

# RESPIRATORY VIRUS DETECTION REPORT

April 2 to April 8, 2023  
(Surveillance Week 2023-14)



Please note that the Respiratory Virus Detection Surveillance System (RVDSS) is a sentinel laboratory surveillance system that does not capture all respiratory virus testing performed in Canada; differences may exist between the data presented in this report and provincial/territorial epidemiological reports. SARS-CoV-2 laboratory data is included in this report to facilitate the comparison of positivity with other respiratory viruses. Interpretation should be made with caution as testing practices differ among viruses.

For additional SARS-CoV-2 surveillance information, please refer to the [COVID-19 epidemiology update](#).

## Overall Summary

In week 14 (week ending April 8, 2023) in Canada, participating RVDSS laboratories reported 3,889 detections of SARS-CoV-2 from 37,325 tests (10.4% positive). Among non-SARS-CoV-2 respiratory viruses, where test volumes are lower (range of 5,982 to 20,835 tests), activity of nearly all viruses is within or below expected levels.

- Activity of influenza remains low at inter-seasonal levels.
  - Influenza B activity has increased in recent weeks but remains slightly below expected levels (368 detections; 1.8% positive). Influenza A activity is lower and far below expected levels (75 detections; 0.4% positive).
- Activity of all other non-SARS-CoV-2 respiratory viruses is near or below expected levels typical of this time of year.
- 33/35 sentinel laboratories reported surveillance data

## Abbreviations

ADV: Adenovirus

Atl: Atlantic Canada

BC: British Columbia

Can: Canada

EORLA: Eastern Ontario Regional Laboratory Association

EV/RV: Enterovirus/Rhinovirus

Flu: Influenza

Flu A(H1N1)pdm09: Influenza A(H1N1)pdm09

Flu A(H3): Influenza A(H3N2)

Flu A (UnS): Influenza A(Unsubtyped)

