Respiratory Surveillance Weekly Summary

October 27, 2022

1. Summary

This report presents information from laboratory testing, community healthcare practitioner visits, and wastewater surveillance indicators used to monitor the activity of seasonal respiratory viruses circulating in British Columbia (BC).

Our data suggest that respiratory illnesses are continuing to increase in BC. This is expected, as many viruses that cause respiratory illnesses circulate more in the fall and winter. SARS-CoV-2, the virus that causes COVID-19, continues to spread. The data suggest that most of the observed relative increase is related to other viruses that cause upper respiratory tract infections (enterovirus/rhinovirus, parainfluenza, adenovirus, human metapneumovirus, and seasonal coronavirus).

One key indicator is the share of visits to community healthcare practitioners that are because of symptoms of a new respiratory illness, such as a cough or fever. This indicator has been increasing, consistent with typical seasonal respiratory infections, with the biggest increase in visits for acute respiratory infections seen among children and youth. Because presenting symptoms may overlap for various respiratory conditions, there is potential for misclassification. Clinical visit data should be interpreted along with pathogen characterization data.

Other important indicators are laboratory test results of submitted respiratory specimens. Only some people visiting a healthcare practitioner or people who are part of an identified outbreak are sent for further testing to identify the virus causing their illness. There has been an increase in positive enterovirus or rhinovirus (ERV) results. SARS-CoV-2 is the predominant virus detected among these tests and the percent positivity is stable.

Finally, wastewater tests from water treatment plants suggest relatively stable SARS-CoV-2 detection overall.

1.1. Community Visits for Respiratory Illness

Overall, community visit rates to healthcare practitioners for respiratory symptoms have been increasing since mid-September, with early signs of potential stabilization. Community visit rates for acute respiratory infection-related symptoms account for the majority of these visits (see Data Notes for more details). The data show higher visit rates among younger children, which is a typical pattern for seasonal respiratory viruses. COVID-19-related visits have been relatively stable across regions and age groups.

Since mid-September, community visits (based on physician billing codes) for:

- Acute respiratory symptoms increased in all regions and particularly among the 0-19 age group.
COVID-19-related symptoms have remained generally stable across regions and age groups.

Note that community visits are summarized by counting physician billing codes assigned to each visit and based on clinical suspicion. Presenting symptoms may overlap for various respiratory conditions, and there is potential for misclassification. Trends presented here should be interpreted along with pathogen characterization data. Please refer to the limitations section of the data notes in the Supplementary Information section for further information.

1.2. COVID-19 Weekly Summary

In the most recent week (October 16–October 22, 2022), the number of reported COVID-19 cases among individuals eligible for PCR testing was lower compared to the previous week (October 9–October 15, 2022). Trends in severe outcomes (hospitalizations, critical care admissions, and deaths) are relatively stable overall based on reported information so far.

Within the last four weeks (September 25–October 22, 2022):

- The average number of cases remained stable.
- The number of new hospital admissions has generally remained stable.
- The number of critical care admissions remained stable. Average numbers ranged from 1 to 10 counts daily.
- The number of deaths within 30 days of a first positive COVID-19 test remained stable. Average numbers ranged from 1 to 13 counts daily.

Within the last week (October 16–October 22, 2022):

- There were 534 cases reported this week.
- There were 148 new hospital admissions reported.
- There were 26 new critical care admissions reported.
- There were 44 deaths within 30 days of a first positive COVID-19 test reported.
- We operate in a live database environment and it is expected that the number of hospitalizations admissions, critical care admissions and deaths in the current report week will increase over time with further updates of data feeds to BC Centre for Disease Control.

1.3. Pathogen Characterization

Over the past two weeks, the number of entero and/or rhinoviruses (ERV) have been increasing, while the percent positivity is no longer on its upward trend. Overall, we observe seasonal circulation of most respiratory pathogens with no notable increase in positivity.

Currently, SARS-COV-2 is the most commonly detected virus in the province. ERV are the second most commonly detected virus in B.C. However, after accounting for testing volumes, test positivity for SARS-CoV-2 is lower than that of ERV.
A targeted proportion of ERV specimens is further subtyped among children in seasons where enterovirus D68 is expected to peak (for further details, see Data Notes). Of the ones that undergo targeted testing, in the current 2022 season, approximately a quarter are currently testing positive for enterovirus D68. This proportion is not necessarily representative of broader patterns in the community.

1.4. **Wastewater**

*SARS-CoV-2 viral loads measured in most wastewater plants in Metro Vancouver are stable at all sites.*