



**NORTH CAROLINA DEPARTMENT OF AGRICULTURE
AND CONSUMER SERVICES
MEAT AND POULTRY INSPECTION DIVISION
Raleigh, North Carolina**

Steve Troxler, Commissioner

MPID NOTICE

8-23

6-22-23

**COMPLIANCE RETAIL GROUND BEEF SURVEILLANCE SAMPLING PROTOCOL
FOR Shiga toxin-producing *E. coli* (STEC) ANALYSIS**

I. PURPOSE

This notice provides MPID Compliance Officers (COs) instructions for determining when to collect a sample of raw ground beef for testing as part of the in-commerce surveillance activities at retail stores,

II. GENERAL INFORMATION

- A. CO will attempt to collect a "Retail Ground Beef Sample" at an NCDA-inspected facility that may conduct retail exempt sales of ground beef using NCDA-inspected beef source materials once per quarter. If product meeting the criteria for sampling is found, CO will collect a sample for analysis.
- B. CO will routinely (once a month) conduct in-commerce surveillance activities of retail stores (preferably non-franchised locations) that may be using NCDA-inspected beef and in turn selling ground beef products to the general public. If product meeting the criteria for sampling is found, CO will collect a sample for analysis.
- C. All eligible samples collected must be collected in accordance with "Compliance Retail Ground Beef Surveillance for STEC Sampling Instructions" outlined under Collection of Sample section (Attachment 1).
- D. All surveillance sampling activities (whether a sample is taken or not) should be recorded on [Form C&E 7a](#) (Daily Report Summary) under column 6 (Special Projects) and documented on a spreadsheet titled "Retail Ground Beef Surveillance Sampling" (Attachment 2).

III. INSTRUCTIONS FOR COLLECTING SURVEILLANCE SAMPLES OF RAW GROUND BEEF AT RETAIL

COs should follow the directions in Section IV below to determine when to collect a sample of raw ground beef for STECs as part of the in-commerce surveillance activities at retail

stores. Following these directions will result in MPID sampling the raw ground beef products that present the highest risk to consumers.

Advance notification to the facility of sampling is not required. A sample may be collected based upon the criteria identified in Section IV even if the retail facility is not actively grinding at the time of the surveillance review. Follow the collection instructions under Collection of Sample found in "Compliance Retail Ground Beef Surveillance for *E. coli* 0157:H7 and non 0157:H7 STECs Sampling Instructions" (Attachment 1).

IV. WHEN TO COLLECT A SAMPLE OF RAW GROUND BEEF DURING THE SURVEILLANCE ACTIVITY

COs are to collect a raw ground beef sample during operating hours when the retail store is grinding or has ground product that is still available at the retail store under one or more of the following circumstances:

- Grinding primals, subprimals, purchased trim, boxed beef, or other components (e.g., head meat, cheek meat, heart meat);
- Grinding store generated bench trim derived from its own operations with special emphasis on bench trim generated from non-intact meat cuts, such as those that have been mechanically tenderized or enhanced;
- Regrinding product (i.e., previously ground product from an official establishment which is reground by the retailer into finely ground product without commingling product from other sources);
- Observation during surveillance activity of facility staff not cleaning and sanitizing the grinder or other food contact surfaces (such as the mixer, conveyor, table, knives, totes, saws) that are in contact with the product between the use of different source materials;
- Using meat cuts (steaks or roasts that the store determines are suitable as an ingredient in raw ground beef) that have been pulled back from the retail case regardless of the sell-by date.
- Grinding and failing to keep records sufficient for trace back ([9 CFR 320.1\(b\)\(4\)](#));
- Mixing irradiated and non-irradiated beef.
- Mixing previously ground beef (regardless of source) from different sources and regrinding it; or
- Grinding under insanitary conditions.

NOTE: COs are to arrive at the retail facility as close to the beginning of the grinding operation as possible to afford the firm the opportunity to hold the product that would be implicated by positive STEC test results.

V. WHEN NOT TO COLLECT SAMPLES

COs will not sample the following ground beef products unless the grinding operation is performed in an unsanitary manner, under unsanitary conditions or unless any of the other conditions in Section IV exist. DO NOT collect samples from product that is:

- case ready (i.e. consumer sized packages of ground beef which were packaged at an official establishment);
- not ground by the retail store but only portioned into retail trays;

VI. SCHEDULING A SAMPLE

COs will notify MPID's Technical Assistance Manager (TAM) when they have found a facility that is eligible for sampling. COs are to provide firm name, address, and phone number. TAM will coordinate with the lab on when the lab is available to analyze the sample. The lab will ship sampling supplies to the CO's house.

If the retail store is a producer of raw ground beef products meeting the criteria, but no ground beef products are available at the time of surveillance, the CO is to schedule a follow-up surveillance visit.

