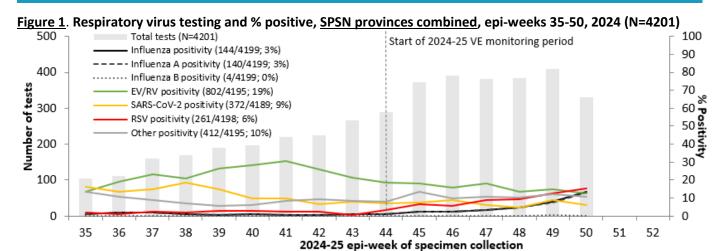


SPSN Report #4, 2024-25 Season Epi Weeks 35 to 50: August 25 to December 14, 2024

Both influenza A and RSV are increasing in all SPSN provinces. The influenza A(H1N1) subtype is predominating. *M pneumoniae* and *C pneumoniae* detections in BC and Quebec are ongoing, exceeding prior seasons.

Sentinels should please continue submitting swabs and questionnaires through the holiday period.



^{*} Tallies subject to change as data become more complete, notably for the most recent weeks. Viruses included in "other" category: parainfluenza, seasonal coronaviruses, human metapneumovirus, adenovirus. Of influenza A viruses subtyped, 99/134 (74%) are A(H1) and 35/134 (26%) are A(H3) overall, including 90/120 (75%) and 30/120 (25%), respectively, since week 44. Overall, 95 participants diagnosed with co-infections, mostly involving RSV. See **Figure 3** for findings by province. See **Table 2** for tallies by age group and province.

M pneumoniae and C pneumoniae

In BC and Quebec, SPSN testing includes the atypical bacteria *Mycoplasma pneumoniae* and *Chlamydophila pneumoniae*. For weeks 35 to 50, *M pneumoniae* positivity is higher than prior seasons at 7% (42/624) in BC and 5% (81/1767) in Quebec. *M pneumoniae* detections are ongoing with week 49-50 positivity of 6% and 5%, respectively (not shown). *C pneumoniae* detections also exceed recent prior seasons, with ~1% positivity in both provinces (14/2391 combined) since week 35 (not shown).

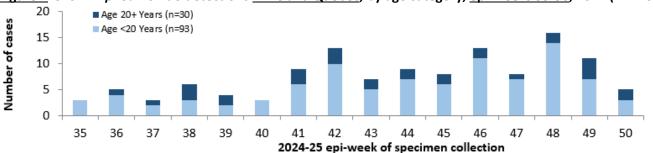


Figure 2. SPSN M pneumoniae detections in BC and Quebec, by age category, epi-weeks 35-50, 2024 (N=123)*

Table 1. SPSN 2024-25 influenza and COVID-19 vaccine coverage among negative controls*

<u> </u>							
	2024-25 self-reported influenza vaccination			2024-25 self-reported COVID-19 vaccination			
Province	Vaccinated	Total	% vaccinated	Vaccinated	Total	% vaccinated	
Alberta	66	229	29%	51	219	23%	
ВС	127	408	31%	98	422	23%	
Ontario	192	914	21%	103	838	12%	
Quebec	84	715	12%	66	688	10%	
Overall	469	2266	21%	318	2167	15%	

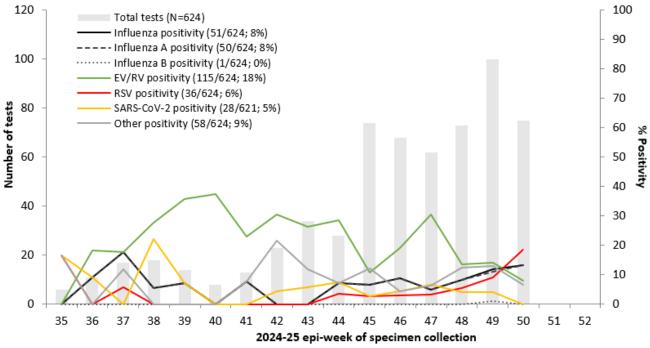
^{*} Since epi-week 44: denominator includes specimens from SPSN patients with acute respiratory illness who tested negative for the target virus and for whom 2024-25 vaccine status (yes/no) was reported; numerator is tally reporting vaccine receipt regardless of timing in relation to specimen collection.

^{*} M pneumoniae reporting in BC and Quebec only. Tallies subject to change as data become more complete, notably for the most recent weeks.



