### **SYMPTOMS**

Influenza is characterized by sudden and intense onset of symptoms including:

- Fever (not everyone with flu will have a fever)
- Chills
- Cough
- · Sore throat
- · Runny or stuffy nose
- Muscle or body aches
- Headache
- Fatigue and
- Sometimes vomiting and diarrhea (more common in children than adults)

#### CONTROL MEASURES

- Get a flu vaccine Everyone 6 months and older should get an annual flu vaccine, people with certain chronic health conditions like asthma, diabetes or heart and lung disease, and people 65 years and older.
- Avoid close contact with people who are sick.
- While sick, limit contact with others as much as possible to keep from infecting them.
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw
  it in the trash after you use it and wash your hands.
- Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- Clean and disinfect surfaces and objects that may be contaminated with germs that can cause respiratory illnesses like flu.
- CDC recommends that you (or your child) stay home for at least 24 hours after fever isgone except to get medical care or for other necessities. Fever should be gone without the use of a fever-reducing medicine.



# INFECTIOUS AGENT Influenza Viruses

#### **TRANSMISSION**

Person-to-person transmission via large-particle respiratory droplet transmission (e.g., when an infected person coughs or sneezes near a person). Other possible routes of influenza transmission are mucosal contamination from hands touching contaminated surfaces.

#### **INCUBATION PERIOD**

Typically, 1-4 days Range, 1-7 days

## **CASE DEFINITIONS**

### **CLINICAL CRITERIA**

#### **Clinical Description**

Influenza is an acute viral disease of the respiratory tract characterized by abrupt onset of fever, myalgia, headache, severe malaise, nonproductive cough, sore throat and rhinitis. Without laboratory confirmation, influenza is referred to as influenza-like illness (ILI).

#### Clinical Case Definition

Without laboratory confirmation, the ILI case definition used by CDC for national surveillance is fever (temperature of 100 °F or greater) and cough and/or sore throat. Influenza is commonly recognized by epidemiologic characteristics. Influenza illness may be indistinguishable from other viral respiratory illnesses based on symptoms alone.

### **CONFIRMED CASE**

Laboratory-confirmed influenza is diagnosed through testing performed using:

- Reverse transcriptase polymerase chain reaction (RT-PCR);
- · Nucleic acid detection; or
- Viral culture

#### LABORATORY CRITERIA

#### **Laboratory Criteria for Diagnosis**

- virus isolation (standard methods and rapid culture assays);
- molecular detection (RT-PCR);
- detection of viral antigens (enzyme immunoassays [EIA] and immunoflourescence [DFA/IFA] testing);
- detection by commerically available rapid influenza diagnostic tests, and less frequently,
- · use of immunohistochemistry [IHC]; and
- serologic testing using hemagglutination inhibition or microneutralization.

## SPECIMEN COLLECTION FOR LABORATORY TESTING

Test Name	Specimens to take	Timing for specimen collection	Transport requirements
Culture/viral isolation	Nasal wash, nasopharyngeal aspirates, nasal/throat swabs, transtracheal aspirate, bronchoalveolar lavage Serum	Within 72 hours of onset of illness As soon as possible, within 6 months of birth	Transport specimens at  4°C if tests are to be performed within 72 hours; otherwise, freeze at -70°C until tests can be performed.  Maintain at 4°C and ship on ice
Antigen detection and RT-PCR			



## INFLUENZA-ASSOCIATED MORTALITY AND REPORTING

#### Criteria for Reporting a Flu-related Deaths

- An influenza-related death is defined for surveillance purposes as a death resulting from a clinically
  compatible illness that was confirmed to be influenza by an appropriate molecular or rapid diagnostic test
  or epidemiologically linked to a positive diagnostic molecular test. There should be no period of complete
  recovery between the illness and death. Influenza-associated deaths for children <18 years of age or
  pregnant or postpartum (within 3 months of delivery) should be reported.</li>
- An influenza-associated death does not have to be the leading cause of death listed and can be a
  supplemental cause of death. If there is a positive influenza test obtained and no complete recovery period
  before the time of death, it should be considered flu-related, reported to KDPH, and entered into REDCap.
- Co-infection with COVID-19 is possible.
- All pediatric or pregnant or postpartum flu-related deaths should be reported for the MMWR week in which the test results were determined or, if no test was performed, the date death occurred.