VII. DOCUMENTATION

When a sample is collected, COs are to complete the following documents:

1. [Form C&E-40](#), Retail Ground Beef Sampling Worksheet
2. Form C&E-40A, Request for Sampling (sent from lab with sample supplies)

VIII. WHAT TO DO IF SAMPLE RESULTS ARE CONFIRMED POSITIVE

If a raw ground beef sample tests positive for STECs, MPID is notified of the retail positive by the NCDA&CS Food Drug Protection Division Microbiology Laboratory. Once a retail positive is confirmed, COs are to:

- A. Notify retail location of positive sample result,
- B. Assist with a possible recall in coordination with the MPID Recall Committee; and
- C. Collect eight (8) additional investigative samples within a 120-day period if possible. The additional investigative samples collected are to be accompanied by:
 1. C&E Form 40B, Request for Sampling with the wording "FOLLOW UP SAMPLE # (1, 2, 3, etc.) DUE TO CONFIRMED POSITIVE FINDINGS ON (date)" written in the "Comments" section of the form (sent from lab with sample supplies)
 2. [C&E Form 35](#), Evidence Receipt and Chain of Custody, including Evidence Tag (Form C&E 6).

3. Complete [C&E Form 40](#), Retail Ground Beef Sampling Worksheet and enter the following wording in block 24, under Additional Comments. "FOLLOW UP SAMPLE # (1, 2, 3, etc.) DUE TO CONFIRMED POSITIVE FINDINGS ON (date)".

IX. ADDITIONAL INFORMATION: If you have any questions or need additional information, contact your supervisor.

Dr. Karen Beck
State Director

DISTRIBUTION:
MPID Compliance Officers, Office Staff

SUBJECT CATEGORY:
Compliance

**N.C. Department of Agriculture and Consumer Services
Meat and Poultry Inspection Division**

**Compliance Retail Ground Beef Surveillance for STECs
Sampling Instructions for Use With C&E Form 40A**

Prior to Sample Collection

- **Check contents of sample box upon arrival.** The box should contain:
 - Request form
 - FedEx slip
 - Ice packs
 - Cardboard mat
 - White plastic bag
 - Sample security seals
 - Clear plastic bag (to place intact final product in)
- Contact the Raleigh Office at 919-707-3180 immediately if you are missing supplies, if there is not a security seal on the outside of the box, or if the security seal shows any signs of being tampered with. The microbiologist places a seal on the outside of the shipping container before it is shipped from the lab.
- Freeze the ice packs.
- Pre-chill the open shipping container in a cooler or refrigerator at least 24 hours prior to sample collection if possible.
- Place all other materials in a secure location until sample collection.

Collection of Sample:

- Samples eligible for **retail** sampling include all **raw ground or comminuted beef or veal product** produced from NCDA-Inspected and Passed source materials.
- Provide the retail management sufficient notification of the sample collection and provide them enough time to hold the sampled lot. Recommend to the retail management that it hold the sampled lot pending the laboratory results. (Negative laboratory results will be available within 96 hours. Presumptive positive results will require additional laboratory analysis and may take an additional week or more for final results.)
- Inform the retailer of the reason that a sample is being collected and provide the retailer with the "Fact Sheet" ([Form C&E-41](#)).

- Complete all applicable sections of the "Retail Ground Beef Sampling Worksheet" ([Form C&E 40](#)).
- Collect the sample on any randomly selected day or location that meets the criteria for collection. Due to the receiving schedule at the lab, do not collect a sample to be shipped on a Friday since no one will be at the lab to receive the package.
- Collect a fresh raw ground beef sample from the current day's production. The sample should be packaged as it would be purchased by the consumer.
- Place the final, intact product inside of the clear plastic bag. Close the bag by folding the top of the bag down a few times, and folding the wire attached to the bag inward against the bag. Place the small security seal over the top of the fold of the bag.
- Collect and submit a minimum of one (1) pound of product packaged as it would be purchased by the consumer.
- Complete the applicable sections of the Request for Sampling form for "Retail Ground Beef Surveillance Sampling for *E coli* 0157:H7 and non 0157:H7 STEC's " testing for Raw Ground Beef. (C&E Form 40A)
 - Fill in the collection date, production date, contact name, date mailed, production lot code if applicable, and production volume. Circle YES or NO to indicate whether product is being held. Fill in the collector's name, collector's signature, badge number and date.
- Refrigerate sample until it is packed for shipping.
- If a sample must be held overnight, it should be refrigerated.

Shipment of Sample

- By noon on the day of collection, arrange for Federal Express to pick up the sample by calling 1-800-Go FedEx (1-800-463-3339).
- Samples collected before FedEx pickup Monday through Thursday should be refrigerated and shipped that same day.
- Samples collected after FedEx pickup Monday through Wednesday should be held refrigerated and shipped the next day. Do not collect samples after FedEx pickup on Thursdays since no one will be at the lab to receive the package.

- Compliance Officers should ensure that sample integrity and chain of custody are maintained at all times.
- Place the sample in the pre-chilled sample box. Add ice packs. Prevent the sample from coming into direct contact with the ice packs by placing the cardboard mat between the sample and the ice packs. Remove the shipping container from the plastic bag before shipping.
- Place the styrofoam plug on top of the ice packs.
- Place the completed request form on top of the styrofoam plug.
- Close the shipping container using the Velcro tabs.
- Use the large security seal to seal the inside flap of the shipping container. Your sample will not be processed by the laboratory without the appropriate seals affixed. If you have any questions, please call the Raleigh office at 919-707-3180.
- Complete the pre-addressed FedEx USA Airbill (directions attached to Airbill).

Retail Ground Beef Surveillance Sampling for STECs

Date	Name of Firm	Address	CO's Name	Sample Taken	No Sample Available

