

Drag Swab Collection for Salmonella Testing of Small-Flock Layer Housing

Sampling Periods

Chick Papers: (not required but highly suggested; swab 10% of papers)

Pullets: 14-16 weeks old

Hens: 40-45 weeks of age

Hens: 4-6 weeks after end of each molt, or once per calendar year

Each new flock will go through this same testing schedule. Try to keep flocks separate for ease of keeping track when testing is needed.

Materials

1. Disposable gloves or wash your hands with soap and water before and after the procedure.
2. Sterile 4"x 4" cotton 4-ply gauze pads, or sterile sponge pads of about the same size. These will be pooled into groups of four per Whirl-Pak® or quart-size resealable Ziplock plastic bag.
3. Sterile, 18-ounce Whirl-Paks or re-sealable plastic bags.
4. Canned, evaporated skim milk and can opener.
5. Alcohol swabs (to wipe the surface of the canned milk & can opener).
6. One approximately 4-foot long ½" pvc pipe pole equipped with heavy-duty alligator clip or battery cable clamp at one end. (See Figure)
7. Styrofoam cooler with a "blue" ice pack.
8. Markers.



Preparation

1. A flock is a group of birds of the same hatch date and strain. If a flock is housed in multiple barns then each barn is to be tested separately.
2. Put on disposable plastic gloves or wash hands with soap and water and sanitize using alcohol hand liquid (such as Purell®, etc.).
3. Clean and disinfect can opener, poles, especially the alligator clamps. Let air dry. Disinfect the top of the canned milk can with 70% isopropyl alcohol. Let dry. Puncture with can opener or flat screw driver that has been wiped with 70% isopropyl alcohol and air dried before using.

Procedure

1. Place two gauze pads into clamp and pour on enough canned skim milk to moisten the pads.
2. Mentally divide the building into four quadrants. Drag the swabs along floor and in nest boxes and under roosts of approximately 1/4 of house. You don't need to hit every square foot – just drag it through representative areas for one or two minutes. Drop the two swabs from the clamp – without touching them – into a quart sealable bag. Attach two more swabs, moisten with canned milk, and repeat for another 1/4 of the house.
3. Once there are four swabs in the bag, add approximately 20 to 30 mL (1 ounce) of canned, evaporated skim milk into the bags. Reseal and massage the contents. Seal this bag.
4. Repeat steps 2 and 3 for the other half of the building.
5. When done, you will have two bags with four gauze pads each (i.e., total of eight pads).
6. Put the two bags into a one-gallon Zip-lock bag for transport. Label the one-gallon bag with owner's name, date, barn number, and flock number.
7. Place this bag (containing the two bags of pooled samples) into a cooler. (Note: Use a separate large Zip-lock per flock.)
8. Wash hands or change gloves, clean and disinfect scissors, poles, especially the alligator clamps between buildings when necessary.
9. Complete lab submission form and submit to the Utah Veterinary Diagnostic Laboratory, Central Utah Branch via FedEx or UPS the same day if possible. If shipping to the lab, send in a Styrofoam cooler that is placed within an outer cardboard box. Use enough blue ice packs in the Styrofoam cooler to keep the samples cool during transport. Be sure owner's name, mailing address, date, barn number, and flock number are clearly entered onto the submission form.
 - a. Place the submission form in a sealable plastic bag to keep dry if placed in the cooler.
 - b. Send box to:

Central Utah Veterinary Diagnostic Laboratory

514 West 3000 North
Spanish Fork, UT 84660

Alternately, the samples can simply be hand-delivered to the lab.

10. A copy of the laboratory results will be made available after test results are determined.

Quick Summary

- Four swabs per bag, two bags per flock
- Two tests per new flock coming into production
- Once yearly after that if flock is kept for more than one lay cycle