

PROVINCIAL LABORATORY MEDICINE SERVICES

Provincial Health Services Authority

BCCDC Public Health Lab



MEMORANDUM

Date: 6/27/2025

Re: Measles Testing Algorithm for Clinicians

The purpose of this communication is to provide clinicians with a recommended testing algorithm for suspected acute measles and measles immunity check based on the laboratory tests offered at the BCCDC Public Health Laboratory (BCCDC PHL).

The BCCDC PHL has developed a Measles Testing Algorithm for Clinicians flowchart which is provided on the second page of this communication. Please feel free to use the information in this memo for further distribution within your community of practice.

Please note that the following specimen types are approved for measles testing at the BCCDC PHL. For more information on measles specimen collection containers and collection guidance please consult the BCCDC eLab Handbook at http://www.elabhandbook.info/PHSA/Default.aspx.

| Test | Specimen | Container |
|------------------|----------------------------|------------------------------|
| Measles NAT | Throat | COPAN red-top with Universal |
| | | Transport Media |
| Measles NAT | Nasopharyngeal swab | COPAN red-top with Universal |
| | | Transport Media |
| Measles NAT | Throat/Nose Self-Collected | COPAN red-top with Universal |
| | swab | Transport Media |
| Measles NAT | Urine | Sterile container |
| Measles Serology | Clotted blood | SST (gold top) blood tube |

Please do not hesitate to contact any of us if you have any questions.

L. Hang. Afassen

Linda M. N. Hoang, MSc, MD, DTM&H, FRCPC Medical Microbiologist & Medical Director **BCCDC Public Health** Laboratory

Agatha Jassem, PhD, (D)ABMM, FCCM Clinical Microbiologist & Program Co-Head, Virology **BCCDC Public Health** Laboratory

Eric Eckbo, MD, FRCPC Medical Microbiologist & Program Co-Head, Virology & High Volume Serology **BCCDC Public Health** Laboratory

Adriana Airo, PhD, FCCM Clinical Microbiologist & Program Co-Head, High Volume Serology BCCDC Public Health Laboratory

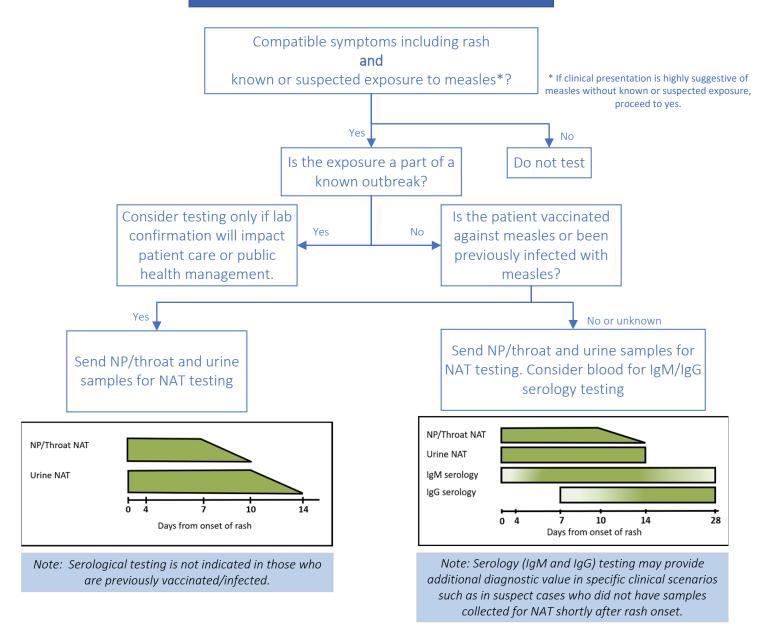


British Columbia Centre for Disease Control Public Health Laboratory



Measles Testing Algorithm for Clinicians

Suspected Acute Measles



What if the measles virus is detected in a sample?

Additional testing to distinguish between measles vaccine and wild-type virus will be performed and reported on positive NAT samples.



| Known or suspected exposure to measles with unknown immune status and a contraindication to the MMR vaccine? | | | |
|--|-------------|--|--|
| OR | | | |
| Healthcare worker with exposure to measles and who does not have a history of vaccination with 2 doses of a measles-containing vaccine, a history of measles infection, or a birthdate prior to January 1, 1957 | | | |
| | | | |
| Yes | No | | |
| Send blood for IgG serology testing | Do not test | | |
| Note: Measles IgG testing should not be routinely performed to determine immune status. When immune status cannot be ascertained, immunization with a measles containing vaccine is preferred. | | | |

For additional information on measles testing, please consult the resources below:

BCCDC Measles Update Memo (May 29, 2025): http://www.bccdc.ca/resource-gallery/Documents/BCCDC_PHL_Memo_Measles_Update_29May2025.pdf **BCCDC Self-Collection for Measles NAT Testing Memo (June 19, 2025):** http://www.bccdc.ca/resource-gallery/Documents/ BCCDC_PHL_Memo_Self_Collection_for_Measles_NAT_Testing_19June2025.pdf

BCCDC Measles Guidance: http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%201%20-%20CDC/Measles.pdf