

Dear colleagues,

With the continued spread of SARS-CoV-2 virus, concerns regarding back-to-school and the expected return of many other respiratory viruses including influenza and RSV, we propose a new testing strategy for fall/winter 2020/21, starting October 5<sup>th</sup>, 2020. This strategy will be revisited next year and adjusted based on clinical need.

For children who have symptoms of respiratory infection or an acute febrile illness NYD, and **need to be admitted**, or are immunocompromised:

- Submit a nasopharyngeal flocked swab and request the **“Respiratory NAT panel”**. Please also include a brief relevant history and physician signature on the requisition, which is required in the lab for prioritization and technical workflows.
- Requisitions can be found on the “eLab Handbook” website, which should come up with a Google search.
- We will perform the respiratory panel on the BioFire instrument as quickly as possible, and results should be available within 2 hours during lab hours (presently 8 am to 10 pm weekdays, 8 am to 7 pm weekends).
- The new panel includes COVID-19 and many other respiratory pathogens including influenza A&B, RSV, pertussis, etc.



For children with **mild respiratory symptoms** who do not need admission and are not immunocompromised or complex:

- We recommend the **routine** COVID-19 test.
- Nasopharyngeal flocked swabs are the specimen of choice for the COVID test at this time. Here is a link to the BCCH video on NP swab collection. [https://www.youtube.com/watch?v=AhC6\\_JXagxE](https://www.youtube.com/watch?v=AhC6_JXagxE).
- The routine COVID-19 test is performed 2-4 times per day, with a turnaround time of <24 hours.
- To order the routine COVID-19 test, please write “COVID” on the requisition next to Other:.

During influenza season, approximately November to March:

- Children with **risk factors for severe influenza** (see below) who present with influenza-like illness should also be tested urgently for influenza A&B to inform the optimal use of oseltamivir.
- The same NP flocked swab can be used for both the COVID-19 test and the influenza/RSV NAT.
- For non-admitted children please request the **“influenza rapid NAT”** on the requisition, and the lab will run the test within 2 hours, during lab hours. Infants may also require RSV testing, which is presently done together with influenza with the current influenza/RSV kit.
- In PowerChart, the rapid Influenza/RSV results can be seen by double-clicking on the old test labelled “Viral Direct Respiratory Panel”.



Microbiology	21-Dec-2017 10:15 PST	20-Dec-2017 19:55 PST	04
Blood Cultures			2
Blood Culture (1 Aerobic)			
Respiratory Microbiology			
Viral Direct Respiratory Panel.	Viral Direct Res		

We anticipate that these more rapid results will assist the clinical teams in patient management and placement, use of additional precautions, and optimal therapy. There are likely to be other situations where urgent testing is required. Please feel free to page the microbiologist-on-call for assistance via 604-875-2161.

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### Respiratory Viral Test Summary, Pediatric.

Clinical Situation:	Specimen:	Test to order:	Turnaround time:
Children with acute respiratory infection or fever NYD who are <b>admitted</b> or require admission, or are immunocompromised	Nasopharyngeal flocked swab	Respiratory NAT Panel (includes COVID, influenza A&B, RSV, many others)	< 2 hr.
<b>Non-admitted</b> children with influenza-like illness Nov-Mar, and risk factors for severe <b>influenza</b> disease.	Nasopharyngeal flocked swab	Influenza Rapid NAT, plus COVID	< 2 hr. < 24 hr.
Non-admitted infants with acute respiratory infection Nov-Mar, and risk factors for severe <b>RSV</b> disease.	Nasopharyngeal flocked swab	RSV Rapid Test, plus COVID	< 2 hr. < 24 hr.
Non-admitted children with milder acute respiratory infection, immunocompetent and not at risk for severe influenza or RSV	Nasopharyngeal flocked swab	COVID	< 24 hr.

#### Risk factors for severe influenza illness:

*(adapted from BC Children's & Women's Antimicrobial Stewardship Influenza Guideline and Canadian Pediatric Society)*

- Chronic pulmonary, renal or liver disease
- Cardiovascular disease, neurological diseases
- Malignancy, diabetes, obesity, hemoglobinopathies
- Immunosuppression, immunodeficiencies including HIV or rheumatological diseases
- Children on ASA therapy
- Residence in chronic care facilities
- First Nations, Inuit, Metis children and youth

#### Risk factors for severe RSV illness

*(from American Association of Pediatrics Red Book)*

- Age <60 days
- Preterm birth (especially <29 weeks gestational age)
- Chronic lung disease of prematurity
- Hemodynamically significant congenital heart disease
- Immunodeficiency

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### Version History

DATE	DOCUMENT NUMBER and TITLE	ACTION TAKEN
29-Sept-2020	C-0506-14-60816 C&W Respiratory Virus Testing Guideline For Children	Developed by Pathology & Laboratory Medicine; Approved by Professional Practice Director

### Disclaimer

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