 2003 (provide to risk manager and economists)

## Summary of Findings

- **Food contact surfaces found to be positive for *Listeria* spp. greatly increase the likelihood of finding RTE product lots positive for Lm.**
- **Frequency of contamination of food contact surfaces with *Listeria* spp. appears to encompass a broad timeframe, and the duration of contamination lasts about a week**
- **The proposed minimal frequency of food contact surface testing/sanitation, as presented in the proposed rule (66FR12589, Feb. 27, 2001) results in a small reduction in the levels of Lm in deli meats at retail**



## Summary of Findings

- Increased frequency of testing/sanitation leads to proportionately lower risk of listeriosis
- Combinations of interventions appear to be much more effective than any single intervention in mitigating the potential contamination of RTE product with Lm and reducing the subsequent risk of illness or death

