

# Guidance Post-Mortem Exams and COVID-19

(Adapted from the Centers for Disease Control and Prevention)

This document provides specific guidance for the collection and submission of postmortem specimens from deceased persons under investigation (PUI) for COVID-19. This document also provides recommendations for biosafety and infection control practices during specimen collection and handling. The guidance can be utilized by medical examiners, coroners, pathologists, other workers involved in the postmortem care of deceased PUI, and the North Dakota Department of Health (NDDoH)

The NDDoH does not recommend an autopsy be performed for deaths where COVID-19 may be suspected. The need for an autopsy continues to be based on medico-legal criteria. Post-mortem testing for SARS-CoV-2, the virus that causes COVID-19 should be considered in deaths where a recent history of acute respiratory illness has been diagnosed or documented. Further consideration should be given to decedents with a recent history of a respiratory illness, and have comorbidities that may increase the likelihood of death due to COVID-19 including:

- Older age
- Diabetes
- Chronic heart, lung, kidney disease
- Underlying immunosuppression due to illness or immunocompromising therapies.

**If an autopsy is NOT performed**, collection of the following postmortem specimens is recommended:

- Postmortem clinical specimens for testing for SARS-CoV-2, the virus that causes COVID-19, to include only upper respiratory tract swabs: Nasopharyngeal Swab only, are needed (NP swab)
- Use separate NP swab and OP swab specimens for testing of other respiratory pathogens

## **Collecting Nasopharyngeal swab (NP)**

The NDDoH recommends that non-medical death investigators with no experience in collecting NP swabs consult with local providers that are experienced with collecting NP swabs to assist with specimen collection. This may include local health care providers or emergency medical personnel. If the decedent was hospitalized at the time of death, the specimen should be collected at the hospital. The specimen can be collected at the funeral home as well, prior to embalming.

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 swabs immediately into sterile tubes containing 2-3 ml of viral transport media. NP specimens should be placed, at collection, into a transport vial.

*Nasopharyngeal swab:* Insert a swab into nostril parallel to the palate. Swab should reach depth equal to distance from nostrils to outer opening of the ear. Leave swab in place for several seconds to absorb secretions. Slowly remove swab while rotating it.

Detailed guidance for postmortem specimen collection can be found at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-postmortem-specimens.html#SpecimenCollection>.

In addition to postmortem specimens, submission of any remaining clinical specimens (e.g., NP swab, OP swab, sputum, serum, stool) that may have been collected prior to death is recommended. Please refer to <https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html> and <https://www.health.nd.gov/diseases-conditions/coronavirus/resources-laboratories> for more information.

### **Recommended Infection Control and Biosafety Practices for the Collection of Postmortem Upper Respiratory Tract Swab Specimens**

Individuals in the room during the procedure should be limited to the coroner or healthcare personnel (HCP) obtaining the specimen. If HCP are not performing an autopsy or conducting aerosol generating procedures (AGPs), follow standard precautions.

Since the collection of a nasopharyngeal swab specimens from a deceased person will not induce any aerosolization, a negative pressure room is not required. Personnel should adhere to standard precautions.

The following PPE should be worn at a minimum:

- Wear nonsterile, nitrile gloves when handling potentially infectious materials.
- If there is a risk of cuts, puncture wounds, or other injuries that break the skin, wear heavy-duty gloves over the nitrile gloves.
- Wear a clean, long-sleeved fluid-resistant or impermeable gown to protect skin and clothing.
- Use a plastic face shield or a face mask and goggles to protect the face, eyes, nose, and mouth from splashes of potentially infectious bodily fluids.

Testing is available through the NDDoH, Division of Microbiology. The NDDoH recommends coordinating with your local hospital laboratory for specimen submission and guidance. All specimens must be accompanied by a test requisition form which can be found at <http://www.ndhealth.gov/microlab//docs/Fillable%20Test%20Request%20Form.pdf>.

The North Dakota Department of Health is available to provide further guidance and can be reached by calling 701-328-6138. The University of North Dakota School of Health Sciences, Department of Pathology can also provide further assistance and guidance to local officials in the 21 eastern counties that are served by UND. That phone number is 701-777-1200.