HCoV: Human coronavirus 229E/OC43/NL63/HKU1

HMPV: Human metapneumovirus

HPIV: Human parainfluenza virus

HSC: Health Sciences Centre

N.C.: Data not collected

N.R.: Data not reported for current week

ON: Ontario

PR: Prairies

P.H.O.L.: Public Health Ontario Laboratory

QC: Quebec

RSV: Respiratory syncytial virus

RVDSS: Respiratory Virus Detection Surveillance System

SARS-CoV-2: Severe acute respiratory syndrome coronavirus 2

Terr: Territories of Canada

UHN: University Health Network

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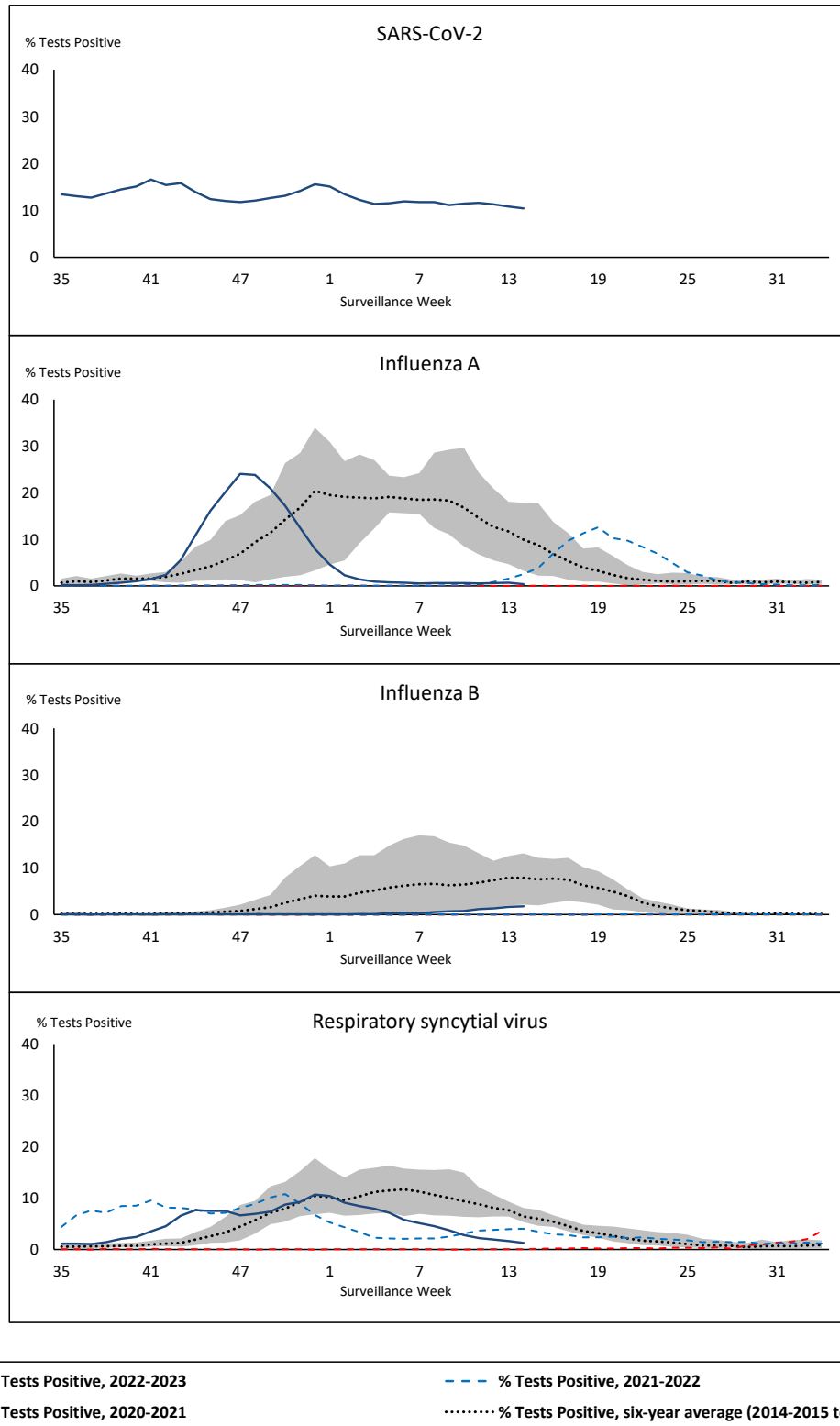


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**Figure 1: Positive severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), influenza, and respiratory syncytial virus tests (%) reported by participating laboratories in Canada by surveillance week compared to average and range from 2014-2015 to 2019-2020 season**



