**Title**: Influenza Specimen Collection and Transport

**Short Name**: Influenza

**Specimen Requirements**
1. Nasopharyngeal/throat swab is preferred, but nasal washes, nasal aspirates, sputum, bronchoalveolar lavage and lung tissue samples are acceptable for PCR and virus isolation.

**Sampling Materials**
1. Viral Transport Media (VTM)-available commercially. Some require refrigeration, others do not — check package insert.
2. Swab - Swab material should be synthetic, i.e., rayon, polyester, or Dacron. Calcium alginate or charcoal-impregnated swabs should not be used, nor should wood-shaft swabs.
3. Sterile containers and collection materials for sputum, aspirates or washes.
4. Catheter with a suction trap or a bulb aspirator for collecting nasal aspirates.
5. Cold packs or dry ice.
6. Shipping boxes/containers with appropriate shipping labels.

**Procedural Notes**
1. Be sure to properly label the specimen tube with at least the patient’s name and date of collection.
2. Check the expiration date on the VTM tube to ensure product is acceptable and will continue to be acceptable once received at the ISDH laboratory.
3. After collection, all specimens should be stored at refrigerator temperature (2-8°C) until shipped. If longer storage is required, place specimens (not serum/blood) in a -70°C freezer (NEVER store, even temporarily, in a regular, -20°C freezer — this temperature will kill virus). Additionally, avoid freeze-thaw cycles, which is also lethal to viruses.
4. Complete a request form for each specimen with the following information:
   a. Name, birth date, race, and sex of patient.
   b. Specimen type and date of specimen collection.
   c. Date of symptom onset.
   d. Suspected disease agent.
   e. Complete patient history, travel history, and other relevant information.
   f. Submitting clinic information-clinic name, address, phone number, fax number, contact name and email address (if available).
5. Special Instructions for Specimen Collection
   a. NP Swab: Insert Dacron-tipped swab through the nostril into the nasopharynx until tip reaches distance equivalent to that from the ear to the nostril of the patient. Rotate swab several times, remove and place swab into the VTM tube.
   b. Nasal Aspirates: Insert a small catheter with a suction trap or bulb aspirator though the nostrils into the nasopharynx. Apply suction while slowly removing the catheter or aspirator tip. The catheter or aspirator should be flushed with VTM. Place the specimen into the VTM tube.
   c. Throat Swab: Rub the tonsils and posterior pharynx with a Dacron-tipped plastic swab. Place the swab into the VTM tube.
   d. Nasal Wash: Place several milliliters of sterile saline into nostrils while patient's head is tilted back. Bring patient's head forward and catch saline flowing from the nostrils into a small container. Pour 1-2mL of specimen into the VTM tube.
   e. Sputum: Satisfactory quality implies the presence of mucoid or mucopurulent material and is of greater significance than volume. Ideally, a sputum specimen should have a volume of 3-5ml, although smaller quantities are acceptable if the quality is satisfactory.
6. Specimens can be submitted by LimsNet, an online system that will make results available as PDF files the minute they are released at the lab.
7. To get a free LimsNet account established at your facility for electronic submission and results reporting, call the help desk at (888) 535-0011 or email to LimsAppSupport@isdh.in.gov.
8. Alternatively, a totally completed submission form must accompany each specimen. The form to use is:
   a. Virology (found in the Forms menu)  
   http://www.in.gov/icpr/webfile/formsdiv/35212.pdf

**Shipping Instructions**
1. Wrap the labeled specimen container with absorbent material and place in a biohazard specimen bag. Be sure to package each patient’s specimens individually to avoid cross-contamination.
2. Place the requisition form in the side pocket of the biohazard bag. Never place the requisition form in with the specimen in case the specimen leaks during transit. If the specimen bag does not have 2 compartments, place the paperwork...
3. Place the specimen(s) in a styrofoam container with sufficient cold packs to maintain 4°C during shipment. For swabs, sputum, aspirates and washes, if needed, dry ice can also be used if the specimen is frozen and/or transport time may be longer than 24 hours. If dry ice is used, do not form an airtight seal on the styrofoam container because dry ice releases carbon dioxide gas.

4. Place the styrofoam container into a cardboard shipping box, close lid, and seal.

5. Ship or transport by courier, the box compliant with DOT and IATA regulations.
   a. Ship to:
      Indiana State Department of Health Laboratories
      Virology Laboratory
      550 W. 16th Street, Suite B
      Indianapolis, IN 46202

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<th>Reporting and TAT</th>
<th>2 - 14 business days.</th>
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<td>Test Referral</td>
<td>Isolates may be forwarded to the CDC for additional testing.</td>
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