

Specimen Collection Manual

Effective date 02/12/21

Collecting and Handling Specimens Safely

For providers collecting specimens or within 6 feet of patients suspected to be infected with SARS-CoV-2, maintain [proper infection control](#) and use recommended personal protective equipment (PPE), which includes an N95 or higher-level respirator (or facemask if a respirator is not available), eye protection, gloves, and a gown, when collecting specimens.

For providers who are handling specimens, but are not directly involved in collection (e.g. self-collection) and not working within 6 feet of the patient, follow [Standard Precautions](#). Healthcare personnel are recommended to wear a form of [source control](#) (facemask or cloth face covering) at all times while in the healthcare facility.

PPE use can be minimized through patient self-collection while the healthcare provider maintains at least 6 feet of separation.

Handling Bulk-Packaged Sterile Swabs Properly for Upper Respiratory Sample Collection

Sterile swabs for upper respiratory specimen collection may be packaged in one of two ways:

- Individually wrapped (preferred when possible)
- Bulk packaged

Bulk-packaged swabs may be used for sample collection; however, care must be exercised to avoid SARS-CoV-2 contamination of any of the swabs in the bulk-packaged container.

- Before engaging with patients and while wearing a clean set of protective gloves, distribute individual swabs from the bulk container into individual disposable plastic bags.
- If bulk-packaged swabs cannot be individually packaged:
 - Use only fresh, clean gloves to retrieve a single new swab from the bulk container.
 - Close the bulk swab container after each swab removal and leave it closed when not in use to avoid inadvertent contamination.
 - Store opened packages in a closed, airtight container to minimize contamination.
 - Keep all used swabs away from the bulk swab container to avoid contamination.
- As with all swabs, only grasp the swab by the distal end of the handle, using gloved hands only.
- When patients are self-collecting their swabs under clinical supervision:
 - Hand a swab to the patient only while wearing a clean set of protective gloves.
 - The patient can then self-swab and place the swab in transport media or sterile transport device and seal.
 - If the patient needs assistance, you can help the patient place the swab into transport media or a transport device and seal it.

General Guidelines

Proper collection of specimens is the most important step in the laboratory diagnosis of infectious diseases. A specimen that is not collected correctly may lead to false negative test results. The following specimen collection guidelines follow standard recommended procedures. For more information, including illustrations and step-by-step guidance, see the CDC [Influenza Specimen](#)

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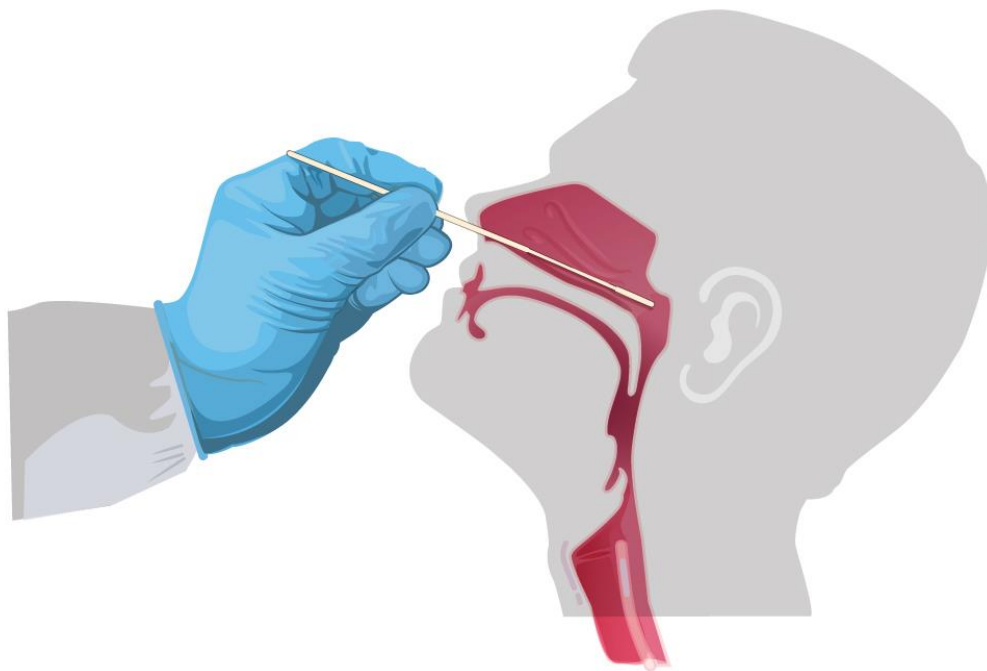
[Collectionpdf icon](#) instructions. Note that these instructions are applicable for respiratory viruses in general, and not specific for only influenza virus.

