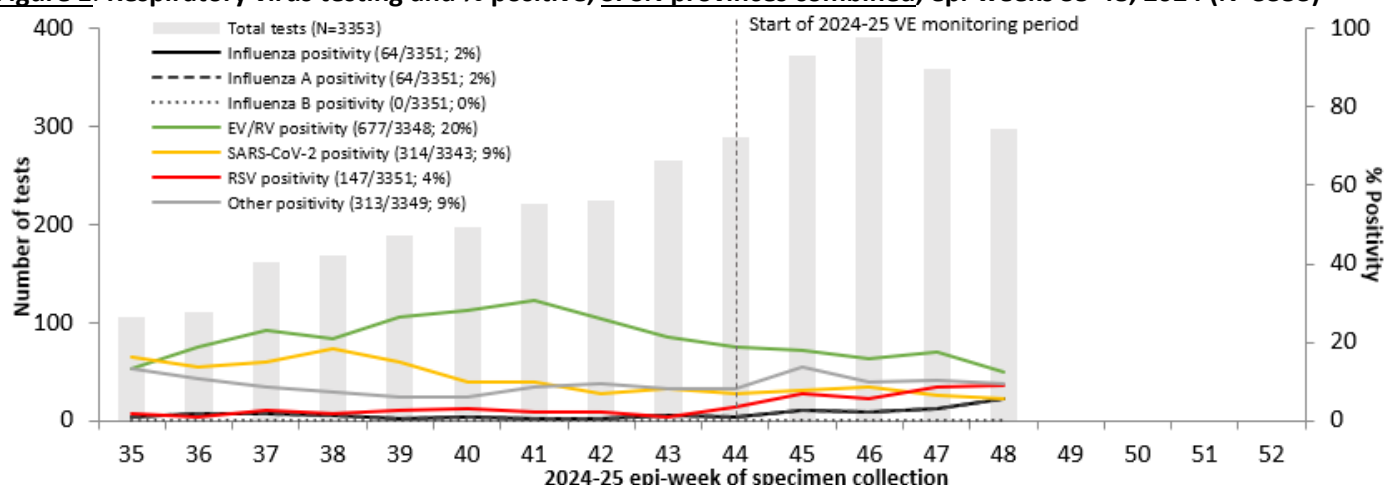


SPSN Report #3, 2024-25 Season

Epi Weeks 35 to 48: August 25 to November 30, 2024

The 2024/25 SPSN vaccine effectiveness (VE) monitoring period is underway. Across participating provinces, influenza activity remains low but is increasing alongside RSV, while enteroviruses show the highest, but declining, positivity. Testing for atypical bacteria including *Mycoplasma pneumoniae* and *Chlamydia pneumoniae* in BC and Quebec shows ongoing detections exceeding prior seasons.

Figure 1. Respiratory virus testing and % positive, SPSN provinces combined, epi-weeks 35-48, 2024 (N=3353)

