

# Instructions for Collection, Handling, and Transport of Food Samples

Contact the IL Department of Public Health Food, Dairies and Devices Section at (217) 785-2439 <a href="mailto:DPH.Food@Illinois.gov">DPH.Food@Illinois.gov</a> or Communicable Disease Section at (217) 782-2016 <a href="mailto:DPH.Foodborne@Illinois.gov">DPH.Foodborne@Illinois.gov</a> for guidance and consultation before submitting any food samples for analysis.

The Environmental Microbiology Section requests that all swab and food samples arrive at the laboratory <u>Monday through Thursday 8 AM – 4:30 PM only</u>. Prior approval from the Environmental Health, FDD (Food, Dairies, and Devices) and laboratory staff is required before samples can be delivered on Friday or a day before a holiday.

The condition of food and environmental swab samples received for examination at the lab is of primary importance. If the samples are not properly collected, are mishandled during transport to the lab, or are not representative of the sampled lot, then there is an increased likelihood that laboratory results will be meaningless.

Supplies for collection, packaging, and shipment of Food/Swab/Sponge Samples are provided by the Illinois Department of Public Health Division of Laboratories Springfield Lab. Use the Foodborne Illness Kit Supply Form for requesting supplies.

## Food/Swab/Sponge Sample Collection

- 1. All samples should be collected aseptically. The use of sterile gloves and sterile sample containers is highly recommended. Use a sterile utensil to aseptically transfer the samples to sterile leak-proof containers.
- 2. Individual food product samples should be collected one at a time. Properly seal the sample container to ensure that leakage will not occur during transport.
- 3. Please submit food product in original container, unless the container is too big or inconvenient for shipment. For finished retail food products, submitting the product in its finalized package form is preferred. Sample size should be at least 25 grams, 200–400 gram sample is preferred. A representative sample is essential in order to detect the presence of pathogens that may be sparsely distributed within the food. If sampling from a large amount of food product, a representative sample should be taken. When dealing with large food vessels take a well-mixed sub sample portion from the geometric center as well as from other locations in the food container. If the food is Highly Implicated, meaning leftover food believed to cause illness, the lab will test at least three 25 gram subsamples and more if enough food is available.
- **4.** Do not mix different types of food products or different lots of food products. For example, if two vessels (A & B) with ground beef are to be collected, transfer the beef from vessel A to one whirl-pak bag and the beef from vessel B to a second whirl-pak bag. It is important to keep different lots of food product separate and avoid cross contamination of any kind.
- 5. For Environmental Swab or Sponge-Stick Collection, only use those swabs and Sponge-Sticks

- provided by the IL DPH Division of Laboratories Springfield Lab. Swabs are provided premoistened with DE Neutralizing broth. Sponge-Sticks require moistening with DE Neutralizing Broth Prior to collection. For full instructions on collection <u>IDPH Division of Laboratories Environmental Testing webpage</u>.
- **6.** Label each sample with the sample type, sample ID, date and time of collection using permanent marker or label. It is important that the sample identification on the sample container match what is on the Food Requisition Form. Place each sample separately in a leak proof or sift proof container like a zip top plastic bag.
- 7. When collecting samples remember to also include an additional sample to serve as a Temperature Control or TC. If there are no additional samples available or if you are sending environmental surface swabs then a sealed bottle containing water can be substituted as the TC. The TC should always be near the sample(s) so that the sample temperature is accurately reflected. Remember to clearly indicate what you are using as the temperature control by marking sample with "TC".
- 8. Complete an IDPH Food Investigation Submission Form and, if more than one sample is to be sent, an IDPH Food Sample Cover Sheet. Chain of Custody must be complete. If collecting more than one sample, complete chain of custody on Food Samples Cover Sheet for all samples. Forms and instructions are available by contacting the IDPH Springfield Laboratory or at IDPH Division of Laboratories Environmental Testing webpage. These forms must be completed and received with samples before testing can begin. Place forms in Ziploc or evidence bag for shipment with samples.

### **Food Sample Packaging**

1. Samples should be submitted microbiologically unchanged from the time of sampling.

2. Refrigerated food samples and perishable food items should be held under refrigeration immediately after collection and should be maintained as such during transport to the laboratory. Do not freeze refrigerated food samples as it causes a significant loss of viability of certain microorganisms.

- **a. Environmental swabs and spongesicles** should be kept refrigerated after collection and during shipment.
- **b.** Frozen food samples should be maintained in the frozen state after collection and when shipping it to the laboratory.
- **c. Non-perishable food**, such as beef jerky, dried and canned foods, can be kept at ambient temperatures after collection and during transport to the lab.
- **d.** Liquid samples (juice, soups, smoothies, etc.) collect in a sterile, plastic container with a screw on lid. Tape around the lid and place the container inside a Ziploc or whirl-pak bag and seal. Place this inside another Ziploc or whirl-pak bag and seal.



- 3. When shipping frozen or refrigerated food samples to the lab, use insulated containers of rigid construction, like Styrofoam ice chests or coolers. This will help ensure that the samples will arrive at the laboratory unchanged from the original temperature. Use pre-frozen icepacks and Insul-Ice to keep the samples cold or frozen.
- **4.** Fill dead space inside cooler or Styrofoam shipping container with padding, absorbent material, or bubble wrap so that food samples do not move around inside the box or mailer.

## **Food Samples Transportation/Shipping**

**1. Driving:** Samples may be driven to any of the IDPH Division of Laboratories facilities. The IDPH Chicago and Carbondale Labs will ship samples to IDPH Springfield Lab for testing.

Springfield Laboratory	Chicago Laboratory	Carbondale Laboratory
Illinois Department of Public Health	Illinois Department of Public Health	Illinois Department of Public Health
Division of Laboratories	Division of Laboratories	Division of Laboratories
825 North Rutledge Street	2121 West Taylor Street	1155 South Oakland Avenue
Springfield, IL 62702	Chicago, IL 60612	Carbondale, IL 62901
Phone: 217-782-6562	Phone: 312-793-4760	Phone: 618-457-5131

2. Shipping: Deliveries from all carriers are accepted, however, FedEx or UPS are usually used for guaranteed next day delivery. Record tracking number to be able to monitor your shipment.

Questions Call the IDPH Springfield Lab (217)782-6562