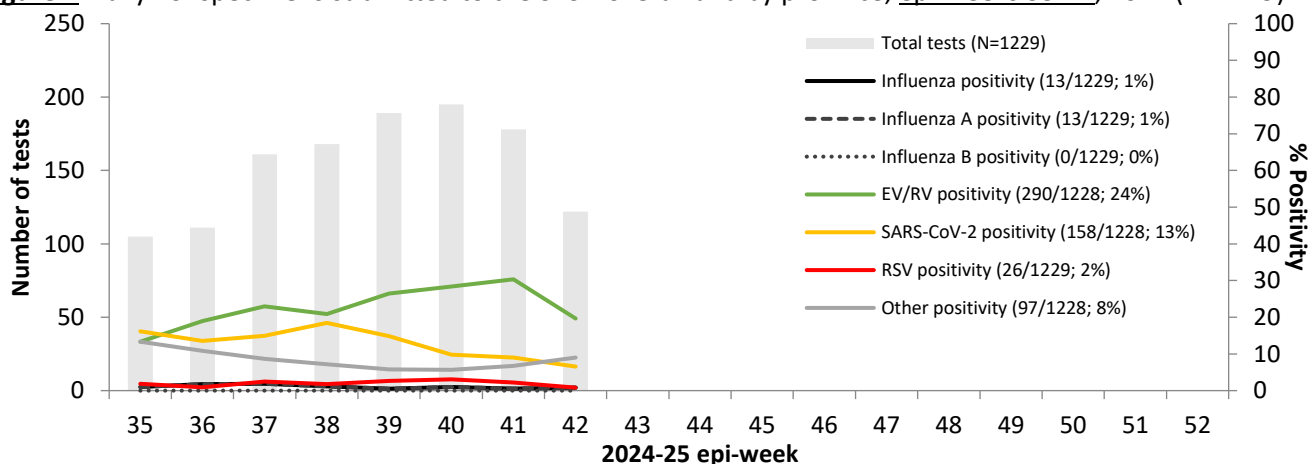


SPSN Report #1, 2024-25 Season

Epi Weeks 35 to 42: August 25 to October 19, 2024

The 2024/25 SPSN vaccine effectiveness (VE) monitoring period has begun. All sentinels should switch to the 2024/25 kits and ensure to fully complete the 2024/25 SPSN questionnaire, notably including whether the patient meets the ARI eligibility criterion and related to COVID-19 vaccination (for which info was more often missing last season). During epi-weeks 35-42, influenza and RSV activity remained low, with highest positivity for entero/rhinoviruses. Testing of SPSN specimens for *Mycoplasma pneumoniae* (undertaken in BC and Quebec only) indicates heightened activity compared to prior seasons, consistent with other reporting. The SPSN 2024 pertussis pilot project (undertaken in BC only) concluded October 31, and findings will be shared once analyzed.

Figure 1. Tally* of specimens submitted to the SPSN overall and by province, epi-weeks 35-42, 2024 (N=1229)



* Includes specimens from both 2023-24 and 2024-25 requisitions with test dates provided. All tallies are subject to change as the season progresses and data become more complete, notably for the most recent weeks. Other includes parainfluenza, seasonal coronaviruses, human metapneumovirus, adenovirus. Among SPSN specimens overall, a total of 15 were diagnosed with co-infections, mostly involving SARS-CoV-2 and another respiratory virus. See Table 2 for the overall tally of specimens tested by age group and province. See Figure 2 for test-positivity findings by province.

For additional respiratory virus surveillance findings specific to British Columbia (BC), see [Figure 2](#), and consult the BC Centre for Disease Control (BCCDC) respiratory dashboard, available [here](#).

M pneumoniae

In the provinces of BC and Quebec, routine multiplex testing of all SPSN specimens includes select atypical bacteria, including *M pneumoniae*. For the August-October period (weeks 35 to 42) of 2024, *M pneumoniae* positivity is 7% (8/109) in BC and 4% (28/711) in Quebec, which is higher than during the same period of prior seasons, consistent with reports elsewhere, including this [US CDC bulletin](#). Monitoring continues.

