



Date: April 10, 2020
To: All Health Care Providers
From: Alberta Precision Laboratories (APL) – Public Health Laboratory
Re: Major changes in COVID-19 specimen collection recommendations

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key messages:

- Nasopharyngeal (NP) and throat swabs are now recommended over nasal swabs for COVID-19 testing.
- Acceptable specimen types for COVID-19 testing include NP swab, throat swab (deep nasal swab can be collected instead if a throat swab is not possible), NP aspirate, endotracheal tube (ETT) suction/sputum, or bronchoalveolar lavage/bronchial wash (BAL/BW).
- It is recommended that hospitalized patients with COVID-19 symptoms be tested with an NP swab. For patients who have a lower respiratory tract infection and are intubated, also submit an ETT suction or BAL/BW.

Background:

- Due to a global shortage of NP swabs, deep nasal swabs were recommended by APL for COVID-19 testing, especially in the setting of community-based screening at COVID-19 assessment centres.
- Despite many attempts to communicate proper collection technique of nasal swabs, it has become clear that there is significant variability in how nasal swabs are being collected.
- An evaluation of different swab types performed by APL and AHS has demonstrated that throat swabs are equivalent to NP swabs.

Recommended specimen types:

- **COVID-19 assessment centre patients:** collect throat swabs using the APTIMA® Unisex or Multitest Swab Specimen Collection Kits currently in circulation (see Addendum 1).
- **Non-assessment centre community patients:** collect NP swabs in the transport medium supplied (see Addendum 1).
- **Hospital patients with lower respiratory tract disease:** In addition to an NP swab, these patients should have lower respiratory tract specimens tested, including ETT suction or BAL/BW, if possible. These should be collected even if the NP swab is negative if there is a high degree of suspicion for COVID-19.
- Throat swabs for COVID-19 should NOT be collected using Amies swabs (the regular bacterial culture swab). See Addendum 2 for collection instructions.
- NP swab collection technique: <https://www.albertahealthservices.ca/assets/wf/plab/wf-provlab-collection-of-nasopharyngeal-and-throat-swab.pdf>
- Non-respiratory specimens (e.g., blood, stool, urine, etc) should only be submitted after discussing with the COVID-19 Virologist on-call (Edmonton 780-407-8822; Calgary 403-333-4942).

Inquiries and feedback may be directed to:

Dr. Nathan Zelyas, Medical Microbiologist, APL – Public Health Program Leader for Respiratory Viruses



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This bulletin has been reviewed and approved by:
Dr. Graham Tipples, Medical-Scientific Director, Public Health, APL

ADDENDUM 1: Collection kits

Throat swab collection kits (can also be used for deep nasal swabs if needed)

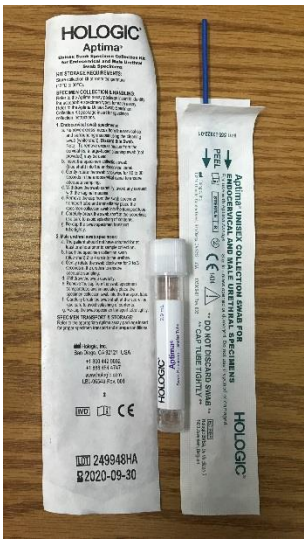
APTIMA® Unisex Swab Specimen Collection Kit

APTIMA® transfer tube (white top with foil, white label, clear fluid)

Use **blue swab** that comes with kit

Discard white cleaning swab

Use if **ONLY COVID-19** testing needed




APTIMA® Multitest Swab Specimen Collection Kit

APTIMA® transfer tube (white top with foil, **orange label**, clear fluid)

Use **pink swab** that comes with kit

Use if **ONLY COVID-19** testing needed

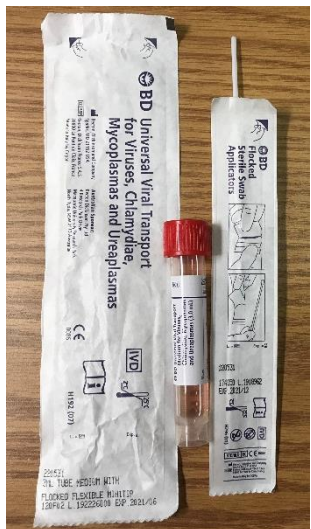


Nasopharyngeal collection kit

Universal Transport Medium (red top tube with pink fluid)

FLOQSwab® (white swab) as **NP swab**

Use for RPP or rapid influenza/RSV (COVID-19 will also be tested)





ADDENDUM 2: Testing instructions for COVID-19 using APTIMA® Unisex or Multitest Swab Specimen Collection Kits

1. Store tubes at room temperature.
2. Fill out the requisition provided for COVID-19 or enter into your EMR and label the tube with:
 - Name and date of birth
 - Unique identifiers (MRN or Alberta Health Care Number)
 - Time of collection
 - Site of collection (nasal)
 - Include ordering provider (designated medical officer of health or other physician) on the requisition
 - If using a printed label make sure the label is properly affixed to the tube
3. Use personal protective equipment (PPE) as per protocol for collection of COVID-19 NP samples.
4. Explain procedure to the patient.

5. Collect throat swab. Swab areas highlighted in the instructions.

6. While holding the swab in your hand, unscrew the tube cap (foil top). Do not spill the tube contents. Immediately place the swab into the transport tube so that the line is in line with the top edge of the tube and carefully break the shaft. The swab will drop to the bottom of the vial. **IF USING APTIMA TUBES, DO NOT FORCE THE SWAB THROUGH OR DO NOT PUNCTURE THE FOIL CAP.**

7. Discard the top portion of the shaft. Tightly screw the cap onto the tube.
8. Place tube in biohazard bag. Place requisition in pouch outside of the bag.
9. Refrigerate tubes or store on ice if possible. If no refrigeration available, store at room temperature and ship to the lab within 48 hours.

Throat Swab Specimen Collection