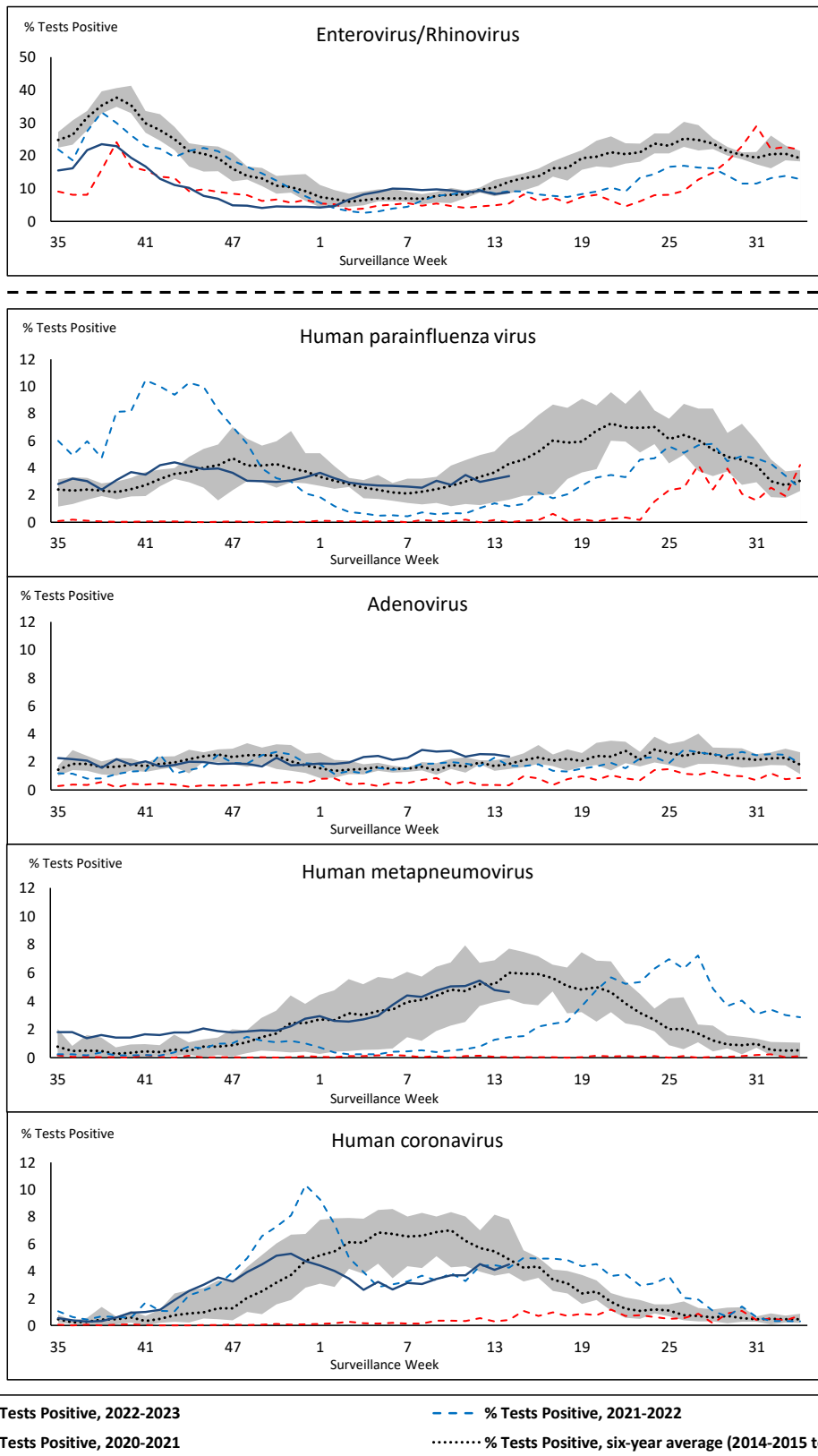
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

Note: Changes to testing practices during the COVID-19 pandemic may cause substantial changes to indicator estimates from previous years. Collection of laboratory testing practice meta-data to understand these changes is ongoing. Interpret trends with caution.

Note: SARS-CoV-2 surveillance was integrated into RVDSS at the beginning of the 2022-2023 season; no appropriate data is available for historical comparison.

Note: Data from week 11 of the 2019-2020 season onwards are excluded from the historical comparison due to the COVID-19 pandemic.

**Figure 2: Positive tests (%) of other respiratory viruses reported by participating laboratories in Canada by surveillance week compared to average and range from 2014-2015 to 2019-2020 season**



Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

Note: Changes to testing practices during the COVID-19 pandemic may cause substantial changes to indicator estimates from previous years. Collection of laboratory testing practice meta-data to understand these changes is ongoing. Interpret trends with caution.

Note: Data from week 11 of the 2019-2020 season onwards are excluded from the historical comparison due to the COVID-19 pandemic.