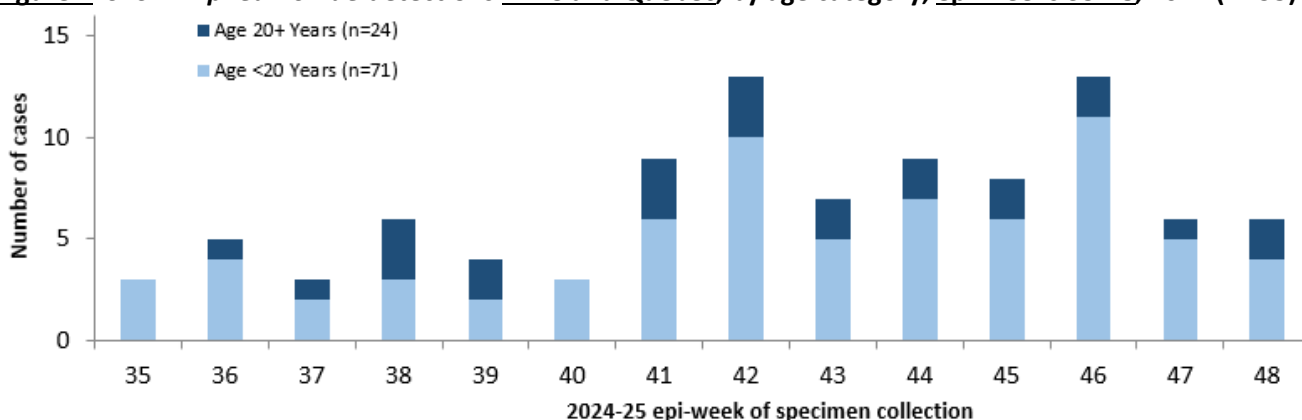


* Tallies subject to change as data become more complete, notably for the most recent weeks. Viruses included in “other” category: parainfluenza, seasonal coronaviruses, human metapneumovirus, adenovirus. Of influenza A viruses subtyped, 47/59 (80%) are A(H1) and 12/59 (20%) are A(H3) overall, including 38/45 (84%) and 7/45 (16%), respectively, since week 44. Overall, 63 participants diagnosed with co-infections, mostly involving RSV. See **Figure 3** for findings by province. See **Table 1** for tallies by age group and province.

M pneumoniae* and *C pneumoniae

In BC and Quebec, SPSN testing includes the atypical bacteria *M pneumoniae* and *C pneumoniae*. For weeks 35 to 48, *M pneumoniae* positivity is higher than prior seasons at 7% (31/435) in BC and 4% (64/1560) in Quebec. *M pneumoniae* detections are ongoing with week 47-48 positivity of 5% and 4%, respectively (not shown). *C pneumoniae* detections also exceed recent prior seasons, with ~1% positivity in both provinces (11/1995 combined) since week 35 (not shown).

Figure 2. SPSN *M pneumoniae* detections in BC and Quebec, by age category, epi-weeks 35-48, 2024 (N=95)*



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

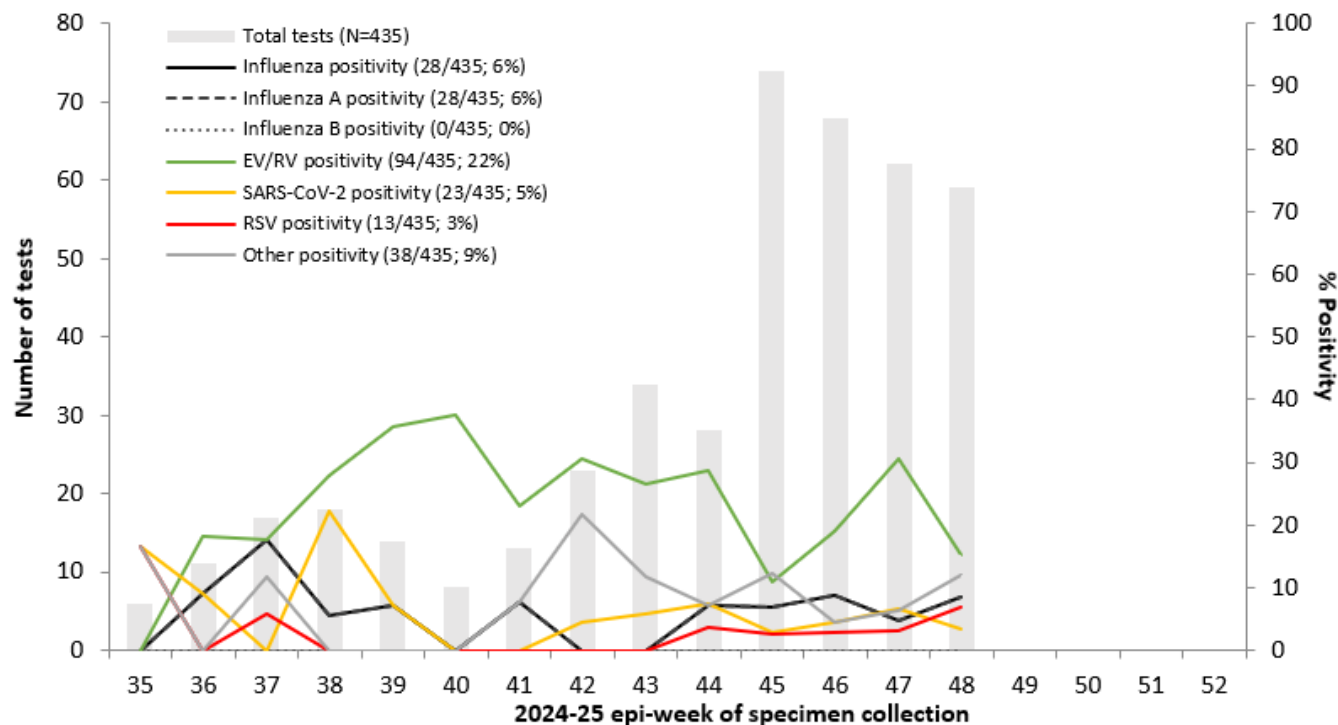
2024-25 influenza vaccination, SPSN influenza-negative controls: 18% (273/1534*)