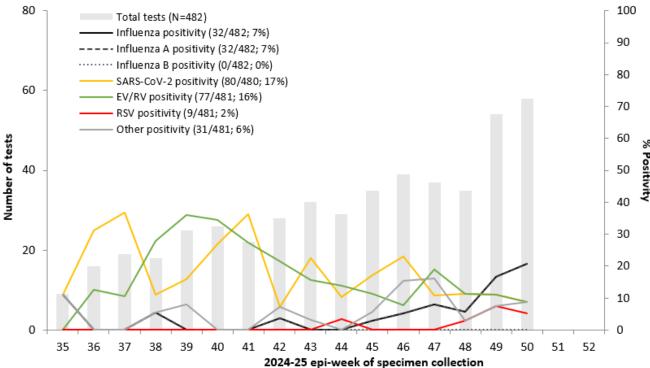
Figure 3. Weekly testing and percent positivity among SPSN specimens by province, epi-weeks 35-50, 2024

a) British Columbia



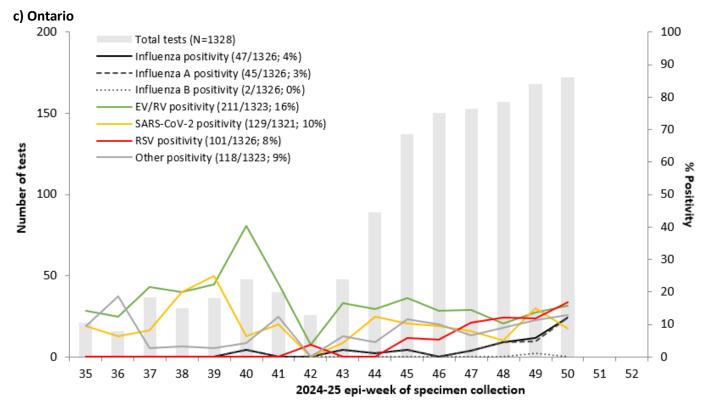
Specimens from both 2023-24 and 2024-25 requisitions are displayed. All tallies are subject to change as the season progresses and data become more complete, notably for the most recent weeks.



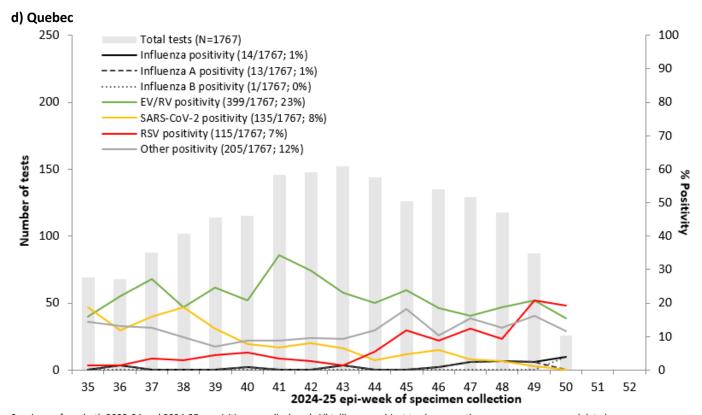


Specimens from both 2023-24 and 2024-25 requisitions are displayed. All tallies are subject to change as the season progresses and data become more complete, notably for the most recent weeks.





Specimens from both 2023-24 and 2024-25 requisitions are displayed. All tallies are subject to change as the season progresses and data become more complete, notably for the most recent weeks.



Specimens from both 2023-24 and 2024-25 requisitions are displayed. All tallies are subject to change as the season progresses and data become more complete, notably for the most recent weeks.



Table 2. Specimens submitted to the SPSN by province and age group, epi-weeks 35-50, 2024 (N=4201)

Province	<5 years	5-8 years	9-19 years	20-49 years	50-64 years	65+ years	Total
AB	25	23	54	177	90	113	482
ВС	45	55	143	199	102	80	624
ON	183	110	187	455	179	214	1328
QC	268	137	244	586	262	270	1767
Total	521	325	628	1417	633	677	4201

Table 3. Additional resources for respiratory pathogen surveillance

Ca	n	а	Ч	а

BCCDC - Respiratory Disease Dashboard

PHAC - FluWatch Surveillance

PHAC - Human Emerging Respiratory Pathogens Bulletins

United States

Washington State - Influenza Updates

<u>California State - Influenza and Respiratory Disease</u>

Surveillance Report

CDC - Weekly Influenza Surveillance Report

Europe

Joint ECDC—WHO/Europe - Flu News

Oceania

Australian Influenza Surveillance Reports

New Zealand Institute of Environmental Science and

Research (ESR) - Acute Respiratory Illness Infections

Dashboard

South Africa

National Institute for Communicable Diseases - Weekly Respiratory Pathogens Surveillance Report

World Health Organization

Global Influenza Updates

Weekly Epidemiological Record

Recommendations for Influenza Vaccine Composition
Influenza at the Human-Animal Interface Summary and

Assessment Updates

World Organization for Animal Health

OFFLU - Animal influenza