The Pennsylvania Department of Health (PA DOH) is releasing the following updates based on guidance released by the Centers for Disease Control and Prevention (CDC) on April 2, 2020, for COVID-19 specimen collection and shipping. This is an update to the guidance that was released on March 14, 2019.

- Health care providers should contact the DOH at 1-877-PA-HEALTH (1-877-724-3258) or their local health department about possible cases of COVID-19.
- Local and state public health staff will determine if the patient meets the criteria for a patient under investigation (PUI) for COVID-19.
- Clinical specimens should be collected from PUIs for routine testing of respiratory pathogens at either a clinical or public health laboratory.
- Testing at the Bureau of Laboratories (BOL) and/or Centers for Disease Control and Prevention (CDC) must be approved by DOH Bureau of Epidemiology or the local health department.

**RECOMMENDED SPECIMEN TYPES**

**Outpatients**

Nasopharyngeal specimen is the preferred choice for swab-based SARS-CoV-2 testing. When collection of a nasopharyngeal swab is not possible, the following are acceptable alternatives:

- Oropharyngeal specimens collected by a healthcare professional,
- Nasal mid-turbinate (NMT) swabs collected by a healthcare professional or by onsite self-collection using a flocked tapered swab, or
- Anterior nares (nasal swab; NS) specimens collected by a healthcare professional or by onsite self-collection (using a flocked or spun polyester swab).

For NS, a single polyester swab with a plastic shaft should be used to sample both nares. NS or NMT swabs should be placed in a transport tube containing either viral or universal transport medium, Amies transport medium, or sterile saline.

If both NP and OP swabs both are collected, they should be combined in a single tube to maximize test sensitivity and limit testing resources.
Inpatients

Collection of both a lower respiratory specimen and a NP swab is recommended.

SPECIMEN COLLECTION INSTRUCTIONS

Specimens should be collected as soon as possible once a PUI is identified regardless of symptom onset. Maintain proper infection control when collecting specimens. Induced sputum sample collection should not be done.

UPPER RESPIRATORY TRACT

Nasopharyngeal Swab (NP)

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.

Following the directions below, collect a NP swab and insert the swab into a viral transport tube containing 1-3 mL viral transport medium (VTM) or equivalent.

1. Pass the NP swab through the nares. Resistance will be met. This will confirm contact with the nasopharynx.

2. Rub the swab tip across the mucosal surface several times. This will loosen and collect cellular material. Allow a time of contact of up to 30 seconds.

3. Withdraw the swab and place it in the tube containing VTM or acceptable alternative. Make sure the liquid medium covers the swab tip.

4. Break or cut the end of the swab

5. Screw the vial lid on tightly.
LOWER RESPIRATORY TRACK

Bronchoalveolar lavage, tracheal aspirate

Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.

Sputum

Have the patient rinse the mouth with water and then expectorate deep cough sputum directly into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.

POSTMORTEM SPECIMENS

See CDC’s the interim guidance for the collection and submission of postmortem specimens from deceased persons under investigation for COVID-19

Interim Guidance for Collection and Submission of Postmortem Specimens from Deceased Persons Under Investigation (PUI) for COVID-19, March 2020

SPECIMEN STORAGE

Store specimens at 2-8°C for up to 72 hours after collection. If a delay in testing or shipping is expected, store specimens at -70°C or below.

SPECIMEN SUBMISSION FORM

1. Complete all information on the BOL specimen submission form. Include the PUI number provided by the PA DOH or your local health department.

2. Complete the form with the submitter information and lab reporting fax number.

3. Submit the single form with the specimen.
SPECIMEN PACKAGING AND SHIPPING

1. Label the specimen container with the:
   - patient’s name and date of birth
   - specimen source collection date

   This patient and specimen information must appear on BOTH the specimen submission form and the specimen container or testing will NOT be performed.

   Include a cold pack and package the specimen as required by the regulations governing the shipment of Category B infectious substances. **Category B packaging MUST BE USED.**

   The BOL can provide additional shipping guidance if specimen submission is approved by the PA DOH or your local health department.

   Refrigerate packaged specimens if they will not be shipped immediately. Specimens MUST be kept cold until they reach the laboratory.

Ship specimens to:

   PA Department of Health
   Bureau of Laboratories
   110 Pickering Way
   Exton, PA 19341

Contact the BOL if you have questions about specimen collection or submission.

   Phone: 610.280.3464

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