2024-25 COVID-19 vaccination, SPSN SARS-CoV-2-negative controls: 12% (175/1424*)

* Since epi-week 44: denominator includes specimens collected 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 represents those reporting vaccine receipt.

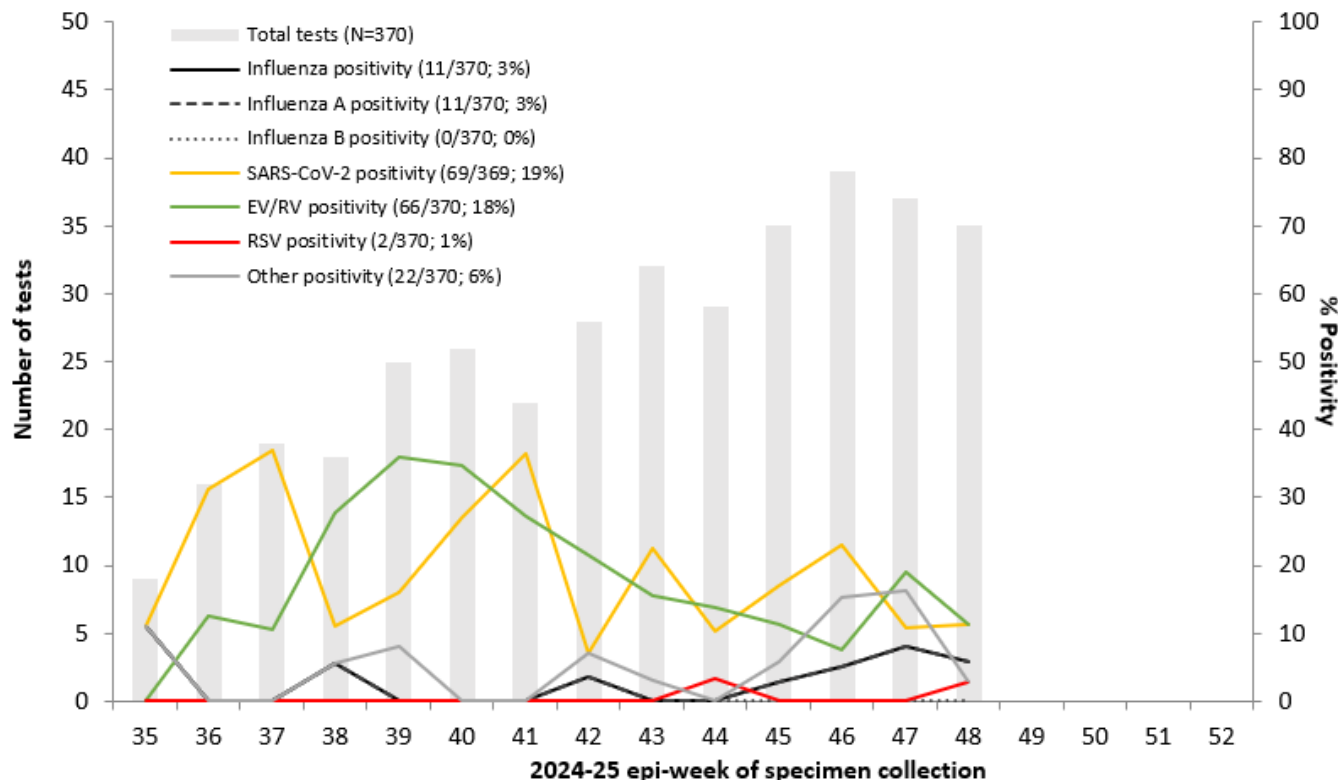
Figure 3. Weekly testing and percent positivity among SPSN specimens by province, epi-weeks 35-48, 2024