Note: % Tests Positive scale changes across the dashed line

**Table 1: Respiratory virus detections for the week ending April 8, 2023 (surveillance week 2023-14)**

Reporting Laboratory	SARS-CoV-2 Tested	SARS-CoV-2 Positive	Flu Tested	A(H1)pdm09 Positive	A(H3) Positive	A(UnS) Positive	Total Flu A Positive	Total Flu B Positive	RSV Tested	RSV Positive	HPIV Tested	HPIV 1 Positive	HPIV 2 Positive	HPIV 3 Positive	HPIV 4 Positive	Other HPIV Positive	ADV Tested	ADV Positive	HMPV Tested	HMPV Positive	EV/RV Tested	EV/RV Positive	HCoV Tested	HCoV Positive
Newfoundland	475	77	306	0	0	0	0	1	306	19	306	2	0	28	5	0	306	2	306	8	306	26	306	5
Prince Edward Island	599	108	116	0	0	0	0	1	116	5	17	0	0	0	0	0	17	1	17	0	17	1	17	2
Nova Scotia	1634	265	907	0	0	1	1	0	907	12	17	1	0	0	0	0	17	2	17	0	17	3	17	0
New Brunswick	887	102	770	0	0	1	1	2	759	4	59	0	1	0	0	0	59	4	59	4	59	14	59	8
<b>Atlantic</b>	<b>3595</b>	<b>552</b>	<b>2099</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>2088</b>	<b>40</b>	<b>399</b>	<b>3</b>	<b>1</b>	<b>28</b>	<b>5</b>	<b>0</b>	<b>399</b>	<b>9</b>	<b>399</b>	<b>12</b>	<b>399</b>	<b>44</b>	<b>399</b>	<b>15</b>
Région Nord-Est	1807	190	982	0	0	9	9	1	344	8	29	1	0	2	0	0	29	2	29	1	N.C.	N.C.	29	2
Québec-Chaudière-Appalaches	2797	221	527	0	0	3	3	22	512	9	149	0	0	3	0	0	158	16	149	5	N.C.	N.C.	149	15
Centre-du-Québec	2800	386	50	0	0	0	0	1	49	1	22	0	0	1	1	0	22	7	22	5	N.C.	N.C.	22	3
Montréal-Laval	3560	394	1949	0	0	10	10	110	998	16	256	0	0	8	1	0	256	14	258	11	N.C.	N.C.	256	12
Ouest du Québec	1992	171	587	0	0	2	2	14	558	7	19	0	0	0	0	0	19	1	19	1	N.C.	N.C.	19	1
Montréal	2696	262	552	0	0	12	12	9	528	10	5	0	0	0	0	0	5	0	5	0	N.C.	N.C.	5	0
<b>Province of Québec</b>	<b>15652</b>	<b>1624</b>	<b>4647</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>36</b>	<b>157</b>	<b>2989</b>	<b>51</b>	<b>480</b>	<b>1</b>	<b>0</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>489</b>	<b>40</b>	<b>482</b>	<b>23</b>	<b>N.C.</b>	<b>N.C.</b>	<b>480</b>	<b>33</b>
P.H.O.L. - Ottawa	238	34	103	0	0	0	0	0	103	1	63	0	0	0	0	5	63	1	63	4	63	10	63	8
EOURLA	1455	96	333	0	0	0	0	5	333	2	27	0	0	0	0	0	27	0	27	1	27	9	27	1
P.H.O.L. - Kingston	456	36	72	0	0	0	0	0	72	2	64	0	0	0	0	0	64	0	64	6	64	9	64	2
UHN / Mount Sinai Hospital	1532	95	542	0	0	0	0	6	542	3	27	0	0	0	0	0	27	0	27	0	27	0	27	2
P.H.O.L. - Toronto	402	70	601	6	0	1	6	2	601	5	574	0	0	0	0	20	574	12	574	66	574	79	574	54
Sick Kids Hospital - Toronto	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
Shared Hospital Laboratory	1695	101	1695	2	0	0	2	29	1695	3	1701	0	0	0	0	16	1701	17	1707	50	1707	68	1707	31
P.H.O.L. - Sault Ste. Marie	13	0	9	0	0	0	0	0	9	1	9	0	0	0	0	0	9	0	9	0	9	5	9	0
P.H.O.L. - Timmins	76	3	14	0	0	0	0	0	14	0	14	0	0	0	0	0	14	2	14	3	14	1	14	0
St. Joseph's - London	1540	136	748	0	0	1	1	8	748	3	65	0	0	0	0	1	65	4	65	3	65	7	65	2
P.H.O.L. - London	511	103	232	0	0	0	0	2	232	2	189	0	0	0	0	12	189	1	189	15	189	19	189	8
