

MISSISSIPPI BVD VOLUNTARY CONTROL PROGRAM

Instructions for Ear Notch Sample Collection, Storage and Submission

MATERIALS NEEDED:

Provided inside BVD Test Kit:

- MVRDL Submission Form
- Program Enrollment Form
- Waterproof Envelope (i.e. zip-lock bag)
- Styrofoam block containing sample tubes
- Mailing Instructions
- Ice Packs (**place immediately into freezer**)
- An insulated shipping box to be used to return collected samples to MVRDL for testing.

Other Materials needed (not provided):

- Medium-sized Ear Notchers
- Permanent Marker to label tubes
- Ballpoint Pen to complete submission form(s)
- Packing Tape
- Brush
- Paper Towels
- Liquid Dishwashing Soap
- Disinfectant (i.e. Virkon-S, Chlorohexidine)
- Two Buckets – for Soap Water & Rinse Water

IMPORTANT

Please retain all original shipping materials for use in returning the collected samples back to the Laboratory. The kit must be stored at room temperature. Do NOT allow the kit to overheat.

COLLECTING EAR NOTCH SAMPLES:

1. Properly restrain the animal for safe, easy access to one ear. Collect samples from the same ear (right or left) and the same location on the ear (lower margin) to track animals that have been tested for BVD (Illustration 1).
2. If the ear is dirty or wet:
 - a. Remove any mud, feces, and/or water with a brush and/or paper towel.
 - b. Collect ear notch sample with an appropriately sized ear notcher (medium-sized hog ear notcher) from the lower margin of the ear as depicted in Illustration 1.
3. If the ear is clean and dry, then collect the ear notch sample with an appropriately sized ear notcher (medium-sized, ¼ to ½ inch) from the lower margin of the ear as depicted in Illustration 1. The same sized notchers should be used for all samples collected.
4. Place the ear notch in the submission tube and securely close the tube lid. **NOTE: Only one ear notch should be placed into each tube.**
5. Tap or shake the closed tube so that the ear notch moves to the bottom of the sampling tube and is completely submerged in the preservation fluid. Keep the tube in an upright position.
6. Use a permanent marker to label the submission tube with the animal's individual, permanent location. Also, label the submission tubes sequentially with the appropriate specimen number to match the specimen number on the submission form (Illustration 2).
7. Use a ballpoint pen to record the animal's permanent identification number in the appropriate location on the submission form. Be sure that the specimen number and animal identification on the submission form corresponds to the specimen number and animal identification on the submission tube.
8. Place the submission tube back into the Styrofoam block. **Be sure to keep all of the tubes in sequential order (Illustration 3).**



Illustration 1.
Example of Location of Ear Notch Collection

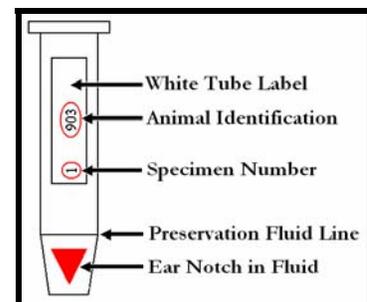


Illustration 2.
Properly Labeled Submission Tube with Ear Notch.

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9. Clean hair, blood, and ear tissue from the ear notchers prior to obtaining each sample. A dilute liquid dishwashing soap solution in a bucket of water can be used to clean the instrument; then rinse the ear notchers in a bucket of water.
10. Disinfect the ear notchers in disinfectant (i.e. Virkon-S or diluted Chlorhexidine) between isolated farms to reduce the transmission of infectious diseases.

SAMPLE HANDLING, PACKAGING, AND SHIPPING (3 OPTIONS):

1. Repackage and ship directly overnight:
 - a. Wrap and seal (with packing tape) the submission tubes/Styrofoam rack inside original plastic covering and then place into the original insulated box with the frozen ice packs.
 - b. Ensure that all information on the submission form is completed and correct, including your preferred method of receiving results.
 - c. Make a copy of the submission form for your records.
 - d. Place and seal the completed submission form back inside the original waterproof envelope that is provided, and then place into the insulated box with the submission tubes.

****Additional forms can be found at:**

www.mbah.state.ms.us/disease_programs/bvd/

- e. **If the box was originally shipped to you, you MUST** affix the enclosed labels according to Illustration 4 to comply with federal regulations for shipping diagnostic specimen. The yellow address label must be placed over the original address label. If the box was hand-delivered to you, the labels will already be affixed in the proper location.
 - f. Close and seal (with packing tape) the insulated box, and complete the yellow shipping label on the outside of the box.
Do not remove the UN3373 label.
 - g. Ship the insulated box overnight via FedEx, UPS or USPS.
 - h. You may keep the ear notchers, if purchased from the MBAH.
2. Refrigerate:
 - a. Samples can be refrigerated (with the Styrofoam block) for up to 48 hours prior to shipment.
 - b. When ready to ship, follow shipping instructions in 1a – 1f.
 - c. If not shipped within 48 hours, all samples should be frozen.
 3. Freeze:
 - a. All samples that are not shipped within 48 hours should be frozen.
 - b. Place Styrofoam block with submission tubes directly into a freezer.
 - c. When ready to ship, follow shipping instructions in 1a – 1h.
 - d. Samples frozen for more than 90 days should be discarded.

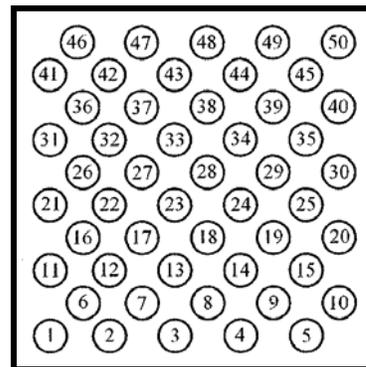


Illustration 3.

Appropriate sequential order for specimen tubes when placed in Styrofoam block.

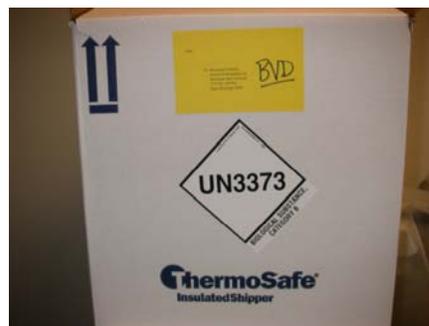


Illustration 4.

Proper label placement.

REMEMBER!! The quality of the samples that you collect, record the data for and submit into the program directly impacts the quality of your results. Samples that have not been prepared properly could cause incorrect or inconclusive results. If you have any questions regarding any aspect of the program, please call Dr. Mike Zhang at (601-420-4700, mzhang@mvrld.msstate.edu) or Dr. Carla Huston (662-325-1183, huston@cvm.msstate.edu).