



California Department of Public Health

May 2020

NOVEL CORONAVIRUS (COVID-19) LABORATORY TESTING GUIDANCE

Appropriate Clinical Specimens for 2019-nCoV Testing



Testing Method	Upper Respiratory Specimens (required)	Lower Respiratory Specimens (optional)
2019-nCoV RT-qPCR	NP, nasal, and/or OP swabs in one tube of VTM or saline	BAL, tracheal aspirate, or sputum

Pre-approval

Suspect cases must be assessed by your local health department.

- Consult with your local public health laboratory for testing of serial clearance specimens from confirmed COVID-19 cases.

Specimen Collection

Acceptable Upper Respiratory Specimens for Symptomatic Patients (Required):

- A **single** nasopharyngeal (NP) swab is preferred.
- Acceptable alternatives to an NP swab include:
 - A nasal mid-turbinate swab collected by a healthcare professional or by onsite self-collection (using a flocked tapered swab), OR
 - A nasal swab of both nares collected by a healthcare professional or by onsite self-collection (using a round foam swab), OR
 - Nasopharyngeal wash/aspirate or nasal aspirate specimen, OR
 - An oropharyngeal (OP) swab collected by a healthcare professional.
- Swabs must be placed in a **sterile collection tube** containing 2-3 mL of viral transport medium (VTM) or sterile saline. If both an NP and OP are collected, place them in the same tube.
- Use sterile, synthetic swabs. Ensure the tube cap is screwed on tightly and sealed with parafilm.

Lower Respiratory Specimens (optional):

- Sputum:** 2-3 mL in a sterile, leak-proof, screw-cap sputum collection container. Induction of sputum is **not** recommended.
- Bronchoalveolar lavage or tracheal aspirate:** 2-3 mL in a sterile, leak-proof, screw-cap container.

Specimen Storage

- Store all specimens at 4°C and ship on cold pack within 24 to 72 hours.
- For questions about specimen collection, submittal, or shipping, please contact the CDPH/Viral and Rickettsial Disease Laboratory (VRDL) Medical and Epidemiology Liaisons (MELs) Unit at (510) 307-8585.

Shipping to the VRDL

Specimen shipment to VRDL requires prior consultation with your local public health department. To ship approved specimens:

- Complete the [VRDL General Purpose Specimen Submittal Form](#) for EACH SPECIMEN (see [example](#)):
 - Disease Suspected: Novel Coronavirus 2019
 - Clinical Findings: Hospitalization status, symptoms, and exposure history
 - Include hard copy of the VRDL General Purpose Specimen Submittal Form with shipment.
- Notify the VRDL by secure email to VRDL.Mail@cdph.ca.gov.
- Ship approved specimens to:

CDPH VRDL
Attn: Specimen Receiving
850 Marina Bay Parkway
Richmond, CA 94804
- Weekend deliveries by courier to the VRDL must be coordinated in advance with the VRDL-MELs Unit. Provide courier with weekend points of contact for your laboratory and the VRDL.

Viral and Rickettsial Disease Laboratory
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