



Date: April 15, 2020
To: All Health Care Providers
From: Alberta Precision Laboratories (APL) – Public Health Laboratory
Re: Change from nasopharyngeal to throat swab for COVID-19 and RPP testing

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key message:

- **Effective immediately, APL will begin to distribute ESwabs and ESwabs Media to perform throat swabs in lieu of nasopharyngeal (NP) swabs and universal transport media (UTM) to test for COVID-19 and the respiratory pathogen panel (RPP).**
- NP swabs will continue to be distributed to bone marrow transplant, solid organ transplant, hematology/oncology, and critical care wards. Additional site-specific distribution may also occur.
- NP aspirates can also be submitted for COVID-19 and RPP testing, primarily for pediatric patients.

Background

- In response to continued shortages of NP swabs and a surge in test volumes, changes in specimen collection and ordering for hospital-associated patients and non-assessment centre community patients are necessary.
- A clinical validation done by APL/AHS demonstrated that the sensitivity of throat swabs is comparable to NP swabs for the detection of COVID-19.
- For the detection of other respiratory viruses, NP swabs are generally preferred, but throat/oropharyngeal swabs have been shown in some studies to have comparable sensitivity to NP swabs for some viruses.
- This is an interim change until a sufficient number of NP swabs can be supplied.

Action Required

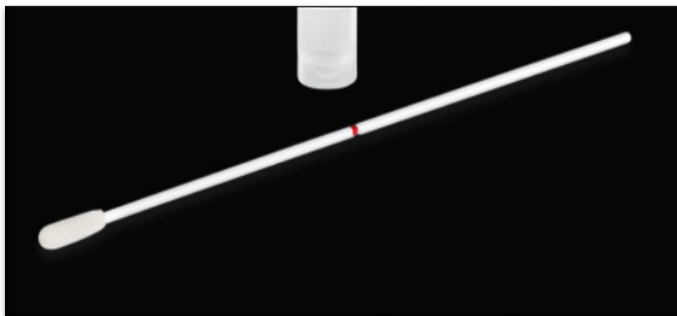
- Hospital units (except bone marrow and solid organ transplant, hematology/oncology, critical care), emergency, urgent care, hospital-associated clinics, long-term and continuing care facilities, and community clinics will receive ESwabs and ESwab media INSTEAD of NP swabs and UTM. The ESwab collection kit is to be used for throat swabs. The swabs and media will NOT include the APTIMA® Multitest or Unisex Collection Kits.
- If you have remaining NP swabs in your unit/area or receive some during the transition period, use them to test for COVID-19 and RPP by sampling the nasopharynx.
- Assessment centres will continue to receive APTIMA® Multitest or Unisex Collection kits for the detection of only COVID-19.
- DO NOT USE any other swab type used for standard throat culture/group A strep screening in the province to test for COVID-19 or RPP.
- Follow local infection, prevention and control guidance on isolation of patients. Generally, patients with symptoms of respiratory viral illness should be isolated based on symptoms and not test results.
- See next page for photos and the addendum for instructions on throat swab collection.
- Follow the April 10th, 2020, bulletin on alternate specimen types if throat swabs cannot be obtained. Nasal swabs can be done using the ESwab kit, but is not preferred:
www.albertahealthservices.ca/assets/wf/lab/wf-lab-bulletin-major-changes-in-covid-19-specimen-collection-recommendations.pdf
- Continue to order tests as per current processes.



Table 1. Sites and supply that will be distributed for COVID-19 and RPP testing

Site	Supply
Bone marrow transplant Solid organ transplant Haematology/Oncology Critical Care units	NP swab + Universal/Viral Transport Medium
Hospital Inpatient units not named above Emergency Departments/Urgent Care Hospital-associated clinics Congregate Living Facilities (e.g. Long-Term Care , Continuing Care, Corrections) Community clinics	Throat swab + transport media (e.g Eswab and ESwab media)
Assessment Centres	APTIMA® Multitest or Unisex kits

THROAT SWAB



NP SWAB



ESWAB



Inquiries and feedback may be directed to:

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Approved By:

Dr. Graham Tipples, Medical-Scientific Director, Public Health, APL



ADDENDUM: Throat collection instructions for respiratory viruses

1. Various collection containers and colored media may be provided to your site. Throat swabs will have a shaft with a continuous thickness. NP swabs have a narrower flexible end and the swab head is smaller than the throat swab. Due to limited supply inventories, the swabs and tubes provided may differ. At the time of writing collection kits may include:
 - Copan ESwab with ESwab media
 - APTIMA Multitest or Unisex Collection Kits (only for COVID-19 testing and only Assessment Centres)
2. Store products at room temperature.
3. 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 (throat)
 - 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
4. Use personal protective equipment (PPE) as per protocol for collection of COVID-19 NP samples.
5. Explain procedure to the patient.
6. Collect throat swab. **VIGOROUSLY** swab the areas highlighted in the figure. Swabbing may activate the gag reflex.
7. 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 (APTIMA kits are to be used only by assessment centres).**
8. Discard the top portion of the shaft. Tightly screw the cap onto the tube.
9. Place tube in biohazard bag. Place requisition in pouch outside of the bag.
10. 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