a) British Columbia



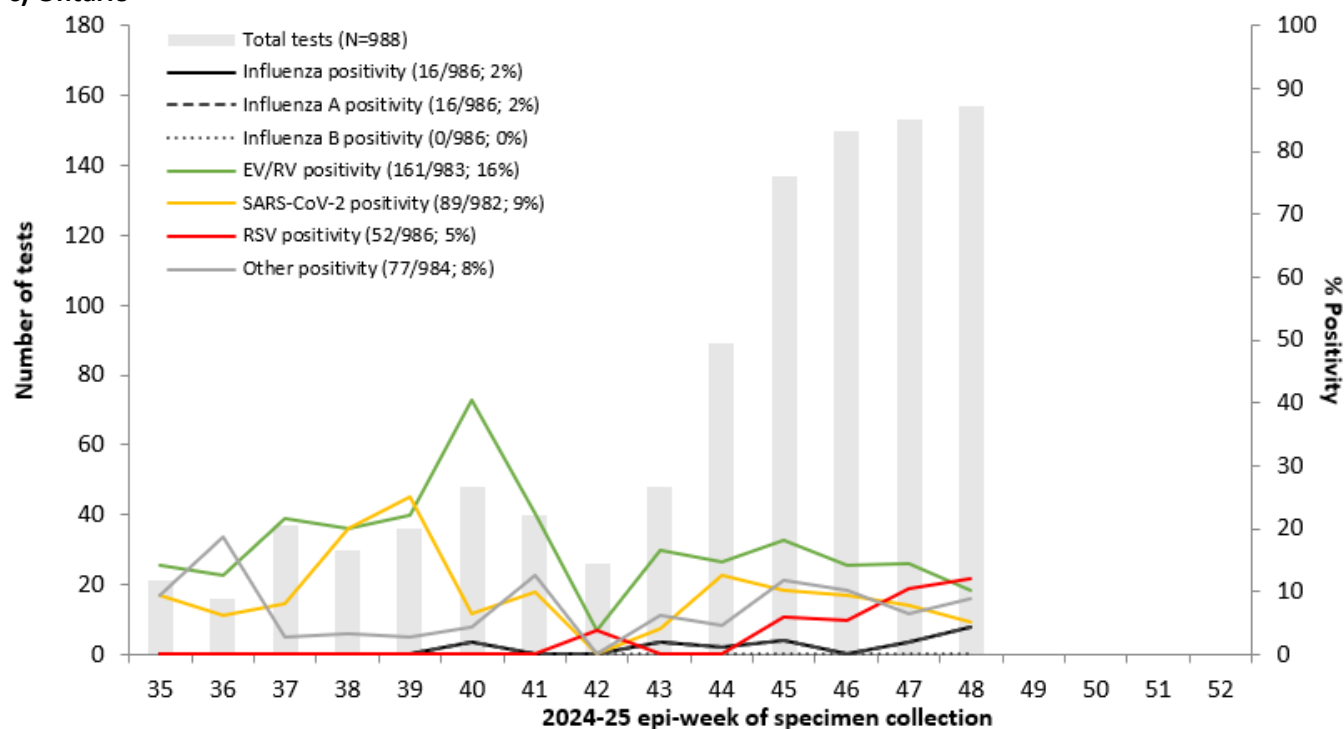
Specimens from both 2023-24 and 2024-25 requisitions are displayed. All tallies are subject to change as the season progresses and data become more complete, notably for the most recent weeks.

