

Influenza, COVID-19 and Respiratory Illness Outbreak Quicksheet for Non-Healthcare Settings



November 2024

For skilled nursing facilities, please refer to the [Recommendations for Prevention and Control of COVID-19, Influenza, and Other Respiratory Viral Infections in California Skilled Nursing Facilities](#).

Respiratory Illness Outbreaks of Increased Concern

- Outbreaks in high-risk settings, where there are populations at risk for severe outcomes or the risk of transmission is increased, such as assisted living facilities, shelters, correctional settings, etc.
- Outbreaks associated with hospitalizations or fatalities.
- Outbreaks assessed as having public health importance such as influenza outbreaks associated with recent swine exposure, contact with animals confirmed or suspected to have avian influenza, their environment or their raw products, or contact with a confirmed human case of variant or novel influenza.
 - For influenza outbreaks potentially involving swine exposure or novel influenza viruses, please see the [Variant Influenza Quicksheet](#).
 - For outbreaks potentially involving H5N1 avian influenza viruses, please see the [Human Avian Influenza A\(H5N1\) Quicksheet](#).

Outbreak Reporting Considerations

- All outbreaks are reportable to the local health department (LHD).
- Licensed facilities should also report outbreaks to their respective state licensing authority, if applicable (e.g., the California Department of Social Services' Community

Care Licensing Division Adult and Senior Care Program [Regional Office](#)).

- Employers must follow any local requirements in place regarding COVID-19 outbreak reporting in their jurisdiction and should consult the [Cal/OSHA COVID-19 Prevention Non-Emergency Regulations](#) for additional requirements pertaining to COVID-19 outbreaks in the workplace. LHDs may have additional, setting-specific reporting, investigation and response guidelines not described in this document.
- LHDs should report outbreaks to CDPH using CalREDIE or an alternate established process.

Infection Prevention and Control Measures for Respiratory Outbreaks in Non-Healthcare High-Risk Settings (e.g., correctional settings, assisted living)

- Encourage everyone (who lives or works in the facility) to stay up to date on all recommended immunizations, to prevent morbidity and mortality from respiratory infections. Offer immunizations onsite if feasible.
- Recommend 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 [When and Why to Wear a Mask](#) guidance.
- Promote respiratory hygiene/cough etiquette and hand hygiene for everyone at the facility.
- Enhance environmental cleaning of high-touch surfaces and common areas.
- Improve [ventilation and filtration](#).
- In high-risk people and applicable circumstances, initiate antiviral treatment per CDC guidelines. Consider [antiviral treatment](#) for confirmed and suspect cases of influenza and [chemoprophylaxis](#) for exposed individuals. For

COVID-19, consider [antiviral treatment](#) for symptomatic, high-risk individuals. Antiviral agents recommended for influenza and COVID-19 are not effective against other respiratory viruses.

- House ill people with laboratory-confirmed or suspect (if feasible) respiratory virus infections in a single-bed room if possible. If a single-bed room is not available, cohort ill people with the same lab-confirmed infection: maintain distance of ≥ 6 feet between heads of beds, change gloves, and perform hand hygiene between contacts with each person.
- Instruct ill individuals to stay in their rooms; serve meals in rooms and restrict from group activities.
- For guidance for skilled nursing facilities, see the [CDPH Recommendations for Prevention and Control of COVID-19, Influenza, and Other Respiratory Viral Infections in California Skilled Nursing Facilities](#).
- For guidance for acute care hospitals, see the [CDC Infection Control Guidance: Respiratory Viruses](#).

Types of Tests

- [Influenza molecular assays](#), including rapid molecular assays, reverse transcription polymerase chain reaction (RT-PCR) and other [nucleic acid detection tests](#), and SARS-CoV-2 [nucleic acid amplification tests \(NAATs\)](#) have high sensitivity and high specificity and are strongly recommended for testing of hospitalized patients, fatal cases, and to confirm outbreaks.
- Influenza [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 \(RIDTs\)](#) and [COVID-19 antigen tests](#) are antigen detection assays that can detect influenza or SARS-CoV-

2 virus antigens in 15 minutes or less.

