

**THE VERMONT DEPARTMENT OF HEALTH LABORATORY**

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**INSTRUCTIONS FOR COLLECTION AND PACKAGING OF SPECIMENS FOR NOVEL  
CORONAVIRUS (COVID-19) KIT 26**

Results will be reported within 24-48 hours of receipt of specimen.

**Kit Contents:**

- One nasopharyngeal swab (minitip) or nasal swab (Kits with nasal swabs have a nasal swab label on the biohazard bag)
- One tube of Transport Media (contains Viral Transport Medium, Saline, or Phosphate Buffered Saline [PBS])
- One biohazard bag
- One cold pack (**remove and freeze**)
- One Micro 220 Clinical Test Request form
- One Styrofoam cooler in cardboard mailer

**Specimen Requirements and Collection**

Label all specimens with the patient name, date of birth, and the collection time/date. Specimen tubes containing patient information should match the Micro 220 Clinical Test Request Form. Pre-printed labels containing patient information may be used on both the specimen tube and Micro 220 Clinical Test Request Form. **\*\*Multiple specimen types for the same date of collection the same patient is not recommended.**

**1. Upper respiratory tract**

Use only synthetic fiber swabs with plastic shafts (i.e. Dacron, FloqSwabs, Rayon). Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing.

a. Nasopharyngeal (NP) Swab for a Nasopharyngeal Specimen

1. Gently insert the minitip swab along the medial part of the septum, along the base of the nose, until it reaches the posterior nares – gentle rotation of the swab may be helpful. (If resistance is encountered on one side, try the other nostril using the same swab, as the patient may have a deviated septum).
2. Rotate the swab several times to dislodge the columnar epithelial cells and leave in place for several seconds. Remove the swab while rotating it. Check that the minitip is saturated with fluid and re-insert swab if necessary.
3. Put the NP swab into the transport media and break it at the score mark on the shaft so that it does not protrude above the rim of the container. Make sure liquid media covers the swab tip. Ensure the cap of the transport media tube is closed securely and tightly.

b. Nasal (NS) Swab with or without score mark on shaft for Anterior Nares Specimen

1. Insert the entire collection tip of the swab provided (usually  $\frac{1}{2}$  to  $\frac{3}{4}$  of an inch, or 1 to 1.5 cm) inside the nostril.
2. Firmly sample the nasal wall by rotating the swab in a circular path against the nasal wall at least 4 times.
3. Take approximately 15 seconds to collect the specimen. Be sure to collect any nasal drainage that may be present on the swab.
4. Repeat in the other nostril using the same swab.
5. Put the NS swab into the transport media provided and break it at the score mark on the shaft if available or if not, bend the shaft back and forth gently until it breaks. Ensure that the shaft does not protrude above the rim of the container after it is broken, and liquid media covers the

swab tip. Place the cap back on the tube and securely tighten it to prevent leakage.

## 2. Other Specimen Types Accepted:

VDHL will also accept oropharyngeal swabs, nasal and mid-turbinate swabs, nasopharyngeal aspirate, and bronchoalveolar lavage. Dry swabs and saliva are not an accepted specimen type currently. Please follow the CDC collection guidelines for these specimen types: <https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html>

**REMINDER:** Apply proper infection control techniques during specimen collection. The sealed, primary container must be decontaminated with an appropriate disinfectant prior to placing it in the secondary container. Change gloves frequently and decontaminate the work area once the packaging of the specimens is complete. Use EPA-registered hospital disinfectants with label claims to be effective against SARS-CoV-2 for decontaminating hard non-porous surfaces. Follow manufacturer's recommendations for use, dilution (i.e., concentration), contact time, and care in handling. For additional information, refer to the following: CDC Interim Infection Prevention and Control Recommendations for Patients with Confirmed 2019 Novel Coronavirus (2019-nCoV) or Persons Under Investigation for 2019-nCoV in Healthcare Settings.

## Specimen Storage and Shipment

**Storage:** 2-8°C for up to 72 hours after collection  
-70°C or lower if >72 hours after collection

**Shipment:** Ship as soon as possible at refrigerated temperature (2-8°C) for up to 72 hours. If the specimen will be received at the VDHL >72 hours after collection ship frozen.

1. Place a cold ice pack inside the cooler.
2. Place the specimen into the biohazard bag and seal shut. Insert the bag into the cooler and cover with the Styrofoam lid.
3. Fill out the VDHL Clinical Test Request form (Micro 220) with all relevant accurate information. Ensure an after-hours fax and telephone number is indicated on the Micro 220 form. Place it on top of the Styrofoam lid. Seal the box shut with tape.
4. Complete the "From, Person Responsible (Name and Phone number)" labels that are on the outside of the shipping box. The name of the person responsible would be the person who can answer questions about the shipment. In the event this is couriered through a NECLA courier and is triaged through UVMHC, please indicate "Do Not Triage, Send to VDHL" on the outside of the package in order to send to VDHL for testing.
5. Ship the specimens to the Vermont Department of Health Laboratory (VDHL) by your courier service. If a courier is required, please contact the VDHL at the phone number listed on page 1.
6. When submitting specimens, please return entire contents of kit, including unused portions to the VDHL.

For submitters who are not using a VDHL kit, follow shipping regulations for UN 3373 Biological Substance, Category B when sending potential COVID-19 patient specimens. Refer to Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens Associated with Coronavirus Disease 2019 (COVID-19): <https://www.cdc.gov/coronavirus/2019-ncov/lab/lab-biosafety-guidelines.html>

## Specimen May be Rejected for the Following Reasons:

- No patient information on the specimen and request form
- Improper shipment temperature
- Too old to test
- Expired transport media
- Specimen leaked in transit and/or there is insufficient specimen for testing
- Inappropriate specimen type or source