Ensure the patient information

I. Respiratory Specimens

Upper respiratory tract

Nasopharyngeal swab/Oropharyngeal (Throat) swab



Use only synthetic fiber swabs with plastic or wire 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.

NP swab: Insert minitip swab with a flexible shaft (wire or plastic) through the nostril parallel to the palate (not upwards) until resistance is encountered or the distance is equivalent to that from the ear to the nostril of the patient, indicating contact with the nasopharynx. Swab should reach depth equal to distance from nostrils to outer opening of the ear. Gently rub and roll the swab. Leave swab in place for several seconds to absorb secretions. Slowly remove swab while rotating it. Specimens can be collected from both sides using the same swab, but it is not necessary to collect specimens from both sides if the minitip is saturated with fluid from the first collection. If a deviated septum or blockage create difficulty in obtaining the specimen from one nostril, use the same swab to obtain the specimen from the other nostril.

OP swab: Insert swab into the posterior pharynx and tonsillar areas. Rub swab over both tonsillar pillars and posterior oropharynx and avoid touching the tongue, teeth, and gums.

Nasal mid-turbinate (NMT) swab, also called Deep Nasal Swab

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Use a flocked tapered swab. Tilt patient's head back 70 degrees. While gently rotating the swab, insert swab less than one inch (about 2 cm) into nostril (until resistance is met at turbinates). Rotate the swab several times against nasal wall and repeat in other nostril using the same swab.

Nasopharyngeal wash/aspirate or nasal wash/aspirate

Attach catheter to suction apparatus. Have the patient sit with head tilted slightly backward. Instill 1 mL-1.5 mL of non-bacteriostatic saline (pH 7.0) into one nostril. Insert the tubing into the nostril parallel to the palate (not upwards). Catheter should reach depth equal to distance from nostrils to outer opening of ear. Begin gentle suction/aspiration and remove catheter while rotating it gently. Place specimen in a sterile viral transport media tube.

II. 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.

III. Shipping

Samples shipped to Panohealth for testing requires shipping without delay, store specimens at 2-8°C, and ship overnight on ice pack Monday to Thursday (Do not ship samples on Fridays or the day before a national holiday when the laboratory is closed. For additional information on holiday closures, please contact Panohealth directly. If a delay in shipping will result in receipt at Panohealth Laboratory more than 72 hours after collection, store specimens at -70°C or below and ship overnight to Panohealth Laboratory on dry ice.

Specimens must be packaged, shipped, and transported according to the current edition of the [International Air Transport Association \(IATA\) Dangerous Goods Regulations external iconexternal icon](#).

Specimens must be submitted with the Panohealth specimen requisition form. The form needs to be filled out electronically: <https://www.panohealth.com/cli/Service/view/requisition>, printed, completed in full and sent with the specimen.

Shipping Address:

PanoHealth LLC
Attn: CLIA laboratory
3607 Parkway Lane, Suite 300
Peachtree Corners, GA 30092

IV. Acceptance/Rejection Criteria

Acceptability Criteria:

1. Patient samples must be collected according to appropriate laboratory guidelines.

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2. Acceptable samples from upper respiratory specimens (such as nasopharyngeal, oropharyngeal, nasal, and mid-turbinate swabs, and nasopharyngeal aspirate) and bronchoalveolar lavage (BAL) specimens that arrive in the testing site in transport media.
3. Swabs should be placed immediately into a sterile transport tube containing 2-3mL of viral transport medium (VTM).
4. Specimens must be submitted with Panohealth specimen requisition form.
5. Specimen must have at least two identifiers
6. Specimen for testing must be received under the Storage and Shipping conditions stated above.
7. Requisition forms must be filled completely with required information before sample can be processed for testing – incomplete forms will delay testing or may cause rejection.

Rejection Criteria:

1. Unlabeled specimens
2. Leaking specimens
3. Specimen with only One identifier
4. Any specimen that was not collected from nasopharyngeal, oropharyngeal, nasal, and mid-turbinate swabs, and nasopharyngeal aspirate and bronchoalveolar lavage (BAL) specimens.
5. Specimens received at room temperature.
6. Specimens collected and sent in an unapproved collection media
7. Specimens collected more the 72 hours AND not received on dry ice
8. Specimens collected more than 72 hours and received on regular ice.