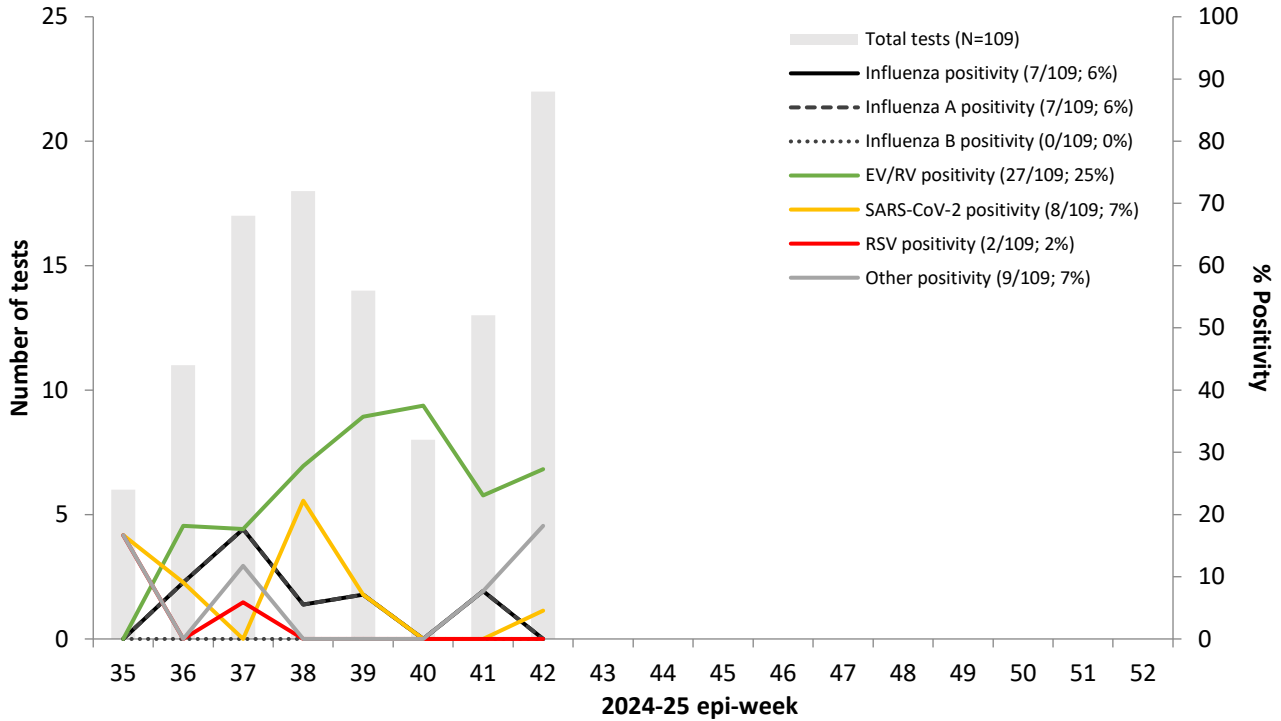
B pertussis

In the context of reports more generally indicating increased *B pertussis* following the COVID-19 pandemic (see bulletins [here](#)), the BCCDC undertook an enhanced surveillance pilot project, additionally applying a separate screening assay for *B pertussis* to SPSN specimens submitted in BC between August and October 2024. The 2024 pilot project concluded October 31, and findings will be shared once analysis is completed.

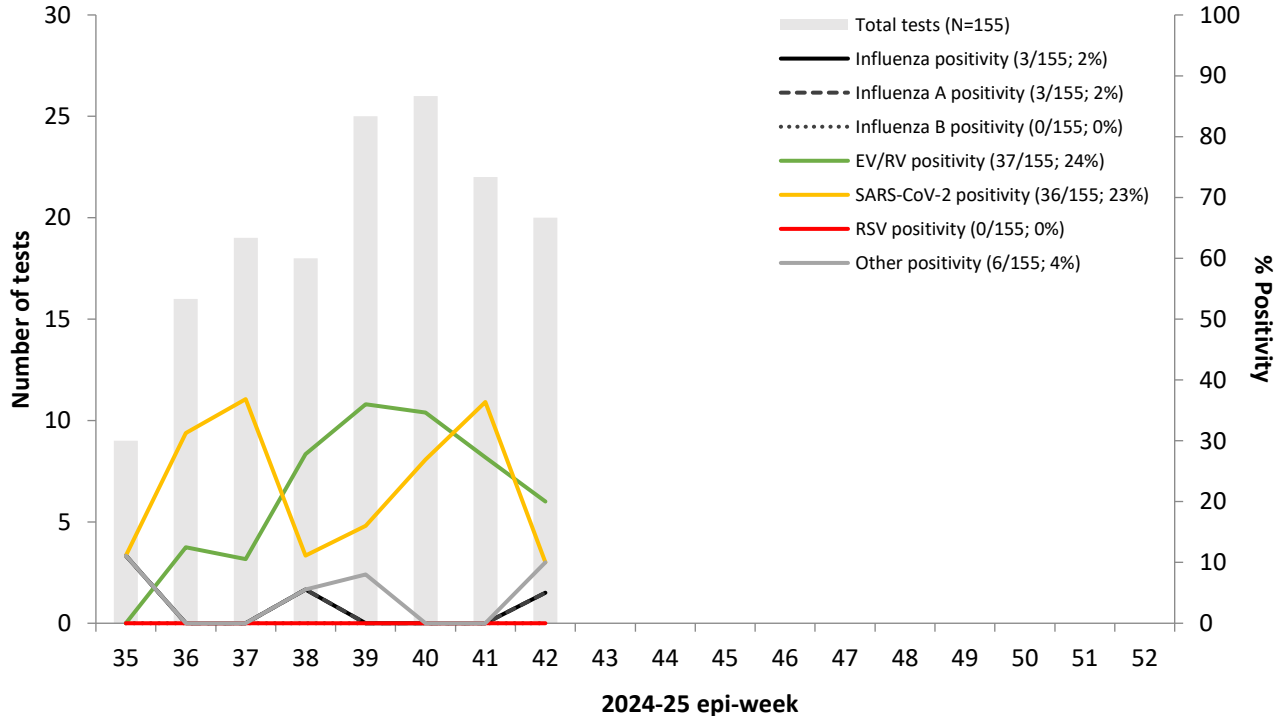
Table 1. The [World Health Organization](#) announced the recommended influenza strains for the northern hemisphere’s 2024-25 vaccine, changing only the A(H3N2) component of the 2023-24 vaccine:

