

Influenza Surveillance Specimen Collection and Transport Requirements

Web Link: <http://dhhs.ne.gov/Flu%20Documents/Flu%20Collection%20Transport.pdf>

Specimen: Nasopharyngeal washings or nasopharyngeal swab
Standard, contact, and airborne precautions are recommended for patient management; this includes collection of respiratory specimens. Nasopharyngeal washings are collected with normal saline, followed by a swab of the nasopharyngeal mucosa and both samples placed in the same viral transport media container. (See collection procedure below)

Volume: 2-3 mL nasopharyngeal washings and nasopharyngeal swab place in the same viral transport media container. Viral transport media container should be labeled with the patient first and last name, collection date and time, and specimen source.

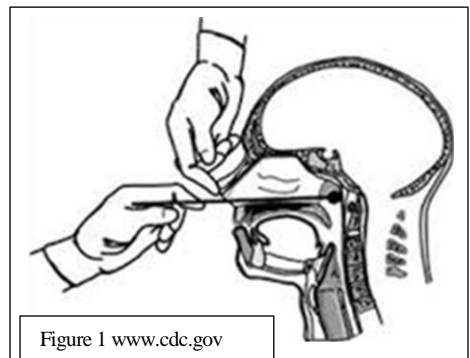
Transportation: Follow enclosed FedEx packaging & shipping instruction. The specimens must be refrigerated from time of collection to arrival at NPHL, a pre-frozen gel pack is recommended. Samples must be received in lab within 72 hours of collection.

Courier service may be available depending on your location and courier provider through the Nebraska Public Health Partner Courier Network. Please contact NPHL Client Services at 402.559.2440 or 866.290.1406 if you are not sure of the specimen transport option available to your facility.

Specimen Collection Procedures

Nasopharyngeal Swab:

1. Using the Universal Viral Transport kit provided, insert the flocked flexible minitip through nares, parallel to the palate (NOT upwards) until resistance is encountered or the distance is equivalent to that from the ear to the nostril of the patient indicating contact with the nasopharynx. See Figure 1.
2. Gently, rub and roll the swab. Leave the swab in place for several seconds to absorb secretions before removing.
3. Place the swab back into viral transport media. NOTE: Combining the aspirate and the swab enhances viral recovery.
4. Transport refrigerated. Specimen must be received at NPHL within 72 hours of collection.
5. A video demonstrating the collection of a nasopharyngeal swab is available at: <http://www.youtube.com/watch?v=hXohAo1d6tk>.



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Washing:

1. Cut off the distal end of the butterfly catheter (needle and butterfly) catheter extension set so that about 2-3 inches of tubing are left attached to the hub.
2. Draw up 2-3 mLs of sterile saline into a syringe.
3. Attach syringe to hub of butterfly catheter. Purge tubing with saline.
4. Put on gloves, gown, mask and eye protection.
5. Gently remove excess mucous from patient's nose. (If patient is an adult, ask the patient to gently blow nose. For pediatrics, a bulb syringe may be used to remove excess mucous.)
6. Position patient in supine position with the head of bed up 30°. The head should be turned to one side and tilted slightly backward.
7. Stabilize the patient's head and gently place the catheter into the nare. Placement should be in the nare (nasal wall). Depending on the size of the patient, this should be about 1-2 cm in adults and 0.5 cm to 1.0 cm in children (0.5 cm in neonates). See Figure 2.

8. Instill .5 - 2 mLs saline (.5 - 1 mLs for infants and children, 1 - 2 mLs for adults) into the nare and aspirate back mucous, saline and epithelial cells.
9. Repeat this process using the same syringe until the sample is cloudy or appears to hold cellular debris. (If the sample is inadequate, the process may be repeated on the opposite nare, using a second sterile syringe and tubing. Usually one nare is sufficient.)

NOTE: There may be some blood streaks in the mucous. This is normal and patients/parents should be told this is expected and will stop in a few minutes.

10. Transfer contents of tubing and syringe into transport media using the following process: Depress syringe plunger and express fluid from syringe and tubing into transport media. Then withdraw media/fluid back into syringe and tubing. Depress syringe plunger again, expressing fluid from syringe and tubing back into transport media.

NOTE: This is necessary to recover any cells or virus adhering to the tubing or syringe.

11. Transport refrigerated. Specimen must be received at NPHL within 72 hours of collection.

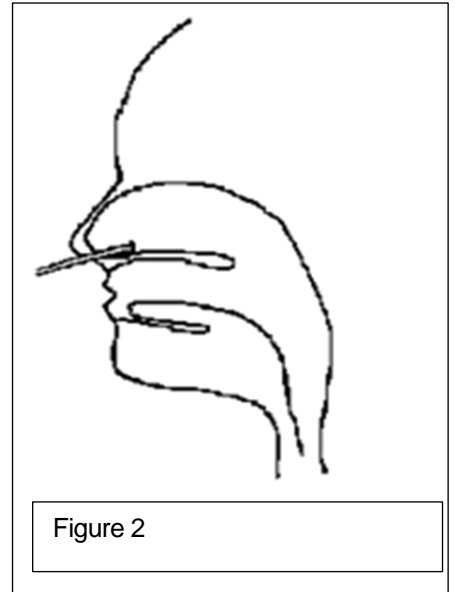


Figure 2

Category B can be transported via NPHL courier, contact NPHL client services at (866) 290-1406 to arrange.

1. Place specimens in bio-hazard bag (with absorbent material) and seal.
2. Shipping boxes provided by NPHL are not required for influenza specimens.
3. Offer to courier with instructions to keep at 2-8C (refrigerated).
4. If using a reference laboratory within Nebraska, Category B may be forwarded by their courier, as typically routine NPHL courier pickups occur at these locations.