Criteria for Submitting Specimens for Influenza & Other Respiratory Virus PCR Testing to the State of Connecticut Department of Public Health Laboratory

Updated 10/03/2016:
To monitor circulating influenza strains throughout the season, rapidly identify novel strains, and determine the effectiveness of this season’s vaccines, the State of Connecticut Department of Public Health Laboratory provides testing of specimens obtained from select patients. For the 2016-17 influenza season, please submit respiratory specimens obtained from the following patients who present with influenza-like illness (ILI: fever >37.8°C [100°F] AND cough or sore throat), regardless of rapid flu testing status (positive, negative, not done).

1. All hospitalized patients with ILI (request influenza testing),
2. All patients with ILI and recent close exposure to swine, sick poultry at farms and agricultural settings, or migratory birds (request influenza testing, note exposure to swine, poultry, or other birds);
3. All patients with pneumonia and/or Acute Respiratory Distress Syndrome (ARDS) developing within 17 days of travel to Southeast Asia or within 14 days of travel in or near the Arabian Peninsula, contact the DPH Epidemiology Program at 860-509-7994 regarding possible avian flu or Middle East Respiratory Syndrome Coronavirus [MERS-CoV] testing (provide travel history);
4. Selected non-hospitalized patients with ILI including patients of ILI network (ILINet) providers, as well as patients associated with outbreaks in long-term care facilities or schools or severe respiratory illness with or without fever in children, contact the DPH Epidemiology Program at 860-509-7994 to discuss possible respiratory viral panel testing for enterovirus and other respiratory viruses.

The sensitivity of rapid influenza diagnostic tests (RIDTs) and direct immunofluorescence assays (DFAs) are lower than real-time reverse transcriptase polymerase chain reaction (rRT-PCR) tests and viral culture (http://www.cdc.gov/flu/professionals/diagnosisclinician_guidance_ridt.htm). A negative RIDT or DFA result does not rule out influenza virus infection. Moreover, these tests cannot distinguish between influenza A subtypes, such as the 2009 H1N1 or H3N2 influenza A viruses.

Please also note that federal guidelines requiring specimens to be transported on ice or with ice packs remain in effect. For questions or assistance regarding collection and handling of specimens from patients that meet testing criteria, please call the DPH Virology Laboratory at 860-920-6662. Influenza PCR specimen collection kits can be ordered by calling Support Services at 860-920-6674 or 860-920-6675. See additional specimen collection and shipping instructions on the following page.

The entire Clinical Test Requisition form (OL-9B) must be completed in order for the State Public Health Laboratory to accept specimens for influenza testing. This includes providing travel history (section 1) and the reasons for testing including ILI symptoms, hospitalization, outbreak association, close exposure to swine, poultry or other birds - which must be written in “Comments” (section 3).

The OL-9B form is available at:

Note: These criteria are subject to change based on the evolving nature of the influenza season and the presence of emerging respiratory viruses.
Influenza PCR Testing Kit Collection Instructions

1. The contents of the kit include:
   a. M4RT viral transport tube
   b. Sterile polyester–tipped sampling swab (Note: specimens collected using Calcium alginate swabs or swabs with wooden shafts are unacceptable for testing)
   c. Cold pack (place in freezer to insure that it is ready for future use)
   d. Specimen collection instructions
   e. For specimens being mailed: Category B Infectious Substance mailer

2. Complete all required fields on the Clinical Test Requisition form (OL-9B).
   Include reason for testing, symptoms, travel history and rapid flu test results on the form.

3. Label the collection container with:
   a. Patient name
   b. Date of birth
   c. Date of collection
   d. Specimen source
      Preferred specimen sources include:
      o Nasopharyngeal or oropharyngeal swab submitted in viral transport media
      o Respiratory specimens such as bronchoalveolar lavage, tracheal aspirates, sputum, nasopharyngeal or oropharyngeal aspirates or washes. Submit at least 2 mL liquid specimen in a sterile screw capped container.

4. Obtain an appropriate respiratory specimen from the patient using the proper collection technique.

5. For nasopharyngeal or oropharyngeal specimens:
   a. Remove the screw cap top from the labeled M4RT viral transport tube.
   b. Insert the swab into the labeled M4RT tube until the swab touches the bottom.
   c. Break or cut off any excess swab handle and discard.
   d. Replace the cap on the labeled M4RT viral transport tube and firmly tighten.
   e. Place the labeled M4RT tube in the sealable biohazard bag containing the absorbent pad.
   f. Seal the top of the plastic bag.
   g. Place the completed OL-9B form in the outer pocket of the biohazard specimen bag.

6. For transport via courier:
   a. Submit the specimen in the sealed biohazard bag containing the absorbent pad.
   b. Place this bag inside a rigid outer container with ice pack.

7. For transport via USPS mail:
   a. Insert the biohazard bag into white Tyvek bag and seal.
   b. Place the ice pack, white Tyvek bag and completed OL-9B form into the fiberboard box.
   c. Seal the fiberboard box for shipping. Be sure to include submitter’s telephone number on outer box.
   d. Ship the box to the DPH Laboratory via mail after attaching proper postage.