



SPSN Report #3, 2023-24 Season Epi Weeks 44 to 45: October 29 to November 11, 2023

The seasonal vaccine effectiveness (VE) monitoring period has begun as of epi-week 44. Only the updated 2023-24 SPSN requisitions should now be used. Please collect specimens and complete the full 2023-24 SPSN requisition for consenting patients, both vaccinated and unvaccinated, presenting with acute respiratory illness (i.e., new or worsening cough) that you believe could be due to a respiratory virus. NOTE: For COVID-19 vaccination, be sure to specify month and year of the most recent dose.

Below is a summary of specimens and respiratory pathogens detected by the Sentinel Practitioner Surveillance Network (SPSN) during the period spanning epi-weeks 44 to 45 (October 29 to November 11) 2023. All tallies are subject to change as the season progresses and data become more complete.

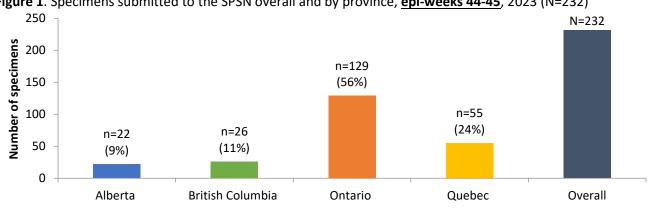


Figure 1. Specimens submitted to the SPSN overall and by province, epi-weeks 44-45, 2023 (N=232)

For the distribution of SPSN specimens by province and age group, see Table 1.

SPSN specimens with at least one respiratory pathogen detected, epi-weeks 44-45, 2023: 125/232 (54%)

SPSN respiratory virus detections, epi-weeks 44-45, 2023 (n, %):

- 1. Enterovirus/rhinoviruses (EV/RV): 51 (22%)
- 2. Respiratory syncytial virus (RSV): 32 (14%)
- 3. SARS-CoV-2: 27 (12%)
- 4. Influenza viruses: 11 (5%)
- 5. Other (parainfluenza, seasonal coronaviruses, human metapneumovirus and adenoviruses): 12 (5%)

SPSN influenza test-negative controls who received 2023-24 influenza vaccine to date: 17% (36/213*) *Denominator includes specimens collected from SPSN patients with acute respiratory illness who tested negative for influenza virus and for whom 2023-24 influenza vaccine status (yes/no) was reported; numerator represents those reporting vaccine receipt.

SPSN weekly respiratory virus findings since epi-week 35 are shown in Figure 2, and by province in Figure 3.

For more respiratory pathogen surveillance globally, including from among general laboratory specimens in British Columbia, see references with hyperlinks provided in Table 2.

Below are the vaccine components recommended by the World Health Organization for the 2023-24 season:

Season	A(H1N1)pdm09	A(H3N2)	B/Victoria*	B/Yamagata	
2023-24	A/Victoria/4897/2022	A/Darwin/9/2021	B/Austria/1359417/2021	B/Phuket/3073/2013	
(current)	(clade 6B.1A.5a.2a.1; "5a.2a.1")	(clade 3C.2a1b.2a.2a; "2a")	(clade V1A.3a.2; "3a.2")	(clade Y3)	

*recommended component of trivalent vaccine whereas quadrivalent vaccine includes both B/Victoria and B/Yamagata lineages.



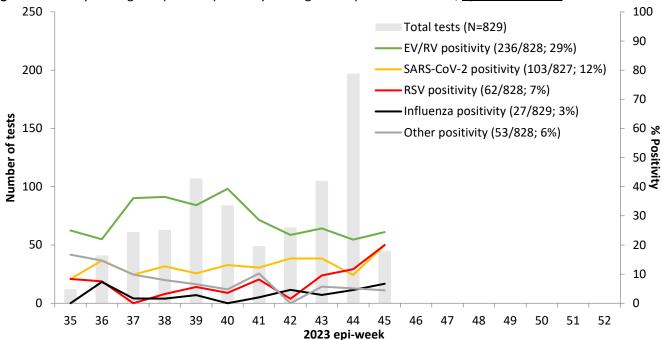
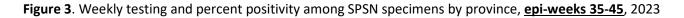
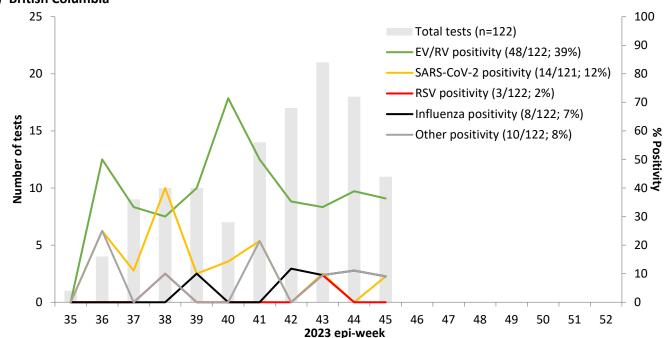