- Antigen test considerations:
 - COVID-19 antigen test sensitivity is ~55–73% and specificity is >99%.
 - Rapid influenza diagnostic tests sensitivity is ~50–70% and specificity is 90–95%.
 - Antigen test results **should not be relied upon for the diagnosis of hospitalized patients, fatal cases, or to confirm an outbreak**. In these situations, use a molecular assay to confirm positive and negative rapid influenza diagnostic tests, and to confirm negative COVID-19 antigen tests.
- 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 test information

- [Overview of influenza testing methods](#)
- [Overview of SARS-CoV-2 Testing](#)

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 at a public health lab:
 - Place specimen swab in specimen collection vial containing 2–3ml of viral transport media (VTM) or universal transport media (UTM).
 - Freeze or refrigerate specimens after collection. Ship refrigerated specimens on cold packs. Ship frozen specimens on dry ice.

Submitting Specimens to CDPH Viral and Rickettsial Disease Laboratory (VRDL)

- Specimens submitted to VRDL must be accompanied by a printed copy of the completed [General Purpose Specimen Submittal Form](#) or a form generated in the [VRDL Lab Web Portal](#).
- Complete **ONE form PER SAMPLE** online and print each filled-in form to include with the specimen shipment.

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 respiratory syncytial virus (RSV), adenovirus,

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 Prevention Resources

- [CDC Preventing Respiratory Viruses](#)

Influenza

- [CDC Seasonal Influenza Vaccine Information](#)
- [CDC Influenza Antiviral Medications Information](#)

SARS-CoV-2

- [CDPH COVID-19 Guidance by Topic](#)
- [CDPH COVID-19 Information](#)
- [CDC COVID-19 Information](#)
- [CDC Infection Control Guidance: SARS-Cov-2](#)

Skilled Nursing Facilities

- [CDPH Recommendations for Prevention and Control of COVID-19, Influenza, and Other Respiratory Viral Infections in California Skilled Nursing Facilities](#)

For additional questions or assistance, contact:

- CDPH COVID Control Branch at coronavirusclinical@cdph.ca.gov for questions about COVID-19 outbreaks in non-healthcare settings.
- CDPH Immunization Branch at VPDReport@cdph.ca.gov for questions about non-COVID-19 outbreaks in non-healthcare settings.
- CDPH Healthcare-Associated Infections Program at HAIPProgram@cdph.ca.gov or 510-412-6060 for questions about outbreaks in healthcare facilities.

CDPH Non-COVID-19 Respiratory Outbreak Definitions

Non-COVID-19 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 older persons, 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.

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, shelter, drug and alcohol rehabilitation center, etc.

Non-COVID-19 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., outbreaks associated with hospitalizations or fatalities; or case(s) that have recent exposure to swine, contact with animals confirmed or suspected to have avian influenza, their environment or their raw products, or contact with a confirmed human case of avian, variant, or novel influenza).

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

CDPH COVID Outbreak Definitions

COVID-19 outbreak definitions for healthcare settings are available at: [CORHA Investigation/Reporting Thresholds and Outbreak Definitions for COVID-19 in Healthcare Settings](#).

COVID-19 outbreak definitions for skilled nursing facilities are included in the CDPH guidance document: [Recommendations for Prevention and Control of COVID-19, Influenza, and Other Respiratory Viral Infections in California Skilled Nursing Facilities](#).

- **Residents:** ≥ 2 cases of probable or confirmed COVID-19 among residents, with epi-linkage.
- **Healthcare personnel (HCP):** ≥ 2 cases of suspect, probable or confirmed COVID-19 among HCP AND ≥ 1 case of probable or confirmed COVID-19 among residents, with epi-linkage AND no other more likely sources of exposure for at least 1 of the cases.

COVID outbreaks in non-healthcare, workplace and community settings are defined by [State Public Health Officer Order](#) and [Non-Healthcare Congregate Facilities COVID-19 Outbreak Definitions and Reporting Guidance for Local Health Departments](#) as:

- At least three COVID-19 cases* within a 7-day period among people who are epidemiologically linked in the setting, and are not known to be close contacts of each other in any other case investigation, OR
- For large settings (a facility or workplace with >100 persons present in the setting), particularly during high levels of community transmission, LHDs may determine that a higher proportion (at least 5%) of cases within a 7-day period may be sufficient for defining an outbreak, even in the absence of identifiable epidemiological linkages.