

Influenza and Other Non-COVID-19 Respiratory Illness Outbreak Quicksheet



December 2023

For management of COVID-19 outbreaks, please do not use this document, refer to [CDPH and Centers for Disease Control \(CDC\) COVID-19 guidance](#). For the management of respiratory virus outbreaks in skilled nursing facilities, please refer to the [CDPH prevention and control guidance](#).

Non-COVID-19 Respiratory Illness Outbreaks of Concern

- Outbreaks in high-risk settings, e.g., skilled nursing facilities, long-term care facilities (LTCFs) and other congregate settings with vulnerable populations.
- Outbreaks associated with hospitalizations or fatalities.
- Outbreaks assessed as having public health importance such as outbreaks associated with recent swine exposure, recent travel to an area where novel influenza is circulating, or contact with a confirmed case of variant or novel influenza. For outbreaks involving swine exposure, please see the [Variant Influenza Quicksheet](#).
- If the source case of the outbreak has recent travel to a country associated with MERS or novel influenza (e.g., H7N9), consult with public health regarding expedited testing and outbreak control measures. See the [MERS](#) or [novel influenza](#) quicksheets for more information.
- All outbreaks are reportable to the local health department. Outbreaks in licensed healthcare facilities are also reportable to the applicable [CDPH Licensing & Certification district office](#).

Infection Prevention and Control Measures for Influenza Outbreaks in High-Risk Settings

- Ensure that residents and healthcare personnel are up-to-date on all recommended vaccinations to prevent morbidity and mortality from respiratory infections.
- Initiate prompt testing and treatment of COVID-19 and influenza to reduce the risk of severe illness, hospitalization, and death.
- Implement source control masking with well-fitting facemasks or respirators that cover a person's mouth and nose to reduce respiratory virus transmission. For additional details, see the [CDPH Guidance for Face Coverings as Source Control in Healthcare Settings](#).
- Implement appropriate Transmission-Based Precautions; for influenza, this includes Droplet Precautions and Standard Precautions.
- Initiate antiviral treatment for confirmed cases of influenza per [CDC guidance](#) and [chemoprophylaxis](#) for asymptomatic residents.
- Place ill residents with laboratory-confirmed influenza in a single bed room. If a single bed room is not available, cohort residents ill with lab-confirmed influenza: maintain distance of ≥ 6 feet between heads of beds, and treat each bed space as a separate room (change gloves and perform hand hygiene between contacts with each patient).
- Have residents with influenza stay in their own rooms; serve meals in rooms and restrict from group activities.
- For more detailed guidance, see the [CDPH Recommendations for Prevention and Control of COVID-19, Influenza, and Other Respiratory Viral Infections in California Skilled Nursing Facilities](#).

Influenza Testing Information

- [Molecular assays](#), including rapid molecular assays, reverse transcription polymerase chain reaction (RT-PCR) and other [nucleic acid detection tests](#), have high sensitivity and high specificity and are strongly recommended for influenza testing of hospitalized patients, fatal cases, and to confirm outbreaks.
- [Immunofluorescence assays](#) are antigen detection assays that generally require use of a fluorescent microscope to produce results in ~2–4 hours with moderate sensitivity and high specificity.
- [Rapid influenza diagnostic tests \(RIDTs\)](#) are antigen detection assays that can detect influenza virus antigens in 10–15 minutes with ~50–70% sensitivity and 90–95% specificity.
- Because the sensitivity of RIDTs vary widely, RIDT results should not be relied upon for the diagnosis of hospitalized patients, fatal cases, or to confirm an outbreak. Rather, positive or negative RIDTs in these situations should be confirmed using a molecular assay.
- Wherever possible, when investigating a respiratory outbreak of unknown etiology, persons with respiratory symptoms should be tested for both influenza and SARS-CoV-2. Wherever possible, use multiplex influenza A and B and SARS-CoV-2 tests. If point-of-care (POC) multiplex antigen testing is done, confirmatory PCR testing should be done to confirm negative results. If influenza and SARS-CoV-2 tests are negative, obtain a full respiratory virus panel.

Additional influenza testing information for clinicians can be found on the CDC website:

- [Information on influenza testing](#)
- [Overview of influenza testing methods](#)

Influenza Specimen Collection

- Laboratory testing for influenza (including molecular assays) is widely available in

commercial labs, as well as many local public health labs.

- Specimen should be collected within 24–72 hours of symptom onset and no later than 5 days after symptom onset.
- Suitable upper respiratory samples include nasal, nasopharyngeal (NP) or throat swabs, or NP or nasal washes or aspirates.
- For patients hospitalized with pneumonia, specimens from the lower respiratory tract should also be collected, if possible. Suitable lower respiratory tract samples include bronchioalveolar lavage, bronchial wash, tracheal aspirate, and lung tissue.
- Swab specimens should be collected using swabs with synthetic tips (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.
- For testing in a public health lab:
 - Place specimen swab in specimen collection vial containing 2–3ml of viral transport media (VTM) or universal transport media (UTM).
 - Specimens should be kept refrigerated at 4°C and shipped on cold packs if they can be received by the lab within 3 days of collection date.
 - If samples cannot be received by the laboratory within 3 days of the collection date, they should be frozen at -70°C or below and shipped on dry ice.

Submitting Specimens to CDPH VRDL

- Use the [General Purpose Specimen Submittal Form](#);
- Complete **ONE form PER SAMPLE** online and then print out each filled-in form to include with specimen shipment to the CDPH Viral and Rickettsial Disease Laboratory (VRDL).

