

CORONAVIRUS DISEASE 2019 (COVID-19) SPECIMEN COLLECTION AND SUBMISSION INSTRUCTIONS

NOTE: Before collecting and handling specimens for COVID-19 testing, it must be determined whether the person meets the current definition for a “patient under investigation” (PUI) for novel Coronavirus disease 2019 (COVID-19) infection as defined by the Centers for Disease Control and Prevention (CDC). All suspect COVID-19 cases must be evaluated and approved for testing by the Division of Infectious Disease Epidemiology (DIDE) prior to submission. Please call (304) 558-5358, extension 1 or the answering service at (304) 347-0843 for consultation.

SPECIMEN COLLECTION

For initial diagnostic testing, CDC recommends collecting and testing upper respiratory nasopharyngeal specimens. Specimens should be collected as soon as possible once a PUI is identified, regardless of the time of symptom onset.

Healthcare personnel collecting specimens from patients with known or suspected COVID-19 should adhere to Standard, Contact, and Airborne Precautions. This includes use of N-95 or higher-level respirator (or facemask if respirator is not available), eye protection, gloves, and a disposable gown. The number of healthcare professionals present during the collection procedures should be limited to only those essential for patient care. Collection of diagnostic respiratory specimens (such as nasopharyngeal) can be performed in a normal examination room with the door closed.

A. Nasopharyngeal (NP)

- Label a viral transport media tube with the patient’s name or other unique identifier and date of collection.
- Immobilize the patient’s head and insert the swab into the nasopharynx and leave in place for 10 seconds to absorb secretions.

NOTE: Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing.

- Place swab immediately into labeled viral transport media tube, break swab at breakpoint, and close lid tightly.
- Refrigerate at 2-8°C for up to 72 hours and ship on cold packs. If the specimen cannot be shipped and received at OLS within 72 hours of collection, freeze the specimen at -70°C or less and ship on dry ice.

SPECIMEN TRANSPORT

Specimens from suspect COVID-19 cases must be packaged, shipped, and transported as Category B Biological Substances according to the current edition of the International Air Transport Association (IATA) Dangerous Goods Regulations 1.5 and 49CFR Section 172.0700 [U.S. Department of Transportation].

Specimens must be stored at 2-8°C and shipped on cold packs. If samples are unable to be shipped and received at OLS within 72 hours of collection, they must be stored at -70°C or less and shipped on dry ice.

All specimens must be packed to prevent breakage and spillage. Specimen containers should be sealed with Parafilm® (or equivalent adhesive) and placed in plastic zippered bags. Place enough absorbent material to absorb

the entire contents of the Secondary Container (containing Primary Container) and separate the Primary Containers (containing specimen) to prevent breakage. Specimens being shipped with cold packs or other refrigerant blocks must be self-contained, not actual wet ice.

- Do not place any dry ice in the "Primary Container" or "Secondary Container", foam envelopes, plastic zippered bags, cryovial boxes, or hermetically sealed containers.
- Do not place any paperwork in the Secondary Containers or plastic zippered bags, so as not to damage the paperwork.

OTHER INFORMATION

1. Ensure that specimen is properly labeled with the patient name or unique identifier and the date of collection and that the Coronavirus Disease (COVID-19) Specimen Submission Form is completed entirely. Be sure to include the PUI#. The patient name or unique identifier on the form and collection container must be identical.
2. Do not delay shipment. Ship as soon after collection as possible.
3. Do not ship specimens on Friday or state holidays.
4. Specimens must be received at OLS within 72 hours of collection. If shipping is delayed, specimens must be frozen and shipped on dry ice.

CONTACT INFORMATION

Office of Laboratory Services
PH | 304-558-3530
FX | 304-558-3530

Office of Epidemiology and Prevention Services
Division of Infectious Disease Epidemiology
PH | 304-558-5358
FX | 304-558-8736

REFERENCES

Centers for Disease Control and Prevention --- <https://www.cdc.gov/coronavirus/2019-nCoV/lab/index.html>

Office of Laboratory Services --- <https://dhhr.wv.gov/ols/labs/Pages/EmergingPathogens.aspx>

WV DHHR --- coronavirus.wv.gov

“Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons Under Investigation (PUIs) for Coronavirus Disease 2019 (COVID-19)” - <https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html>.

“What Healthcare Personnel Should Know about Caring for Patients with Confirmed or Possible COVID-19 Infection” - <https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-for-patients.html>

“Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings” - https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Finfection-control.html.