

H5N1 Specimen Collection and Transportation Guidance



The Indiana Department of Health provides free testing for avian influenza A H5 virus (H5 avian flu) specimen. Clinicians should follow this guidance when submitting specimens for testing to ensure the best results.

Sampling Materials

1. Viral Transport Media (VTM) or Universal Transport Media (UTM) available commercially, or through the IDOH lab. Some require refrigeration, others do not. Check package insert. No dry swabs will be accepted.
2. Specimens should be collected using swabs with a synthetic tip (e.g., polyester or Dacron) and an aluminum or plastic shaft. Swabs with cotton tips and wooden shafts are not recommended. If you're unsure, check the manufacturer's website will have information about the materials used in the swab.
3. Cold packs or dry ice.
4. Shipping boxes/containers with appropriate shipping labels.

Specimen Collection Procedural Notes

1. Nasopharyngeal (NP)/Oropharyngeal(NP) specimen are preferred
2. Standard, contact, and airborne precautions are recommended. Place the patient in a single-patient airborne infection isolation room. If this is not available, he or she can be placed in an examination room with the door closed. If an examination room is not available, specimen may be collected from the patient in a personal vehicle.
 - Personal protective equipment (eye protection, disposable gown, disposable gloves, and N95 respirator) should be worn during specimen collection.
3. **Specimens must be pre-authorized by IDOH Infectious Disease Epidemiology & Prevention Division (IDEPD). Specimens will not be tested without prior approval.**
4. Check the expiration date on the VTM/UTM tube and swab to ensure product is acceptable and will continue to be acceptable once received at the IDOH Laboratory.
5. Be sure to properly label the specimen tube with at least two unique identifiers as well as the specimen type. Examples of identifiers include: the patient's full name, date of birth and date of collection, and MRN.
6. Special Instructions for Specimen Collection:
 - NP Swab: Insert swab through the nostril into the nasopharynx. The swab should reach a depth equal to the distance from the nostrils to the outer opening of the ear. Rotate swab several times, remove and place swab into the VTM tube.
 - OP Swab: Insert swab into the posterior pharynx and tonsillar areas. Rub swab over both tonsillar pillars and posterior oropharynx and avoid touching the tongue, teeth, and gums. Place swab, tip first, into the transport tube provided.
 - Conjunctival Swab: Gently pull down the lower eyelid of the patient's affected eye to expose the conjunctival tissues that line the inside of the eyelid and cover the white part of the eye. Gently swab the conjunctiva by rotating the swab over the infected area 2-3 times [avoid touching the cornea (surface of the eye)]. If both eyes are

Authorization Note:

Individuals who are under aggregate or individual monitoring for H5N1 are considered pre-authorized.

affected, repeat these procedures on the other eyelid, using a separate new swab. Place the conjunctival swab specimens (or both swabs, one for each eye), into the same virus-specific tube containing sterile viral transport medium (VTM) or UTM. Cut the excess swab handle to fit the VTM/UTM vial and reattach the cap security.

- Conjunctival swabs must be accompanied by a NP swab in VTM/UTM and/or nasal swab combined with an oropharyngeal swab in VTM/ UTM.
 - The other specimen types in VTM/UTM are also acceptable: Nasal swab, oropharyngeal (OP) swab, one nasal and one OP swab may be combined. Patients with severe respiratory disease also should have lower respiratory tract specimens (e.g., an endotracheal aspirate or bronchoalveolar lavage fluid) collected, if possible. For severely ill persons, multiple respiratory tract specimens from different sites should be obtained to increase the potential for HPAI A(H5N1) virus detection.
7. After collection, all specimens should be stored at refrigerator temperature (2-8°C) until shipped. **Do not** store in a -20°C freezer and **avoid freeze-thaw cycles**, both of which are lethal to the virus. Specimens must be received at the lab refrigerated within 3 days of collection if stored at a refrigerated temperature. If a specimen will not be received at the IDOH Laboratory within 3 business days, it may be frozen at -70°C. The specimen must be shipped in an insulated shipper on dry ice and arrive at the IDOH Laboratory frozen.

Specimens can be submitted to the IDOH Laboratory by using the virology form in LimsNet. To get a LimsNet account established at your facility for electronic submission and results reporting, call the help desk at (888)-535-0011 or email to LimsAppSupport@health.in.gov.

Shipping Instructions

1. Wrap the labeled specimen container with absorbent material and place in a biohazard 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 two compartments, place the paperwork in a separate Ziplock bag.
3. Place the specimen(s) in a Styrofoam container with sufficient cold packs to maintain 2-8°C during shipment.
4. Ship or transport by courier (**contact your field epidemiologist to help arrange courier transport**), ensure the box is compliant with DOT and IATA regulations. Ship to:

**Indiana Department of Health Laboratory
ATTN: Virology Laboratory
550 W. 16th Street, Suite B
Indianapolis, IN 46202**

Reporting and Turn-Around-Time

PCR results will be available within 1-2 business days.

