

## CLINICAL MICROBIOLOGY

**Update on SARS-CoV-2 Only and SARS-CoV-2/Influenza A & B/RSV Quadruplex GeneXpert® Testing of Symptomatic Hospital Inpatients for the 2024-2025 Respiratory Virus Season****September 3, 2024****Background Information:**

Vaccine-preventable respiratory viruses infecting humans follow predictable annual patterns. In Manitoba, influenza A, influenza B, and respiratory syncytial virus (RSV) appear annually in a well-established, sequential, and overlapping pattern; circulating from mid to late October (autumn) to late April (spring). SARS-CoV-2 (COVID-19) currently continues to cause infections year-round. Due to the seasonality of influenza A, influenza B, and RSV, sentinel hospital laboratories alter their respiratory virus testing algorithms for fiscal and diagnostic testing stewardship reasons. Other viruses (e.g., rhinoviruses/other enteroviruses, human metapneumovirus) that are not routinely tested for by laboratories also commonly cause human respiratory tract infection.

Respiratory virus testing facilitates Infection Prevention and Control and bed management decisions for hospitalized patients in addition to clarifying treatment decisions.

**Update:**

On August 15, 2024 a memo from Shared Health leadership indicated GeneXpert® Quadruplex PCR testing (influenza A, influenza B, RSV, SARS-CoV-2) would be made available for the 2024-2025 respiratory virus season. **To better coincide with the anticipated start of the respiratory virus season, the start date identified in that memo (September 1, 2024) has been revised to mid to late October, as informed by provincial respiratory virus activity.** Until that time sentinel hospital laboratories will continue to provide GeneXpert® SARS-CoV-2 only testing following the current algorithm (<https://sharedhealthmb.ca/files/covid-19-testing-table.pdf>). Quadruplex testing is currently available from Cadham Provincial Laboratory (CPL) upon request.

When available, GeneXpert® Quadruplex PCR testing at Shared Health laboratories will be performed on nasopharyngeal (NP) swabs for the following patients:

- **Symptomatic patients admitted to hospital**
- **Symptomatic patients** in an Emergency Department (ED), Urgent Care Centre or Obstetrical Triage where **a consult for admission has been initiated or who have been designated for transfer to another facility or Personal Care Home**
- **Symptomatic patients** in an ED with **severe comorbidities** who are at a **high risk of deterioration and who will benefit from therapeutic initiation in the ED**
- Asymptomatic organ transplant patients (donors and recipients pre-transplantation)

**NP swabs collected from other patient types will be forwarded to CPL for testing.**

**Contact Information:**

Dr. James Karlowsky, Medical Director, Clinical Microbiology, Shared Health, 204-237-2105, [jkarlowsky@sharedhealthmb.ca](mailto:jkarlowsky@sharedhealthmb.ca)

Joelle Carlson, Technical Director, Clinical Microbiology, Shared Health 204-237-2073, [jcarlson@sharedhealthmb.ca](mailto:jcarlson@sharedhealthmb.ca)