ALBERTA PRECISION LABORATORIES

Leaders in Laboratory Medicine

DATE:	17 April 2023	
TO:	All Health Care Providers	
FROM:	Public Health Laboratory (ProvLab), Alberta Precision Laboratories (APL)	
RE:	Specimen Collection for Viral Detection Including SARS-CoV-2/COVID-19	

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- Swabs collected to detect the presence of viruses by nucleic acid testing (NAT: e.g. PCR) should be submitted in viral transport medium (VTM); also known as universal transport media (UTM).
- Use a **nasopharyngeal (NP) swab** and not a throat, buccal, oral, or nasal swab to test for **respiratory viruses** (e.g. COVID-19, influenza) in the clinical setting.
- For other non-respiratory virus testing by NAT/PCR use a kit with a large-tipped swab and VTM/UTM.
- Samples submitted for viral NAT/PCR using an eSwab or other Amies bacterial transport medium will be cancelled.

Background

- During the COVID-19 pandemic, alternate media and swabbing sites other than a NP swab in VTM/UTM were used in some settings to test for SARS-CoV-2. This is no longer recommended for the following reasons:
 - There are no longer shortages of NP swabs and VTM/UTM.
 - Most commercial methods used in Alberta are only Health Canada approved for testing with a swab collected in VTM/UTM. Therefore, testing on other media or swabs is off-label and not extensively evaluated, especially for viruses other than SARS-CoV-2.
 - Testing of other respiratory viruses is often clinically required. NP swabs or NP aspirates are the optimal upper respiratory tract specimen type for most respiratory viruses.
 - Large scale community assessment centre testing where the alternate sites were used is no longer done. NP swabs in VTM/UTM were always the preferred swab for acute care testing
- VTM/UTM is included in kits with NP swabs for respiratory virus NAT/PCR. VTM/UTM is also included in a kit with a larger tipped swab to sample lesions and eyes for NAT/PCR for other pathogens such herpes zoster, varicella zoster, and syphilis.
- Since **eSwab kits** distributed in Alberta for culture are larger than a NP swab and do not include a NP swab or VTM/UTM, they are **not appropriate to test for viruses or syphilis**.
- APTIMA kits are to be used ONLY for Chlamydia/Gonorrhea and/or Trichomonas NAT.

Table 1. Differences between eSwabs (liquid amies) and UTM/VTM media kits distributed in Alberta

	eSwab (bacterial culture)	VTM/UTM (viral NAT/PCR)
Media Color	Clear	Pink
Cap Color	Pink	Red
Swab Tip	Large	Small*
Manufacturer	Copan	Yocon or Copan

*Kits with NP swabs for respiratory virus testing. VTM/UTM kits with a larger swab are for swabbing lesions or eyes for virus or syphilis NAT/PCR.

Action Required

- When submitting a swab for viral testing, submit it in VTM/UTM.
- Collect a NP swab and not a throat, oral, buccal swab for respiratory virus testing (rapid COVID-19 PCR, influenza and RSV NAT/PCR, and respiratory pathogen panel). If only a throat can be collected, submit in VTM/UTM. Other specimen types will not be accepted.
- Do NOT use the eSwab or APTIMA kits for viral NAT/PCR.

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- Use Regan-Lowe medium for pertussis testing.
- See below for pictures of the VTM and eSwab kits.
- Community providers including conintuing care can order swab kits from DynaLIFE medical laboratories o Internet eBusiness Solutions, Inc.(SP) (dynalife.ca)
 - SupplyOrderingPortalUserGuide.pdf (dynalife.ca)
- AHS and Covenant sites order using current processes.

Other related bulletins

Search: "eSwab" @ https://www.albertaprecisionlabs.ca/hp/Page13803.aspx

Inquiries and Feedback

- Dr. Mathew Diggle, Clinical Microbiologist, ProvLab, <u>mathew.diggle@aplabs.ca</u>
- Dr. Nathan Zelyas, Medical Microbiologist, ProvLab, <u>Nathan.Zelyas@aplabs.ca</u>

Approved by

Dr. Kevin Fonseca (covering for Medical/Scientific Director of ProvLab, Dr. Graham Tipples)

Yocon Viral Transport Media kit with a NP swab

Note: fine tipped white swab, pink/red fluid, red cap (not pink), name on tube and package



Kits provided for lesion or eye swabs have a larger tip (white)

eSwab kit with liquid Amies - for BACTERIAL CULTURE

Note: large tipped brown swab, clear fluid, pink cap (not red), name on tube and package

