

Raw Beef Sampling Job Aid

Instructions: Review this Job Aid and policy documents, regulations, and inspection methodologies with a mentor.

Acronyms/Definitions

- Shiga Toxin-Producing *Escherichia coli* (STEC) – Foodborne pathogen. STEC contamination is a food safety hazard that may occur during the slaughter and processing of beef products.
- Sampled Lot – The production lot represented by the sample. Defined and supported by the establishment.
- Aseptic Technique – Method used when collecting samples to prevent contamination of the sample. Includes proper gloving technique.
- Non-Intact Beef Products – Include ground beef, chopped beef, flaked or minced product, beef vacuum tumbled with solutions or mechanically tenderized, beef with proteolytic enzymes applied; and diced beef less than ¾ inch in any one dimension on average.
- “Raw Beef” – Includes veal and not ready-to-eat beef.
- Laboratory Information Management System (LIMS) – System used by FSIS personnel to view testing results for samples submitted to FSIS labs.

Task Overview

- IPP collect samples of raw beef products for FSIS’s sampling programs for STEC and *Salmonella*.
- STEC is an adulterant in all raw non-intact beef and raw intact beef intended for use in raw non-intact products. *Salmonella* is not an adulterant in raw beef products.
- FSIS sampling verifies that an establishment’s controls or procedures adequately address STEC.
- PHIS uses the establishment profile to assign appropriate sample requests.

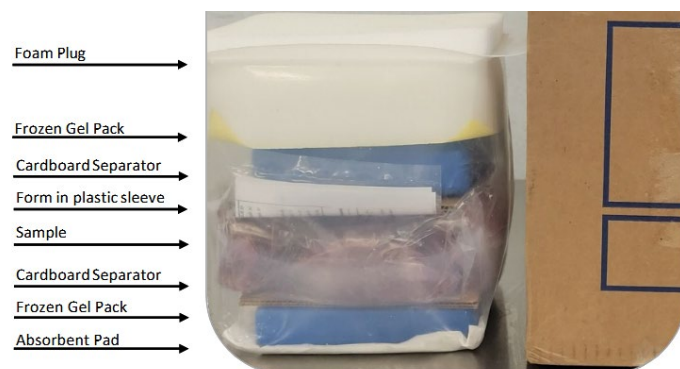
Sampling Program	Eligible Product
MT60_C	Beef manufacturing trimmings: intact beef slaughtered onsite when product is intended for non-intact use* E.g., boneless beef, two-piece chucks, smaller pieces of trimmings
MT64	Raw ground beef components other than trim from beef slaughtered onsite when product is intended for non-intact use* E.g., head, cheek, weasand, heart meat, meat from Advanced Meat Recovery (AMR)
MT65_C	Bench trim: beef not slaughtered on-site, originally intended for intact use by the slaughter establishment, designated for non-intact use* by receiving establishment E.g., beef prior to non-intact process, components other than trim (e.g., head meat), primals/subprimals
MT43	Certain finished non-intact products (cont. on next page)

Sampling Program	Eligible Product
MT43 (cont.)	E.g., Product meeting standard of identity in 9 CFR 319.15 and similarly produced products (e.g., chopped/ground beef, hamburger, beef patties)

*or when intended use is unclear.

Basic Procedure

- [Schedule the sampling task](#) in PHIS.
- Verify receipt of sampling supplies prior to the collection window.
 - Pre-chill nBPW and shipping container. Pre-freeze gel coolant packs.
- Randomly select one type of product that is eligible under the sample project ([FSIS Directive 10010.1](#), Ch. IV, Sec. IV., B.). Through random selection, all eligible products will likely be selected over time.
- Notify the establishment:
 - Of the reason IPP are collecting the sample.
 - 1-2 days prior to sampling.
 - That it is required to maintain control of the sampled lot until negative results are received.
- [Document the sampling task](#) in PHIS. For raw ground beef and bench trim samples (MT43 and MT65_C), gather supplier and source material information at the time of sample collection.
 - Lot numbers, slaughter dates, production dates, supplying establishment number, pounds used.
 - Document information in the [MT43](#) or [MT65 C](#) PHIS questionnaire within the task.
- Follow step-by-step instructions for aseptically collecting the sample ([FSIS Directive 10010.1](#), Ch. V, Sec. I.).
 - [MT60 C and MT65 C Sampling Procedures](#)
 - If collecting from boxes/totes/other containers, use 1 cloth for up to 5 containers from the same lot.
 - [Video of MT60 C/MT65 C Cloth Sample Collection](#)
 - [MT64 Sampling Procedures](#)
 - [MT43 Sampling Procedures](#)
- [Pack, label, and ship](#) the sample. **Do not freeze** the sample.



- Access test results using [LIMS-Direct](#).
 - Negative STEC: Notify the establishment that it can release the held product.
 - Presumptive positive STEC: Verify the establishment has the sampled lot under control. If it does not, notify your supervisor immediately.
 - Positive/negative Salmonella: If the STEC result is negative, notify the establishment that it can release the held product.
- Positive STEC ([FSIS Directive 10010.2](#), Ch. III., Sec. I., A.):
 - Notify the establishment that they produced adulterated product.
 - Perform any traceback activities assigned by the district office per [FSIS Directive 10010.3](#).
 - Verify the establishment takes corrective actions per [9 CFR 417.3](#), including verifying that the products receive appropriate disposition.
 - **Note:** Appropriate disposition options are landfilling, rendering, or further processing the product into a RTE product under FSIS inspection.
 - Perform a directed HACCP verification task for the specific production lot that tested positive.
 - Perform a directed Operational SSOP Review and Observation verification task.
 - If positive was from establishment's own slaughter, perform a directed Beef Sanitary Dressing verification task.
 - Collect follow-up samples assigned in PHIS.
- Document noncompliance ([FSIS Directive 10010.2](#), Ch. III., Sec. I., B.) when FSIS test results are STEC positive and:
 - The establishment's HACCP system did not identify the adulterated product being produced (i.e. through an establishment-collected positive sample from the same lot);
 - The establishment did not hold or maintain control of the product. IPP are also to immediately notify their supervisor; or
 - The establishment did not take required corrective actions.
- Consider whether pathogen positives are associated with past noncompliances or other findings that may indicate systemic problems or trends.

Discussion Points

- Explain how IPP sample all eligible products over time.
- Review the establishment profile and discuss the fields that impact eligibility for sampling programs ([FSIS Directive 10010.1](#), Ch. III., Sec. I.).

Knowledge Check

- Explain what it means to use "aseptic technique" to collect a sample.
- Discuss the significance of a trend of STEC positive results (e.g., High Event Period).

Resources

- [FSIS Directive 10010.1](#) – *Sampling Verification Activities for STEC in Raw Beef Products*
- [FSIS Directive 10010.2](#) – *Verification Activities for STEC in Raw Beef Products*
- [FSIS Directive 10010.3](#) – *Traceback Methodology for E. coli O157:H7 in Raw Ground Beef Products and Bench Trim*
- [FSIS Directive 7355.1](#) – *Use of Sample Seals for Laboratory Samples*
- [Industry Guideline for Minimizing the Risk of STEC in Raw Beef \(including Veal\) Processing Operations](#)
- [IPP Help: Sampling](#)
- [PHIS Help: View Sample Alerts](#)
- IM Workbook – Raw Beef Sampling