b) Alberta



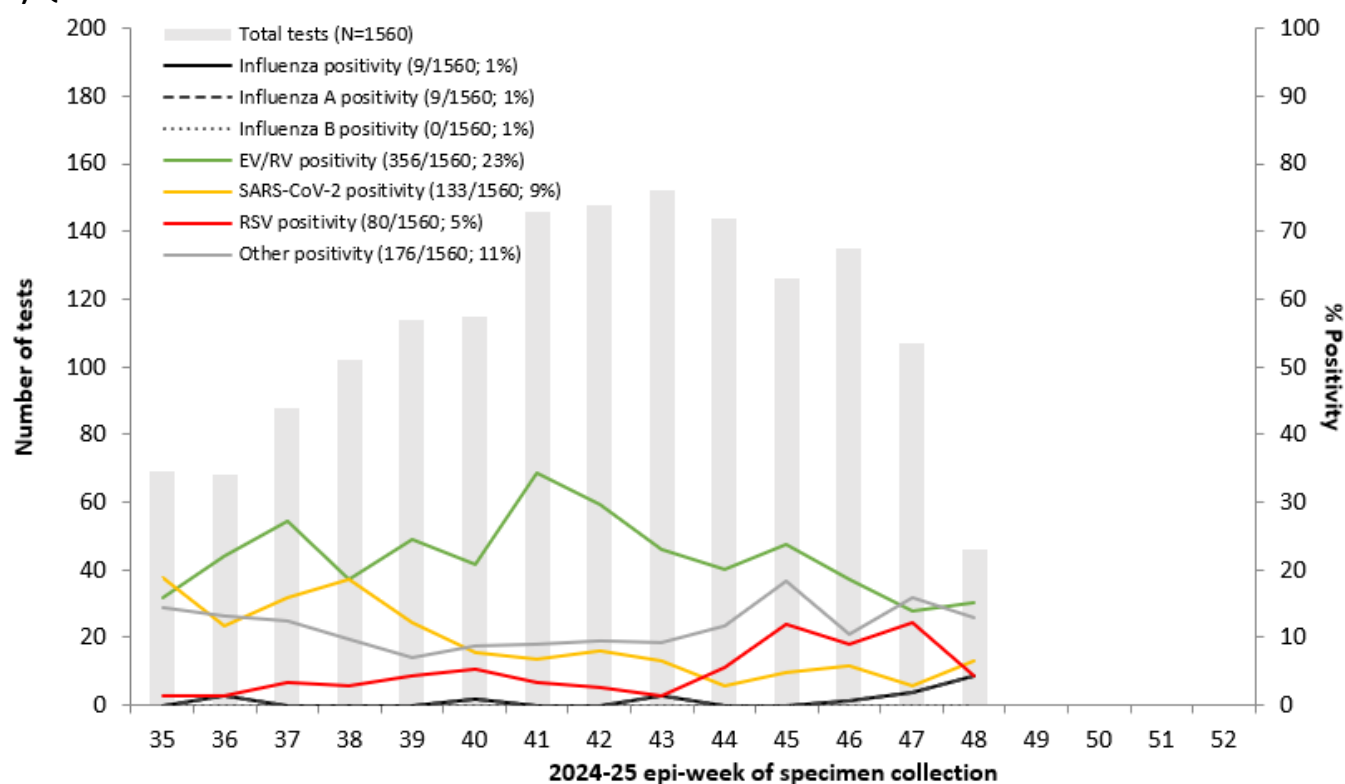
Specimens from both 2023-24 and 2024-25 requisitions are displayed. All tallies are subject to change as the season progresses and data become more complete, notably for the most recent weeks.

c) Ontario



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.

d) Quebec



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 1. Specimens submitted to the SPSN by province and age group, epi-weeks 35-48, 2024 (N=3353)

Province	<5 years	5-8 years	9-19 years	20-49 years	50-64 years	65+ years	Total
AB	13	15	46	131	71	94	370
BC	28	37	102	135	77	56	435
ON	136	80	144	332	131	165	988
QC	229	123	212	524	234	238	1560
Total	406	255	504	1122	513	553	3353

Table 2. Additional resources for respiratory pathogen surveillance

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