

DATE:	14 December 2023
TO:	All care providers who order laboratory testing
FROM:	Alberta Precision Laboratories (APL) – Public Health Laboratory
RE:	REVISED: Rabies Serology Testing Guidance

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- Rabies serology testing is only indicated in a select few circumstances:
 - Post-receipt of an intra-dermal rabies vaccine series or booster.
 - Post-receipt of a rabies vaccine series or booster in an immunocompromised patient.
 - Post-vaccination if there have been serious deviations in the planned vaccine administration or unclear quality of vaccine received outside of Canada.
 - Routine monitoring of immune status due to a person’s ongoing risk of potential occupational exposure to the rabies virus.
- Routine rabies serology testing in travelers to enzootic regions is not advised.
- Test requests not meeting criteria or without a rationale may be canceled.
- Rabies serology should NOT be the primary test of choice when investigating patients with potential rabies virus exposure via an animal bite. In this situation, prompt clinical evaluation and consultation as clinically indicated is advised.
- If you believe a rabies serology request was incorrectly canceled, please first consult with the Provincial Laboratory Microbiologist/Virologist on-call (MVOC).

Background

- The Public Health Laboratory (ProvLab) at Alberta Precision Laboratories (APL) currently coordinates rabies serology testing. The National Advisory Committee on Immunisation (NACI) of the Public Health Agency of Canada (PHAC) have released specific guidance as to when rabies serology testing is indicated. This guidance can be found at: <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-18-rabies-vaccine.html>.

Situations in which rabies serology testing is indicated

- Pre- or post-exposure vaccination given by the **intra-dermal (ID)** route. Check antibodies 2-weeks post last dose of an **ID**-vaccine series or an **ID**-booster dose. Intramuscular doses do not routinely require follow-up serology determination.
- An individual who is at high risk of ongoing exposure to rabies:
 - Continuous risk – those who work with rabies virus in a research laboratory or vaccine production center – check serology every 6 months.
 - Frequent risk – rabies laboratory workers, spelunkers, those handling bats, veterinarians, veterinary staff, animal control and wildlife workers in areas where rabies is enzootic – titers should be checked every 2 years.
- Immunocompromised patients – Please consult with the NACI/PHAC guidance (at the link above).



Situations in which rabies serology testing is NOT routinely indicated

- Individuals who have less frequent risk to potentially rabid animals or whose risk is likely to be from a recognized source.
- Travelers to enzootic areas.

Patients who may have rabies virus exposure from an animal/bat bite:

- Clinical evaluation of the patient should be conducted using the appropriate Connect Care animal exposure assessment pathway **or** the AHS Animal Exposure Referral tool: [Animal Exposure Referral \(albertahealthservices.ca\)](https://www.albertahealthservices.ca/epb/AnimalExposureReferral.aspx). Zone-specific contact information for clinical consultation (AHS Environmental Public Health and Zone MOH) is found within these tools.
- An overview of the process and patient handout is also available at <https://www.albertahealthservices.ca/epb/Page8294.aspx> (found under Animal Bites)
- Routine rabies serology testing in this situation is **NOT** indicated.
- Timeliness of this clinical evaluation is important.

Appropriateness of rabies serology testing requests

- Please ensure that the rationale for rabies serology testing is clearly indicated on the requisition (paper or electronic if ordering on Connect Care).
- Patient Service Centers are asked to ensure that this rationale is typed in appropriately into Beaker.
- All rabies serology requests are reviewed by the Microbiologist/Virologist-on-call (MVOC) at the ProVLab.
- Those not meeting indications, as outlined in the NACI/PHAC guidance, or with no rationale provided, may be canceled.

Rabies vaccination

- This bulletin is NOT intended to provide guidance as to the administration of rabies vaccine.
- For guidance on rabies vaccination, please refer to the 'Rabies Vaccines' section from the NACI guidelines (link above).

Action Required

- Review the indications for rabies serology testing.
- If you believe a rabies serology test was inappropriately canceled, please first consult with the MVOC prior to re-testing. The Provincial Laboratory MVOC can be consulted by calling 403-944-1110 (Calgary) or 780-407-8822 (Edmonton).

Thank you for your cooperation on this.

Inquiries and feedback may be directed to

- Dr. Jamil Kanji, Medical Microbiologist, ProVLab, Alberta Precision Laboratories (jamil.kanji@ahs.ca).

This bulletin has been reviewed and approved by

- Dr. Graham Tipples, Medical and Scientific Director, ProVLab, Alberta Precision Laboratories.

Effective September 1, 2023, APL has become the sole provider of all public lab services in Alberta. As a result, community lab services formally provided by DynaLIFE Medical Labs will become the responsibility of Alberta Precision Labs (APL). This change impacts all zones.