Season	A(H1N1)pdm09	A(H3N2)	B/Victoria*	B/Yamagata
2023-24 (prior)	A/Victoria/4897/2022 (clade 6B.1A.5a.2a.1; “5a.2a.1”)	A/Darwin/9/2021 (clade 3C.2a1b.2a.2a; “2a”)	B/Austria/1359417/2021 (clade V1A.3a.2)	B/Phuket/3073/2013 (clade Y3)
2024-25 (current)	(unchanged)	A/Thailand/8/2022 (clade 3C.2a1b.2a.2a.3a.1; “2a.3a.1”)	(unchanged)	(unchanged)

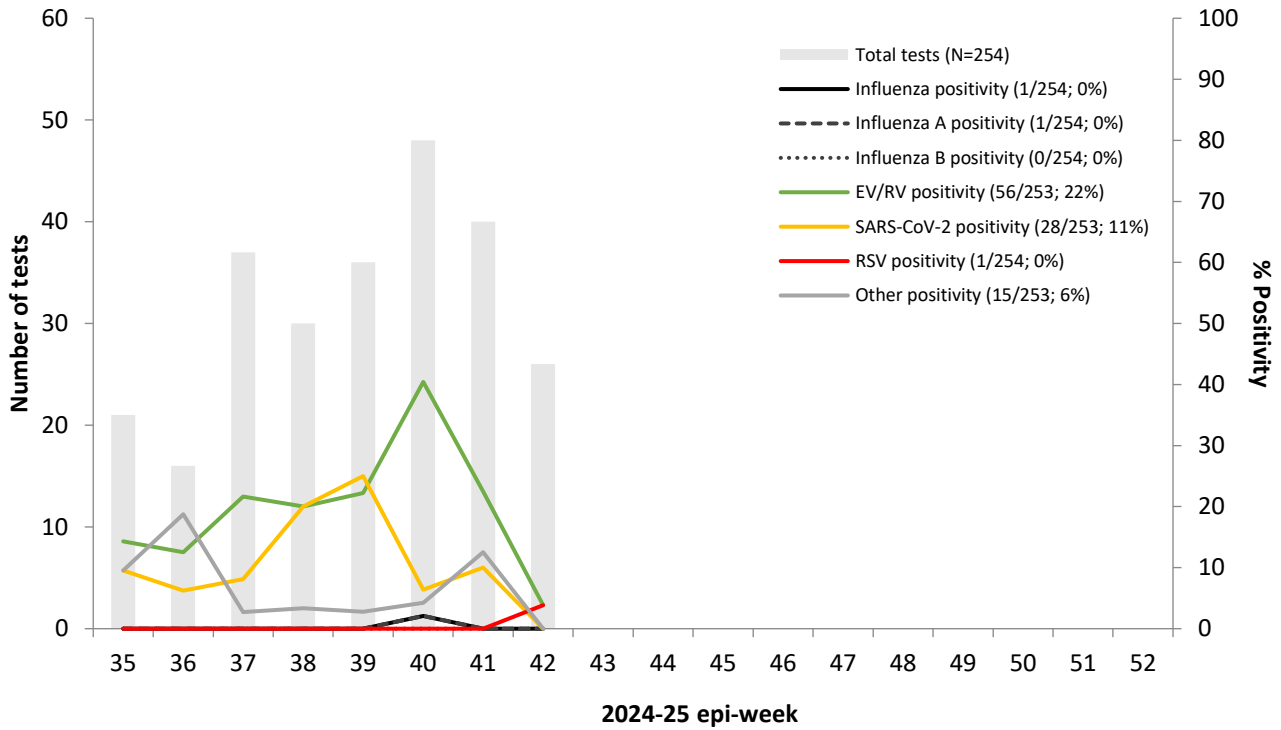
*recommended component of trivalent vaccine whereas quadrivalent vaccine includes both B/Victoria and B/Yamagata lineages.

