

CLINICAL MICROBIOLOGY

May 30, 2024

PCR-Based (GeneXpert) Respiratory Virus Testing Performed by Shared Health Clinical Laboratories to Switch from Quadruplex Testing to SARS-CoV-2 Only Testing for Symptomatic Hospital Inpatients

Date effective: June 10, 2024

Background Information:

The GeneXpert Quadruplex test identifies Influenza A, Influenza B, RSV, and SARS-CoV-2 in nasopharyngeal (NP) swabs. **Influenza A, Influenza B, and RSV detections are now near or at zero in symptomatic hospital inpatient NP swabs tested by the GeneXpert Quadruplex test in Shared Health clinical laboratories.** SARS-CoV-2 has become endemic in Manitoba and current SARS-CoV-2 detections are low (<5% of NP swabs tested) but persist.

Based on current respiratory virus epidemiology and to reduce hospital system testing costs, Shared Health clinical laboratory testing will switch to the GeneXpert SARS-CoV-2 only test (SARS-CoV-2 Plus test) starting June 10, 2024.

If testing for Influenza A, Influenza B, and RSV is required on June 10, 2024 or later, Cadham Provincial Laboratory (CPL) will continue to perform this testing. **NP swabs requesting quadruplex testing (Influenza A, Influenza B, RSV and SARS-CoV-2) can be sent directly to CPL along with a completed CPL requisition** (<https://healthproviders.sharedhealthmb.ca/files/general-requisition-form.pdf>).

The patients to be tested by Shared Health laboratories using the SARS-CoV-2 Plus test will initially remain the same as those listed in the most current posted criteria (December 5, 2023) (<https://sharedhealthmb.ca/files/covid-19-testing-table.pdf>). **NP swabs from other patient groups will not be tested by GeneXpert at Shared Health clinical laboratories and will be forwarded to CPL for testing.** Respiratory virus testing criteria are periodically reviewed and may also change in the near future.

Importantly, NP swabs requesting “viral studies” or “QUAD” or that do not clearly specify SARS-CoV-2 or COVID-19 will be forwarded to CPL for testing. Single NP swabs with requisitions asking for multiple tests will also automatically be forward to CPL for testing. Test prioritization phone calls will not be placed by Shared Health clinical laboratories regarding NP swabs for respiratory virus testing.

To support laboratory diagnostic testing stewardship and hospital system cost containment efforts, care providers are also strongly encouraged to review their respiratory virus testing criteria given the current absence of Influenza A, Influenza B, and RSV detections and the very low numbers of positive detections observed for SARS-CoV-2.

To further support diagnostic testing stewardship and hospital system cost containment efforts, the use of pre-populated CPL requisitions with photo-copied physician signatures is strongly discouraged and may result in samples being rejected or forwarded to CPL for testing. Ordering of SARS-CoV-2 testing should not be by rote and a new requisition should be completed for each test ordered based upon the current likelihood of SARS-CoV-2 infection.

GeneXpert SARS-CoV-2 tests run solely to determine Ct values for known SARS-CoV-2-positive patients will no longer be tested in Shared Health clinical laboratories and will be forwarded to CPL for testing.

As a reminder, Shared Health results for SARS-CoV-2 will appear in eChart under the “Labs” tab and in EPR (where available) under the Microbiology heading in the “Results” tab.

Please note that Cadham Provincial Laboratory results for SARS-CoV-2, Influenza A, Influenza B, and RSV all appear in eChart under the “Labs” tab and do not appear in EPR.

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