Enhanced Influenza Surveillance for County Health Departments, Intensive Care Unit Cases
Version 3.0           September 2, 2019

Note: This document may become outdated as situations change. Documents on this topic dated after September 2, 2019, supersede this one. This document will be posted on the Bureau of Epidemiology website at FloridaHealth.gov/FloridaFlu.

I. Summary:
   • Seasonal influenza activity patterns are unpredictable. Influenza seasons can vary dramatically in terms of timing, severity, and duration of the season. Maintaining a robust surveillance program to identify when and where influenza viruses are circulating and what populations are impacted is crucial to the Florida Department of Health.
   • To assist in identifying any unusually severe presentations of influenza and assessing season severity, the Florida Department of Health is requesting hospitals report patients meeting all three of the following criteria:
     1) Admitted to the intensive care unit (ICU)
     2) Laboratory-confirmed influenza (including rapid antigen tests)
     3) Between 0–64 years of age
   • Surveillance goals: assess viral strains associated with severe influenza presentations, assess vaccination administration in populations at high risk for severe complications due to infection, and assess antiviral administration and timing according to current guidance. This information will be used to inform state response strategies and assess policies and gaps with implementing current guidelines.

II. Actions:
   • Investigate and report in Merlin all persons admitted to the ICU with laboratory-confirmed influenza (including rapid antigen tests) who are 0–64 years of age. Add a case record in Merlin within 48 business hours of county health department (CHD) notification—see Section V.
     o Report cases in Merlin under the disease code Influenza, ICU (Special Project) – 48710
   • Coordinate specimen submission for pre-screened positive specimens to the Florida Department of Health Bureau of Public Health Laboratories (BPHL) for confirmation and additional testing—see Section IV.
     o Rapid influenza diagnostic tests can be used to identify influenza but have sub-optimal sensitivity. A negative rapid test cannot rule out influenza. Negative tests may require further testing for influenza by PCR or viral culture.
   • A data collection tool is available to support this activity:
     o Enhanced Influenza Surveillance Form for CHDs
     o The form can be found on the Surveillance and Investigation Guidance page at FloridaHealth.gov/GSI
III. Public Health Investigation

- Collect medical and laboratory records from the hospital.
- Complete Merlin case data entry. Merlin data entry is required and will be considered the record of file. Completion of the paper Enhanced Influenza Surveillance Form for CHDs (FloridaHealth.gov/GSI) is optional and provided only as a tool to aid in Merlin data entry (see Section V).
- Patient or proxy interviews are not recommended.
- For missing data elements, coordinate with hospital health care providers to obtain the information.

IV. Collection and Submission of Specimens for Further Testing at BPHL

**Coordinate specimen submission to BPHL for testing.**

- Ideally, hospitals will conduct influenza PCR testing prior to submitting specimens for testing to BPHL. Rapid testing results performed by hospitals for influenza are also accepted if PCR testing cannot be performed.
- This should be handled like all other reportable diseases where the Florida Department of Health requests or requires that specimens be forwarded to BPHL for testing.

**Specimen Collection**

- **Original specimens are preferred when available.**
- When influenza is detected in a clinical laboratory by rapid testing methods, please send an aliquot (1–2 ml) of the original swab eluate in viral transport medium (VTM). Place the swab eluate in VTM before sending to BPHL. BPHL is required by the U.S. Food and Drug Administration-approved PCR protocol to only test original specimens that are in VTM. Rapid test fluid can interfere with PCR. **Do not send the rapid test reagent.**
- If collecting a new specimen, collect nasopharyngeal (NP) specimen with a viral swab and place in VTM from patients with laboratory-confirmed influenza (including rapid antigen tests).
- NP swabs (not nose swabs) are preferred. There must be an adequate volume of the specimen, or the test will not be valid.
- If an NP swab is unavailable, these other respiratory specimens are also acceptable:
  - Nasopharyngeal aspirates
  - Bronchial wash
  - Sputum (not saliva)
  - Oropharyngeal (throat)
- **Swabs must be placed in 2–3 ml of VTM immediately after collection.**
- **Refrigerate immediately; do not freeze.**
- Collect specimens from patients within three days of illness onset.

**Specimen Shipping**

- Hospitals should contact the CHD prior to submitting specimens to BPHL for testing.
- Keep specimens refrigerated at 4°C (not frozen) and ship on gel ice no later than 48 hours post collection.
• Weekend specimen submission should not occur. No weekend testing will be performed.

If you have any questions, please reach out to BPHL directly:

**Shipping Specimens to BPHL-Tampa**

Hours: Mon–Fri 8:00 a.m. to 5:00 p.m.
Phone number: 813-233-2203
Shipping address: Attn: Virology
Bureau of Public Health Laboratories-Tampa
3602 Spectrum Blvd.
Tampa, FL 33612

**Shipping Specimens to BPHL-Jacksonville**

Hours: Mon–Fri 8:00 a.m. to 5:00 p.m.
Phone number: 904-791-1540
Shipping address: Attn: Virology
Bureau of Public Health Laboratories
1217 N. Pearl St.
Jacksonville, FL 32202

V. **Reporting Influenza-Associated ICU Cases in Merlin**

• Cases should be entered **within 48 business hours of CHD notification**.
• DX status should be listed as **confirmed** as long as there is any laboratory evidence (including positive rapid antigen tests) of influenza infection.

Please attach all laboratory results to the Merlin case.
• Enter the case as you would any other reportable disease. For disease code, select **Influenza, ICU (Special Project) – 48710**
• Fill out the **basic case data** as you would for any other reportable disease.

• **Laboratory results**
  o Enter laboratory results received from the hospital.
  o Following receipt of BPHL testing, attach laboratory results to the case.

• Attach documents to the **Additional Info section**, under the “documents” tab. Please also attach any of the following information that you may have collected as part of this investigation:
  o Medical records
  o Paper laboratory results from the hospital
  o Enhanced Influenza Surveillance Form for CHDs (completion of the paper form is optional and provided only as a tool to assist with required Merlin data entry)

• Complete the questions on the **extended data screen** as you would for any other reportable disease.

• When you’ve completed your investigation, **report the case**.