Launching a Provincial Respiratory Illness Surveillance System

PICNet
PROVINCIAL INFECTION CONTROL NETWORK OF BRITISH COLUMBIA
A program of the Provincial Health Services Authority

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OBJECTIVES

- **Develop standardized, provincial, acute care facility and health authority-based respiratory illness (RI) surveillance products for timely situational awareness of RI burden to inform infection prevention and control strategies.**
- **Engage with partners to obtain system requirements by employing an ongoing, collaborative, partnership-focused approach.**
- **Provide an accessible platform for end-users to monitor key RI metrics.**

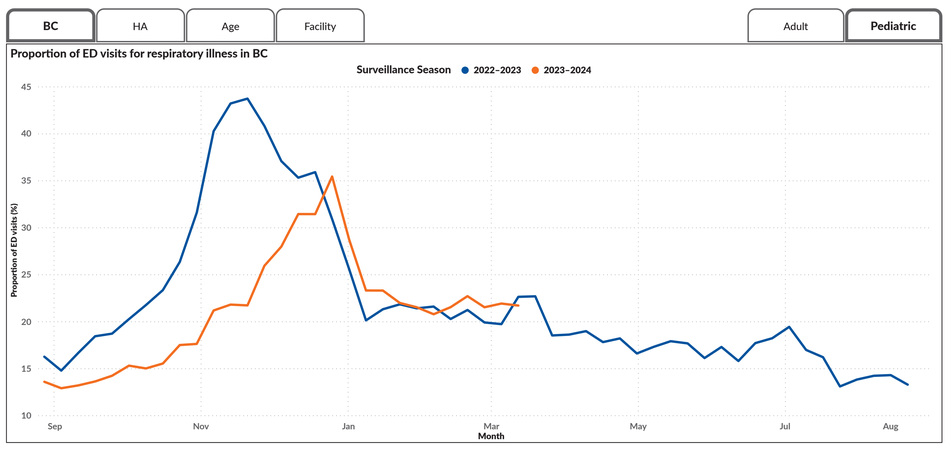
METHODS

- **Engagement:** Collaborated with infection prevention and control (IPC), public health, and BC Centre for Disease Control Data & Analytics colleagues to determine metrics and define reporting.
- **Populations under surveillance:** Patients presenting to an emergency department (ED) and the acute care inpatient population.
- **ED metrics:** Pediatric and adult syndromic indicators were developed using administrative health data for daily ED visits based on presenting complaints (CEDIS codes) for cough and fever and cough, fever, and shortness of breath, respectively.
- **Reporting format:** Indicators are presented at the provincial level and stratified by age, health authority, and facility.
- **Delivery:** An interactive, internally accessible dashboard is shared weekly data with IPC partners.

RESULTS

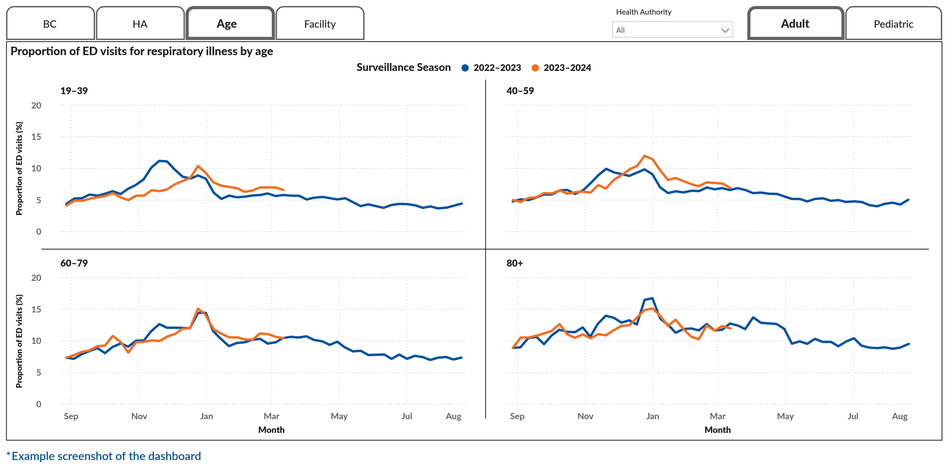
- **Trends of ED visits due to RI symptoms in acute care facilities** for pediatric and adults align with community surveillance trends provincially, and by health authority and age group.
- **The dashboard enables users** in each health authority to access their respective facility-level metrics.
- **A later peak in ED visits for RI symptoms** occurred in the 2023/24 season compared to the 2022/23 season for both the pediatric and adult populations at the provincial level and in the majority of health authorities and age categories.

Figure 1: Proportion of pediatric ED visits for RI symptoms in BC*



*Example screenshot of the dashboard

Figure 2: Proportion of adult ED visits for RI symptoms in BC by age*



*Example screenshot of the dashboard

CONCLUSIONS

- **Positive feedback** from end-users indicates the dashboard's effectiveness. Membership has increased significantly since the dashboard was launched where the number of active users has tripled, indicating its value and impact.
- **There is a wide range of users,** including infection control practitioners, operational leadership, epidemiologists and medical microbiologists.
- **Engagement and collaboration** with our partners was key to the successful creation of meaningful, and standardized ED indicators.
- **Next steps** include building indicators for hospitalizations and critical care admissions with a positive test for respiratory syncytial virus, COVID-19 or Influenza A and B.

ACKNOWLEDGEMENTS

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As a provincial network, we operate on the unceded traditional and ancestral lands of First Nations. Our main office is located on the traditional and ancestral lands of the territories of the xʷməθkwəy̓əm (Musqueam), Sḵwx̱wú7mesh Úxwumixw (Squamish), Stó:lō and səl̓ílwətaɬ (Tsleil-Waututh) Nations.