



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

BVD PCR Sample Collection Guidelines

1. Materials and Equipment Needed for Ear Notch Collecting:
 - a. Ear notching tool that yields a 1cm a side notch: Recommend purchasing two or more tools.
 - b. Red Top blood tube: The preferred tube is a **Monoject**: 7ml draw, 16mm x 75mm.
 - c. Shipping container rack that holds individual tubes in slots.
 - d. Submission form: Use the "Serologic and Multiple Test Submission Form". This form can be found on our web site: www.wvdl.wisc.edu
 - e. Disinfectant for rinsing notching tool: 10% bleach (eg.100ml (3oz) bleach in 900ml, (27oz) water).
 - f. Clean rinse water: 3-5 gallon bucket. Change bucket water every 20-30 notches.
 - g. Use disposable gloves and wear clean coveralls.
 - h. Do not vaccinate or tattoo at the same time samples are taken.

2. Collection Procedure:
 - a. Label Red Top collection tubes with the animal ID's and sequence number's (#1 through number in submission).
 - b. Dip notching tool in disinfectant then **ALWAYS** rinse away disinfectant with copious quantities of clean water. **Caution:** Residual disinfectant on the notching tool will yield false negative results, therefore thorough rinsing with clean water is required!!
 - c. Take a proper size ear notch from a clean portion of the ear (figure 5). For comparison, a triangle notch size is superimposed on a nickel (figure 6). Place notch into a labeled, dry, red top collection tube (no formalin, other liquid or separator gel; do not use snap-cap milk tubes or whirl-pac bags). **Caution:** Collected ear notch **MUST** be free of contaminating dirt, feces, tattoo ink or BVD vaccine.
 - d. Store collected ear notches for a maximum of 72 hours at refrigerator temperatures and ship over night to the WVDL on cold packs.



Figure 5: Best location for taking ear notch



Figure 6: Required size of ear notch, ~1cm per side



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3. Materials Needed for Nasal Swab Collecting:
 - a. The following form and supplies can be found by visiting our website:
<http://www.wvdl.wisc.edu/index.php/forms/>
 - i. BVD PCR NASAL SWAB SUBMISSION FORM
 - ii. BVD NASAL SWAB KIT
 1. Polyester tip swab with Dacron shaft.
 2. 96 array deep well plate.
 3. Aluminum seal film.
 4. Re-sealable plastic bag.
4. Collection Procedure
 - a. Using a single dacron or polyester tip nasal swab with a plastic applicator, (non-wood applicator) swab 2-3 inches inside one nostril with enough pressure to capture epithelial cells.
 - b. Put the swab in the 96 deep-well plate.
 - c. Snap off applicator stick so that the tip is below the top of the 96 deep-well plate and not protruding above the top of the array. If necessary, use scissors to cut applicator stick, be careful not to touch the collection tip.
 - d. Wipe down the scissors between cuts with dry, clean cloth.
 - e. Do not add liquid to 96 deep-well plate.
 - f. Cover with aluminum foil.
 - g. Record the sample ID number on WVDL submission form in the corresponding well (an electronic spreadsheet can be used in addition to the WVDL submission form for ease of entry).
 - h. Mark the 96 deep-well plate with the corresponding submission form page number.
 - i. Place the 96 deep-well plate in a re-sealable bag provided and the WVDL submission form in a separate bag.
 - j. Ship the plate and form with cold packs overnight, not on Fridays.
 - k. Refrigerate samples until packaging for up to one week. **Do not freeze.**
 - l. If shipping from within Wisconsin, we recommend UPS Ground as a fast and inexpensive submission handler.
 - m. A video of this collection procedure can be located on our website at:
<http://www.wvdl.wisc.edu/index.php/forms/>