

**Illinois Department of Public Health  
Division of Laboratories**

**Instructions for Influenza Virus Specimen Submission**

This document is intended to assist you with the collection and shipping of specimens for influenza testing. **Please note, however, the Department has been provided PCR testing materials from the U.S. Centers for Disease Control and Prevention (CDC) for surveillance, rather than diagnostic testing. Influenza testing performed for inpatient and outpatient clinical care, including PCR testing, should be obtained at clinical and hospital laboratories.** For the most current information on influenza testing and reporting guidance go to [http://www.idph.state.il.us/flu/Influenza\\_interimTestingReportingGuidance091010.pdf](http://www.idph.state.il.us/flu/Influenza_interimTestingReportingGuidance091010.pdf) . A list of laboratories which provide PCR-based influenza testing can also be found at the above Internet link.

**Influenza Testing at the Department's Division of Laboratories**

Only the following specimens shall be sent to IDPH for influenza testing. (Note: These criteria do not apply to Department designated influenza sentinel surveillance providers, who will receive separate instructions regarding specimen submission.)

1. Specimens that are approved by the local health department on a case-by-case basis (e.g., for outbreak management in a congregate facility, post-mortem evaluation, cases of suspected animal to human transmission of influenza virus).
2. Specimens that cannot be subtyped (e.g., PCR testing is performed and is negative for currently circulating strains of H1 and H3). Note: the 2009 H1N1 influenza virus is not considered novel, but is regarded as another circulating strain.

All submissions to Department laboratories for influenza testing require pre-approval from the local health department and the use of the "Request for Respiratory/Influenza Testing" form, available at [http://www.idph.state.il.us/about/laboratories/manual/app\\_L.pdf](http://www.idph.state.il.us/about/laboratories/manual/app_L.pdf) .

**Acceptable Respiratory Specimens**

There are two CDC/FDA-cleared PCR test kits used by the Department's Division of Laboratories.

1. One is for influenza B and the H1 and H3 strains of influenza A. which have been in circulation for many years. **The only specimens that are acceptable for this kit are nasopharyngeal swabs and nasal swabs.** All other specimens will be reported as "unsatisfactory" and not tested by this kit.
2. The other kit is specifically for the 2009 H1N1 influenza virus. The permissible specimens for this kit are: nasopharyngeal swabs, nasal swabs, nasal aspirates, nasal washes, dual nasopharyngeal/throat swabs, bronchoalveolar lavages (BAL), tracheal aspirates, bronchial washes, and viral cultures.

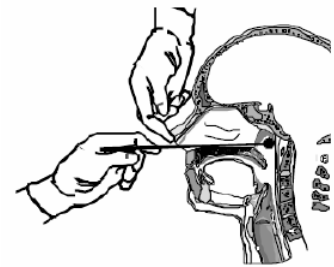
If any specimen types other than the ones listed above are submitted (e.g., sputum or tissue), they will be reported as "unsatisfactory" and not tested. **Bear in mind, nasopharyngeal or nasal swabs must be submitted if testing is to be performed by both test kits.** Otherwise, limited or no testing will be performed.

**Swabs**

Swab 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. Specimens collected with swabs made of calcium alginate are not acceptable. The swab specimen collection vials should contain 1mL-3mL of viral transport medium (VTM). Store VTM as recommended by the manufacturer, and allow it to come to room temperature before use.

## Instructions for Nasopharyngeal Swab Collection

1. Collect nasopharyngeal swabs by inserting a flexible swab through each nostril deeply into the nasopharynx (aiming toward the ear). Rotate, remove and place the swab in a tube of transport medium. Break the shaft. Close tightly.
2. Label the specimen vial with the patient's name and collection date.  
**Refrigerate immediately.** Complete all the information on the "Request for Respiratory/Influenza Testing" requisition form.  
**Be sure to include the Authorization Code, obtained from the local health department, in the appropriate place (upper left-hand corner of the form).**



## Instructions for Specimen Transport

1. Ship specimens within 24 hours of collection. Avoid shipping specimens over weekends and holidays.
2. **Messenger/Courier by ground transport:** Wrap specimen(s) individually in absorbent material. Place wrapped specimen(s) into a biohazard bag and seal securely. Place the test requisition(s) in the outside pouch of the biohazard bag. Place the sealed bag with the test requisition(s) inside the shipping container, **add cold packs**. The shipping container must be rigid, such as a cooler, and labeled with the UN 3373 Biological Substance Category B marking. Close securely.
3. **Commercial carrier by ground/air transport:** Wrap specimen(s) individually in absorbent material. Place the wrapped specimen(s) inside a biohazard- labeled 95 kPa bag and seal following the instructions on the bag. Place the test requisition(s) in the outside pouch of the 95 kPa bag. Place the sealed 95 kPa bag and completed requisition(s) inside the outer shipping container, **add cold packs** and close securely. If testing at the Department has been approved (see section above), label the outer shipping container with the appropriate Illinois Department of Public Health laboratory address. Complete the return address section to include the name of the person shipping the package, business name and address, and a business phone number. The shipping container must include the UN 3373 Biological Substance Category B marking.
4. Ship specimens by the fastest delivery method possible. This can be accomplished by use of a local courier or commercial shipping corporations. If approved for testing at the Department (see section above), ship to the attention of the Molecular Diagnostics Lab at the closest Department laboratory (see below).
5. **Note: The instructions accompanying both CDC/FDA-cleared influenza testing kits specify that specimens must be maintained at 2°C-8°C at all times following collection, and that testing must be performed within 72 hours of collection.** Consequently, specimens cannot be collected on Friday and shipped on Monday; and care must be taken with holidays. While shipping on Thursdays is usually OK, sometimes even overnight packages are not received until the second day, and the laboratory is not open on Saturday. If specimens are brought to the lab by courier, they still need to be on ice packs. **Any specimens that have not been maintained at the proper temperature, or are more than three days old when received, will be reported as "unsatisfactory" and not tested.**

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Note: Shipping containers will not be returned.