Figure 2. Weekly testing and percent positivity among SPSN specimens by province, epi-weeks 35-42, 2024
a) British Columbia


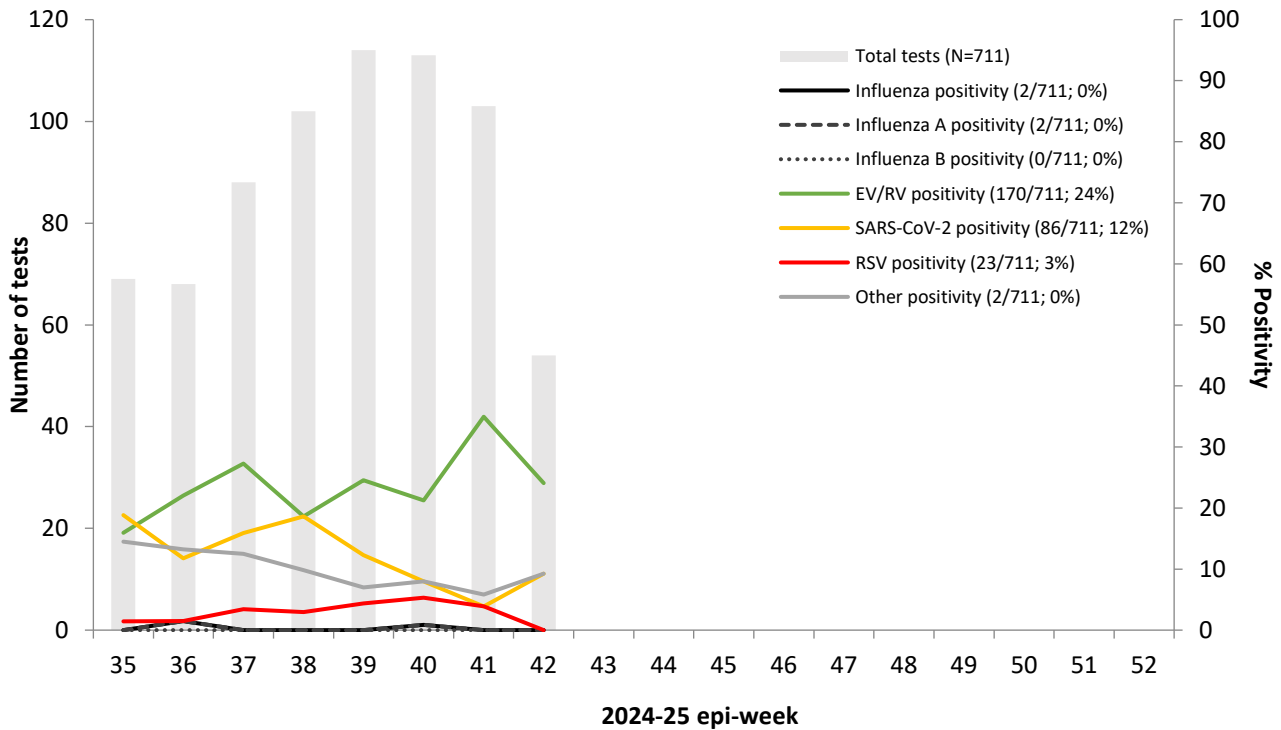
Specimens from both 2023-24 and 2024-25 requisitions are displayed. All tallies are subject to change as the season progresses and data become more complete, notably for the most recent weeks.

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 2. Specimens submitted to the SPSN by province and age group, epi-weeks 35-42, 2024 (N=1229)

Province	<5 years	5-8 years	9-19 years	20-49 years	50-64 years	65+ years	Total
AB	2	7	20	57	26	43	155
BC	4	4	22	33	29	17	109
ON	38	16	35	92	30	43	254
QC	110	56	80	233	110	122	711
Total	154	83	157	415	195	225	1229

Table 3. 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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