NASAL SWAB COLLECTION IN PIGS







SUPPLIES FOR NASAL SWAB COLLECTION

The supplies needed are simple and inexpensive to acquire. The following is a list of supplies that may be used during the sample collection:

- Polyester or flocked swabs with a plastic shaft (flocked swabs retain more sample for testing)
 Some swab options included here are mini (a) and regular (b) nylon flocked swabs and regular polyester swabs (c).
- 2. Sample tube containing a liquid transport medium or 0.5-1.0 cc of sterile saline
- 3. Permanent marker
- 4. Gloves

Wear disposable gloves to prevent contamination of nasal swab samples.

COLLECTING NASAL SWABS STEP 1

• Ensure the pig is adequately restrained with the head positioned upward. Young pigs may be restrained by holding animals against the handler's body or larger animals may be restrained with a snare. The snare should be positioned back in the mouth so that nasal openings aren't closed off.



STEP 2

- Wipe off snout and insert sterile swab deep into nasal cavity, avoiding contact with the outside of the nostril.
- Rotate swab hard enough on the inside of the nose to collect the sample, but not so hard as to draw a lot of blood (small amount OK) which may interfere with diagnostics.
- Withdraw the swab from the nostril and repeat the process with the other nostril, using the same swab.



HANDLING & SHIPPING OF NASAL SWAB SAMPLES AFTER COLLECTION

- Nasal swabs should be submitted cooled, without freezing, and received by the diagnostic lab within two days. Do not ship on Fridays.
- All containers should be clean on the outside to prevent contamination of the lab and of other specimens.
- Following sample collection, all waste materials should be disposed of appropriately according to farm protocol.
- Samples for shipment to the testing laboratory must be prepared in compliance with the same federal guidelines required for diagnostic samples.
 - Ship in a properly labeled, insulated and leakproof container that is lined with a plastic bag.
 - Pack the samples with ice packs and an absorbent material to absorb any unexpected leakages.
 - Include the proper paperwork indicating that the samples are nasal swab samples for diagnostic testing.
 - Make sure paperwork includes the premises identification number (PIN) for the site.

COLLECTING SAMPLES FROM BABY PIGS

 Nasal swab sampling of baby pigs is possible. However, because of the smaller size of their nostrils, a mini swab needs to be used. Restraint can be accomplished by holding the piglet tight against the handler's body. Just as with older animals, both nostrils should be swabbed with swabs handled the same way after collection.



Commercial kits are available that include a plastic sheath into which the swab is inserted. Some kits include a sheath at the end which needs to be crushed to release transport medium. It is important to verify that the medium being used will allow growth of the suspected pathogen; for example, if a bacterial agent is suspected, do not select a media containing antibiotics.





STEP 3

- Place the swab in the sample tube containing the medium, release the medium from the ampule at the end of the sheath (if applicable).
- Stir the swab in the medium to facilitate release of the sample. When applicable, break off the shaft within the tube and securely close the tube.



STEP 4

• Number each tube with a permanent marker. Appropriate paperwork must include the animal or group identification, Premises Identification Number, date, and species. Make a note that the sample is a nasal swab.



Photos courtesy of Alex Ramirez, Iowa State University