#### **Guidelines for Reporting Flu-related Deaths**

- Upon notification of an influenza-related death, the notification recipient should notify partners to include the Regional Epidemiologist/LHD Disease Investigation Nurse covering the region involved in the outbreak and the KDPH Flu Surveillance Team. (NOTE: This communication is vital to avoid duplication efforts.)
- The Regional Epidemiologist/LHD Disease Investigation Nurse should collect the following records from the hospital:
  - Admission Summary
  - History and physical
  - Lab report indication positive flu results
  - Discharge Summary
  - Autopsy Results (if applicable)
- If the patient died at home, try to find out if the patient had been diagnosed with influenza by a healthcare provider prior to death and, if possible, the contact information for that provider.
- The patient's medical information should be sent to the KDPH Flu Surveillance Team via encrypted email to <u>FluReporting@ky.gov</u>
- The Regional Epi/LHD Disease Investigation Nurse will then conduct a traditional influenza death investigation to confirm that it is, in fact, a flu-related death.
- The Regional Epi/LHD Disease Investigation Nurse will enter the information for the flu-related death into the Influenza-Associated Mortality REDCap project: Influenza-Associated Mortality | REDCap (ky.gov)
- KDPH will report pediatric flu-related deaths to CDC via SAMS.
- Do not enter into REDCap if investigation determines that it is not flu-related.



## LONG-TERM CARE FACILITY OUTBREAKS AND REPORTING

#### Criteria for Reporting Influenza Outbreaks

- An influenza outbreak is defined when two cases, who shared the same unit or the same exposure, reported as testing positive for influenza and identified within 72 hours of each other (i.e., resident or staff tests positive for influenza by a lab test such as a rapid influenza test, culture, real-time PCR, DFA, or IFA).
- Although rapid antigen tests (RIDT) are not considered "lab-confirmed" by the CDC, they are acceptable when determining if an outbreak is occurring.
- If a long-term care facility is amid a large, ongoing outbreak and makes the decision to stop testing, any new cases will be considered epi-linked and should be counted.
- Outbreaks should be considered closed when no new cases of influenza or ILI have been detected for seven
  consecutive days. Report a new outbreak if your facility meets the above listed criteria again during the
  influenza season and a minimum of seven days has passed.

#### **Guidelines for Reporting LTCF Outbreaks**

- When receiving notification of an influenza outbreak in a long-term care setting, the notification recipient should notify partners to include Regional Infection Preventionists (RIP), Regional Epidemiologist/LHD Disease Investigation Nurse covering the region involved in the outbreak and the KDPH Flu Surveillance Team. (NOTE: This communication is vital to avoid duplication efforts.)
- The Regional Epi/LHD Disease Investigation Nurse will contact the KDPH Flu Surveillance Team to obtain a flu outbreak investigation number.
- The RIP makes contact with the LTCF and will assist with infection control education and mitigation efforts to stop the outbreak.
- The Regional Epi/LHD Disease Investigation Nurse will work with the LTCF to conduct the outbreak investigation and report to the KDPH Influenza Surveillance Team.
- Enter the LTCF outbreak into the REDCap project: 2023 DEHP Outbreak Management | REDCap (ky.gov)

#### What to Report

- · Facility name and contact
- Facility population (e.g., resident enrollment and number of staff employed)
- # of total and affected units/wings in facility
- # of residents and staff who have received the current season's influenza vaccine
- # of residents and staff with ILI and treatment that has been given, if applicable
- Earliest illness onset date and latest illness onset date
- # of residents and staff who have tested positive for influenza and the testing method
- # of residents and staff who are hospitalized
- · Mitigation measures already taken
- Promptly report all influenza-associated deaths within 24 hours of notification by phone or email to the KDPH Influenza Surveillance Team

