

# CDPH Viral and Rickettsial Disease Laboratory

The CDPH Viral and Rickettsial Disease Laboratory (VRDL) serves as a statewide reference laboratory offering diagnostic testing for influenza and a broad array of other respiratory pathogens. VRDL routinely performs diagnostic testing in a variety of situations, including institutional or community respiratory outbreaks, individual cases of severe respiratory illness, and outpatient cases of influenza-like illness submitted by Centers for Disease Control and Prevention (CDC) Influenza Sentinel Providers. The VRDL testing capabilities include polymerase chain reaction (PCR), strain characterization and antiviral resistance testing.

For guidance on outbreaks of respiratory illness please see the [CDPH Quicksheet on Influenza and Other Respiratory Illness Outbreaks](https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Immunization/FluAndRespiratoryIllnessOutbreakQuicksheet.pdf) at:

<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Immunization/FluAndRespiratoryIllnessOutbreakQuicksheet.pdf>

For information on [Influenza Surveillance in California](https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Influenza.aspx), please visit this site:

<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Influenza.aspx>

## Diagnostic Testing for Influenza

### Minimum Specimen Requirements

#### Respiratory Specimens

- At a minimum, collect a nasopharyngeal swab (nasopharyngeal wash or nasopharyngeal aspirate are also acceptable). Oropharyngeal (throat) swabs are acceptable, but may not have as high yield. If oropharyngeal specimens are collected, they should be accompanied by a specimen from the nasopharynx. Place the swabs in a standard container with 2-3 ml of viral transport media (VTM).
- If the patient is hospitalized with pneumonia, specimens from the lower respiratory tract (e.g., tracheal aspirate, bronchoalveolar lavage) should also be obtained.
- Swab specimens should be collected using swabs with a synthetic tip (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 PCR testing.

# Specimen Storage and Shipment

Specimens should be collected within the first 24-72 hours of onset of symptoms and no later than 5 days after onset of symptoms. The specimens should be kept refrigerated at 4°C and sent on cold packs if they can be received by the laboratory within five days of the date collected. If samples cannot be received by the laboratory within five days, they should be frozen at -70 °C or below and shipped on dry ice.

After review with the local health department, any requests for diagnostic testing at VRDL must be accompanied by the [General Purpose Specimen Submittal Form](https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/VRDL_General_Purpose_Specimen_Submittal_Form.pdf)\*. ([https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/VRDL\\_General\\_Purpose\\_Specimen\\_Submittal\\_Form.pdf](https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/VRDL_General_Purpose_Specimen_Submittal_Form.pdf))

The form must be filled out as completely as possible or the specimen will not be tested. Specimens should be shipped per usual protocol to either your local public health laboratory or:

*California Department of  
Public Health / VRDL  
Specimen Receiving  
850 Marina Bay Parkway  
Richmond, CA 94804  
(510) 307-8585  
(510) 307-8578 (fax)*