PROVINCIAL LABORATORY
MEDICINE SERVICES
Provincial Health Services Authority
BCCDC Public Health Lab

MEMORANDUM

DATE: August 21, 2023

TO: BC Medical Health Officers
Medical Microbiologists
Laboratory Operations Directors
Provincial Microbiology Advisory Group Members

RE: Updates to Poliovirus carriage screening in refugees arriving from Dadaab Refugee Complex

The purpose of this correspondence is to provide updated information to the memo shared on Aug 11, 2023 regarding Poliovirus carriage screening in refugees arriving from Dadaab Refugee Complex.

Changes in Testing Strategy for Persons from Dadaab Refugee Complex
Due to the influx of samples for screening of poliovirus from the Dadaab Refugee complex, the testing strategy at the NML has changed based on the person's risk level for poliovirus carriage/infection. Please note that the updated protocol still meets the WHO recommended protocols designed for symptomatic/high risk cases.

Risk Level	Testing strategy
Asymptomatic and no known contact with polio case/person with new symptoms of paralysis and not in the travel group of someone at highest risk (*Moderate risk)*	1. Molecular PCR-based screening specific for poliovirus (5-7 day TAT.) • Negative = No further action and will issue final report. • Positive = Issue preliminary report and set up for cell culture. 2. Culture results: • Confirmation of a presumptive positive test, with subtype details, can take up to 28 days.
Symptomatic or close contact with polio case/person with new symptoms of paralysis and their travel group (*Highest risk)*	1. Molecular PCR-based screening specific for poliovirus (5-7 day TAT). • Negative or Positive = Issue preliminary report. All samples will be set up for cell culture regardless of screening result. 2. Culture results: • Confirmation of a negative result relies on a culture negative test which takes 14 days to complete. • Confirmation of a presumptive positive test, with subtype details, can take up to 28 days.

Updates to Recommendations for Facilities Receiving Potentially Infectious Material Samples

- Stool and respiratory tract samples are considered potentially infectious materials (PIM).
- Cerebrospinal fluid, serum/blood and other clinical materials are not considered PIM.
- Facilities should ensure personnel are immunized against poliovirus in accordance with provincial guidelines. PHSA recommends one adult poliovirus booster dose in addition to the primary childhood series for health care providers who may be exposed to feces.
- PHAC guidance for handling of PIM:
    - PIM from asymptomatic (moderate risk) individuals that are currently under investigation for carriage of poliovirus are to be handled using universal precautions with additional PPE.
        - For guidance on biosafety and PPE, please refer to Appendix II from Interim Guidance for U.S Laboratory Facilities to Store and Work with Poliovirus Potentially Infectious Materials (cdc.gov).
    - PIM from symptomatic (highest risk) individuals, must be inactivated using validated methods in a Containment Level 3 lab. If PIM cannot be inactivated (e.g. stool culture for enteric bacterial pathogens), a local risk assessment should be performed prior to handling of PIM.
        - Validated methods to inactivate PIM can be found on pages 12-13 from Interim Guidance for U.S Laboratory Facilities to Store and Work with Poliovirus Potentially Infectious Materials (cdc.gov).
        - Nucleic acids extracted with a validated method to inactivate PIM can be handled in a Containment Level 2 lab.
        - NML has indicated that closed extraction+testing molecular systems (e.g. Biofire, GeneXpert) are considered to be a suitable option for PIM testing due to being closed, self-contained systems and minimal required handling of samples.