



**Wisconsin Veterinary
Diagnostic Laboratory**
UNIVERSITY OF WISCONSIN-MADISON

Bovine Environmental Sampling Instructions for *Salmonella spp.*

WVDL *Salmonella* Environmental Monitoring Sampling Kit includes:

- One-Styrofoam holder for 15 mL conical tubes
- Sterile Buffered Peptone Water (BPW): 3 mL in 15 mL conical tubes with snap-top lid
n = 12
- Sterile polyester-tipped, plastic shaft applicator sticks: (six-inch length-2 per pack)
n = 12
- Pairs of Buffered Peptone Water (BPW) Boot Cover Swabs
n = 2
- One-8-ounce ice pack
- 6 x 9 resealable plastic bags
n = 3
- One-Insulated Shipping Envelope
- WVDL Submission Form
- Bovine Environmental Sampling Instructions for *Salmonella spp*
- UPS Return Shipping Label

Upon Arrival

Upon **receipt** of the sampling kit, **place** the 8-ounce ice pack in a **household freezer**. The ice-pack must be completely frozen before the environmental sampling is done. The BPW can be stored at refrigerator temperature until use.

Sampling Locations

The following areas are considered high risk and are potential sample sites: close-up pen floor, close-up pen feed bunk, close-up pen waterers (inside wall of waterer), calving pen floor, calving pen waterer, calving pen feed bunk, calf transporter(s), warming box, floor in the calf feed mixing room, alleyways in the calf barn, floors and walls of the calf pens and some of the calf feeding equipment, which includes the colostrum collection equipment.

Sampling Instructions - Swabs

Open the applicator stick package and wet the tips of both of the six-inch polyester swabs in the BPW taking care **not to touch the tips of the polyester swabs with your fingers**. Gently swab a 2-inch x 2-inch square area while rotating both swabs simultaneously. Place both polyester swabs in the 15 mL conical tube. Repeat this process 2-3 times until the BPW is noticeably discolored with organic material. After swabbing is complete snap off 1-2 inches of the plastic shaft on both swabs so they will fit into the 15 mL conical tubes. Ensure the lid is snapped closed tightly on the tube and legibly write the sampling location on the side of the tube. For example, calf barn: east alleyway floor. Repeat the process over and over again with a different pair of six-inch polyester swabs and a 15 mL conical tube that contains BPW until the environmental sampling is completed.

Sampling Instructions – Boot Cover Swabs

On-Farm Sampling Method

1. Wash hands prior to using the boot swab and wear gloves to protect hands from conditions encountered during sampling and to also protect the sample from cross-contamination.
2. Immediately before sampling slip a disposable plastic boot cover (Cat # C14019WA) over a single shoe or boot to protect personal clothing and to prevent cross-contamination of the sample from shoe sole carryover. (Alternatively one may use a dedicated boot from the target barn)
3. Next, fit the boot swab. Hold the boot swab kit in your hands and carefully tear open the Twirl-tie bag at the upper perforation above the twist-tie. Carefully remove the pre-moistened boot swab from the Twirl-tie bag and place it securely over your boot/shoe.
4. Walk the entire length of one side of the row/bank in the livestock facility. If sampling multiple rows/banks, use fresh gloves, boot swab(s) and plastic boot cover(s) for each row/bank. (As the sampling plan may vary for each facility, consult your HACCP plan to ensure proper sampling for your housing.)
5. Immediately after sample collection carefully remove the boot swab and return it to its original Twirl-tie bag. Seal the bag and identify the sample with the pertinent information.
6. Change gloves and put on a new pair of plastic boot covers. Repeat the same process for the 2nd pair and subsequent boot swabs.

Shipping Instructions

- Completely fill out the WVDL Submission Form making sure that the locations listed on the 15 mL conical tubes and Twirl-tie bags **matches** the locations listed on the WVDL submission form.
- Make sure the position number on the submission form matches the position number on the 15 mL conical tube. For example, if the calf pen floor is the fifth environmental sample listed on the WVDL Submission Form then the conical tube that contains the calf pen floor sample should be marked with position # 5 as well.
- Specimen type: **Environmental Swabs in BPW and Booties**
- Test(s) requested: **Salmonella panel**
- Place the WVDL Submission Form in the plastic bag and then place the plastic-bag inside the insulated shipping envelope.
- Double-check that the lids of each 15 mL conical tube are snapped shut and place the tubes in the other plastic bag and place in the insulated shipping envelope along with the **frozen** 8-ounce ice pack.
- Seal the insulated shipping envelope closed. Make sure the insulated shipping envelope is completely sealed shut. It has a recloseable zip lock and an adhesive sealing feature.
- Place the UPS Return Label on the outside of the insulated shipping envelope
- Drop-off the insulated shipping envelope at any UPS-store location in the continental United States or request that UPS pick up at your location

For more information about *Salmonella* testing options and turnaround time please contact the WVDL at (608) 262-5432 or Salmonella@wvdl.wisc.edu and use our website at wvdl.wisc.edu.