Figure 2. Weekly testing and percent positivity among SPSN specimens overall, epi-weeks 35-45, 2023

Among SPSN specimens overall, a total of 22 were diagnosed with co-infections: 5 with influenza A plus EV/RV; 5 with SARS-Co-V-2 plus EV/RV; 11 with RSV plus EV/RV; and 1 with RSV plus adenovirus.

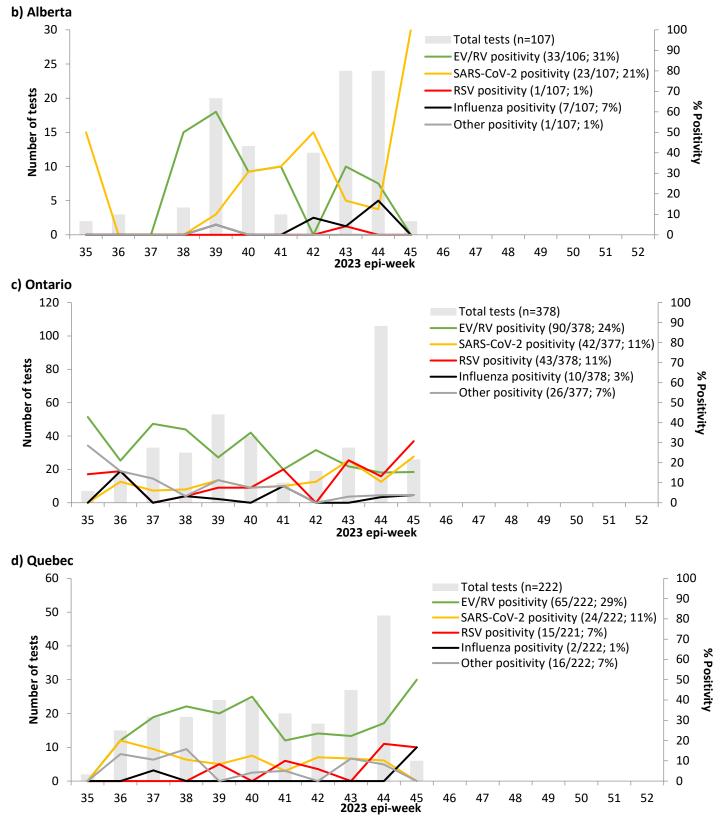




a) British Columbia

Note: Figure 2 and Figure 3 indicate specimens from both 2022-23 and 2023-24 requisitions. All values for the most recent epi-week are subject to change.





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Province	<5 years	5-8 years	9-11 years	12-19 years	20-49 years	50-64 years	65+ years	Total
AB	1	0	1	2	11	4	3	22
BC	2	3	2	4	6	3	6	26
ON	23	14	5	7	41	19	20	129
QC	8	6	1	3	12	12	13	65
Total	34	23	9	16	70	38	42	232

Table 2. Additional resources for respiratory pathogen surveillance

Canada	South Africa
BCCDC - Respiratory Disease Dashboard	National Institute for Communicable Diseases - Weekly
PHAC - FluWatch Surveillance	Respiratory Pathogens Surveillance Report
PHAC - Human Emerging Respiratory Pathogens Bulletins	
	World Health Organization
United States	Global Influenza Updates
Washington State - Influenza Updates	Weekly Epidemiological Record
California State - Influenza and Respiratory Disease	Collaborating Centre for Reference and Research on
Surveillance Report	Influenza
CDC - Weekly Influenza Surveillance Report	Recommendations for Influenza Vaccine Composition
	Influenza at the Human-Animal Interface Summary and
Europe	Assessment Updates
Joint ECDC—WHO/Europe - Flu News	
	World Organization for Animal Health
Oceania	OFFLU - Animal influenza
Australian Influenza Surveillance Reports	
New Zealand Institute of Environmental Science and	
Research (ESR) - Acute Respiratory Illness Infections	
Dashboard	