Recommendations for Non-Influenza, Non-COVID-19 Respiratory Illness Outbreaks in High-Risk Settings

- Promote respiratory hygiene/cough etiquette and hand hygiene for all residents and staff.
- Enhance environmental cleaning of high-touch surfaces and common areas.
- For guidance on Transmission-Based Precautions see the [CDPH Recommendations for Prevention and Control of COVID-19, Influenza, and Other Respiratory Viral Infections in California Skilled Nursing Facilities](#).
- Antiviral agents recommended for influenza are not effective against other respiratory viruses.

Testing for Other Respiratory Pathogens

- Other viral and bacterial pathogens can cause outbreaks of respiratory illness. If influenza and SARS-CoV-2 testing by a molecular assay are negative, or if the clinical presentation differs from influenza and COVID-19, other causes should be explored. See the [CDC guidance for unexplained respiratory outbreaks](#).
- Viral pathogens to consider testing for include adenovirus, respiratory syncytial virus (RSV), parainfluenza, rhinovirus, enterovirus, human metapneumovirus, and non-COVID-19 coronaviruses.

- Bacterial pathogens to consider testing for include *Bordetella pertussis*, *Streptococcus pneumoniae*, *Mycoplasma pneumoniae*, *Chlamydia pneumoniae*, and *Legionella spp.*

Additional Resources on Influenza

- [CDPH Recommendations for Prevention and Control of COVID-19, Influenza, and Other Respiratory Viral Infections in California Skilled Nursing Facilities](#)
- [CDC recommendations for influenza vaccination, 2023–2024](#)
- [IDSA Clinical Practice Guidelines for Diagnosis, Treatment, Chemoprophylaxis and Institutional Outbreak Management of Seasonal Influenza](#)
- [Additional CDC information on antiviral drugs for influenza treatment and prophylaxis](#)

For additional questions or assistance, contact:

- CDPH Healthcare-Associated Infections Program at HAIProgram@cdph.ca.gov or 510-412-6060 with questions about licensed healthcare facility outbreaks.
- CDPH Immunization Branch at 510-620-3767 for questions about outbreaks in other settings.
- [CDPH Licensing & Certification District Office](#)

Respiratory Outbreak Definitions

Respiratory Outbreaks in Institutions/Congregate Settings:

Institutions/congregate settings are defined as:

- A. Acute health care settings defined as general acute care hospital (GACH) or acute psychiatric hospital (APH);
- B. Long-term health care settings defined here as facilities licensed by the California Department of Public Health (CDPH), Licensing and Certification. These include skilled nursing facility (SNF), intermediate care facility (ICF), intermediate care facility-developmentally disabled (ICF-DD), intermediate care facility-developmentally disabled habilitative (ICF-DDH), intermediate care facility-developmentally disabled nursing (ICF-DDN), congregate living health facility (CLHF) and pediatric day health and respite care facility (PDHRCF); or
- C. Congregate settings where people are admitted, residing, or incarcerated overnight defined as independent living facility, assisted living facility, prison, jail, university dormitory, shelters, overnight camps, drug and alcohol rehabilitation centers, etc.

Respiratory outbreaks in institutions/congregate settings are defined as:

- Influenza outbreak: At least one case of laboratory-confirmed influenza in the setting of a cluster (≥ 2 cases) of influenza-like illness (ILI)* within a 72-hour period;
- Non-influenza and non-COVID-19, respiratory outbreak of known etiology: At least one case of a laboratory-confirmed respiratory pathogen, other than influenza or SARS-CoV-2, in the setting of a cluster (≥ 2 cases) of acute respiratory illness (ARI)[†] within a 72-hour period; or
- Respiratory outbreak of unknown etiology: A sudden increase of ARI cases over the normal background rate in the absence of a known etiology.

*ILI is defined as fever ($\geq 100^\circ\text{F}$ or 37.8°C) plus cough and/or sore throat, in the absence of a known cause other than influenza. Persons with ILI often have fever or feverishness with cough, chills, headache, myalgia, sore throat, or runny nose. Some persons, such as the elderly, children with neuromuscular disorders, and young infants may have atypical clinical presentations, including the absence of fever. In the context of a multi-pathogen outbreak that includes influenza, patients with ILI symptoms who have tested positive for another respiratory pathogen in the absence of an influenza negative test result may be considered to meet the ILI case definition; however, influenza testing is recommended in this situation because the results are helpful for infection control and clinical decision-making.

[†] ARI is defined as an illness characterized by any two of the following: fever, cough, rhinorrhea (runny nose) or nasal congestion, sore throat, or muscle aches.

NOTE: Facilities should also report outbreaks to their respective state licensing authority, if applicable (e.g., the [CDPH Licensing and Certification District Office](#) or the California Department of Social Services' Community Care Licensing Division Adult and Senior Care Program [Regional Office](#)).

Respiratory Outbreaks in Community Settings

Respiratory outbreaks assessed as having public health importance occurring in non-congregate/non-institutional settings (as defined above) (e.g., case(s) that have recent exposure to swine, recent travel to an area where novel influenza is circulating, or contact with a confirmed case of variant or novel influenza; or outbreaks associated with hospitalizations or fatalities).

Any Respiratory Disease Clusters Due To A Reportable Disease (Title 17, CCR 2500)

For the following diseases; plague, anthrax, Q-fever, hantavirus, brucellosis and psittacosis:

Any respiratory disease cluster (defined as ≥ 2 cases of ARI occurring within the incubation period of the disease in persons who are in proximity to the same infectious source) with laboratory confirmation in at least ONE of those cases.