

# National Advisory Committee on Meat and Poultry Inspection

## Risk-Based Sampling Issue Paper

### Purpose

FSIS is seeking guidance from the National Advisory Committee on Meat and Poultry Inspection on how to more effectively develop risk-based verification testing programs addressing the unique considerations associated with small and very small plants. As part of the process, FSIS will explain the role of verification testing as it applies to an incentive-based public, regulatory health strategy. The agency will also define risk-based sampling in regard to verification testing. An overview of how risk-based verification testing is being implemented, along with current thinking on expanding and refining this testing, will be presented. FSIS recognizes that small and very small plants present unique considerations (e.g., low volume of production; production of specialty items; “just-in-time” processing; heavy dependence upon external source materials; limited use of new technology and food safety interventions; less reliance upon frequent in-plant verification testing; and Federal mandates to specifically address small business concerns).

### Discussion

FSIS will:

- Define the goal of its risk-based sampling programs.
- Provide an overview of the current design of the *Listeria monocytogenes* risk-based verification testing program.
  - FSIS testing is a verification tool used in addition to reviewing plant records to assess compliance.
  - A risk-based approach targets limited FSIS resources in a manner that enhances public health protection.
    - Presently, those ready-to-eat products and processes identified as posing a greater risk (e.g., identified through a risk assessment using information supplied by the industry via survey forms) are sampled more frequently each year. Risk factor considerations include type of control measures; product type; compliance history; and volume of production. Sampling now includes only finished product (Phase I). Phase II will incorporate a focus on further evidence of the validation of the food safety system by adding food contact surface swabs/contact medium (e.g. brine), environmental swabs, and an assessment of the type of records and data to support validation.

- Sampling requests are generated with the aid of mechanistic and dynamic risk assessment models that provide a high degree of flexibility and agility when determining relative risk among plants. A multi-factorial algorithm is used to assess the relative risk presented by each plant. With small and very small plants, volume is not believed to be a primary driver for risk of *Listeria monocytogenes* contamination. It is a secondary factor when allocating inspection resources (samples). Thus, small plants have an advantage when all other factors are equal.

The Agency expects to implement risk-based sampling for other pathogen programs (e.g., *E. coli* O157:H7 in raw ground beef and manufacturing trimmings and *Salmonella* on raw product). Primary and secondary risk factors need to be defined. FSIS suspects there are unique traits in small and very small operations that are related to risk of *E. coli* O157:H7 and should be considered. The Agency hopes NACMPI and other stakeholders will assist in identifying these traits. FSIS expects that as the *E. coli* O157:H7 risk-based verification sampling program is developed, the program will reflect these unique traits.

### **Questions for the Sub-Committee**

1. Are any risk factors FSIS presently uses in designing risk-based sampling more important when addressing the concerns of small and very small plants?
2. Are there additional factors unique to small and very small plants that FSIS should consider in the design of risk-based sampling?
3. How can FSIS conduct risk-based sampling more effectively in small and very small plants?
4. What are examples of the unique business practices of small and very small plants that should be considered when designing and implementing risk-based sampling for:
  - a) *E. coli* O157:H7 in raw beef manufacturing trimmings and ground beef?
  - b) *Salmonella* in raw livestock and poultry product?
  - c) *Listeria monocytogenes* in post-lethality exposed ready-to-eat product?
  - d) *Salmonella* in pasteurized egg products?

### **Contact Persons**

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## **Attachments**

FSIS Notice 61-04 -- Risk-based verification testing for *Listeria monocytogenes* (5 pages  
-- <http://www.fsis.usda.gov/OPPDE/rdad/FSISNotices/61-04.pdf>)