P.H.O.L. - Orillia	0	0	29	0	0	0	0	0	29	0	29	0	0	0	0	3	29	3	29	4	29	4	29	2
P.H.O.L. - Thunder Bay	77	18	20	0	0	0	0	0	20	0	10	0	0	0	0	0	10	0	10	0	10	0	10	4
P.H.O.L. - Sudbury	24	0	11	0	0	0	0	0	11	2	11	0	0	0	0	1	11	0	11	1	11	2	11	0
P.H.O.L. - Hamilton	331	104	200	0	0	0	0	2	200	5	127	0	0	0	0	3	127	4	127	14	127	12	127	13
P.H.O.L. - Peterborough	130	10	10	0	0	0	0	0	10	0	10	0	0	0	0	1	10	2	10	1	10	3	10	1
St. Joseph's - Hamilton	1743	146	1376	0	0	5	5	46	1376	6	1376	0	0	17	0	0	1376	22	1376	51	1376	101	0	0
Sault Area Hospital	87	5	87	0	0	0	0	1	87	4	45	0	1	0	0	0	45	0	45	2	45	1	45	6
<b>Province of Ontario</b>	<b>10310</b>	<b>957</b>	<b>6082</b>	<b>8</b>	<b>0</b>	<b>7</b>	<b>14</b>	<b>101</b>	<b>6082</b>	<b>39</b>	<b>4341</b>	<b>0</b>	<b>1</b>	<b>17</b>	<b>0</b>	<b>62</b>	<b>4341</b>	<b>68</b>	<b>4347</b>	<b>221</b>	<b>4347</b>	<b>330</b>	<b>2971</b>	<b>134</b>
Manitoba	1497	216	1270	0	0	1	1	4	1270	21	87	5	3	1	0	0	87	1	113	4	87	13	113	3
Saskatchewan	2072	170	754	0	0	3	3	4	698	11	318	7	3	3	2	0	318	10	318	8	318	68	318	14
Alberta	4030	362	2794	5	0	2	7	62	2630	11	1061	16	4	19	7	0	1060	21	1061	26	1041	73	1061	43
<b>Prairies</b>	<b>7599</b>	<b>748</b>	<b>4818</b>	<b>5</b>	<b>0</b>	<b>6</b>	<b>11</b>	<b>70</b>	<b>4598</b>	<b>43</b>	<b>1466</b>	<b>28</b>	<b>10</b>	<b>23</b>	<b>9</b>	<b>0</b>	<b>1465</b>	<b>32</b>	<b>1492</b>	<b>38</b>	<b>1446</b>	<b>154</b>	<b>1492</b>	<b>60</b>
<b>British Columbia</b>	<b>N.R.</b>	<b>N.R.</b>	<b>3082</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>12</b>	<b>23</b>	<b>2921</b>	<b>52</b>	<b>667</b>	<b>11</b>	<b>3</b>	<b>30</b>	<b>1</b>	<b>0</b>	<b>667</b>	<b>27</b>	<b>667</b>	<b>49</b>	<b>640</b>	<b>80</b>	<b>640</b>	<b>27</b>
Yukon	54	7	26	0	0	0	0	0	26	2	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
Northwest Territories	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
Nunavut	115	1	81	0	0	0	0	13	81	13	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
<b>Territories</b>	<b>169</b>	<b>8</b>	<b>107</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>107</b>	<b>15</b>	<b>N.C.</b>	<b>N.C.</b>	<b>N.C.</b>	<b>N.C.</b>	<b>N.C.</b>	<b>N.C.</b>	<b>N.C.</b>	<b>N.C.</b>	<b>N.C.</b>	<b>N.C.</b>	<b>0</b>	<b>0</b>	<b>N.C.</b>	<b>N.C.</b>
<b>CANADA</b>	<b>37325</b>	<b>3889</b>	<b>20835</b>	<b>15</b>	<b>1</b>	<b>51</b>	<b>75</b>	<b>368</b>	<b>18785</b>	<b>240</b>	<b>7353</b>	<b>43</b>	<b>15</b>	<b>112</b>	<b>17</b>	<b>62</b>	<b>7361</b>	<b>176</b>	<b>7387</b>	<b>343</b>	<b>6832</b>	<b>608</b>	<b>5982</b>	<b>269</b>

The data in the RVDSS report represent surveillance data available at the time of writing. Data missing from the current week are denoted by N.R. Data not collected by reporting lab denoted by N.C.

Some specimens from Yukon (YT) are sent to reference laboratories in British Columbia and reported results reflect specimens identified as originating from YT.

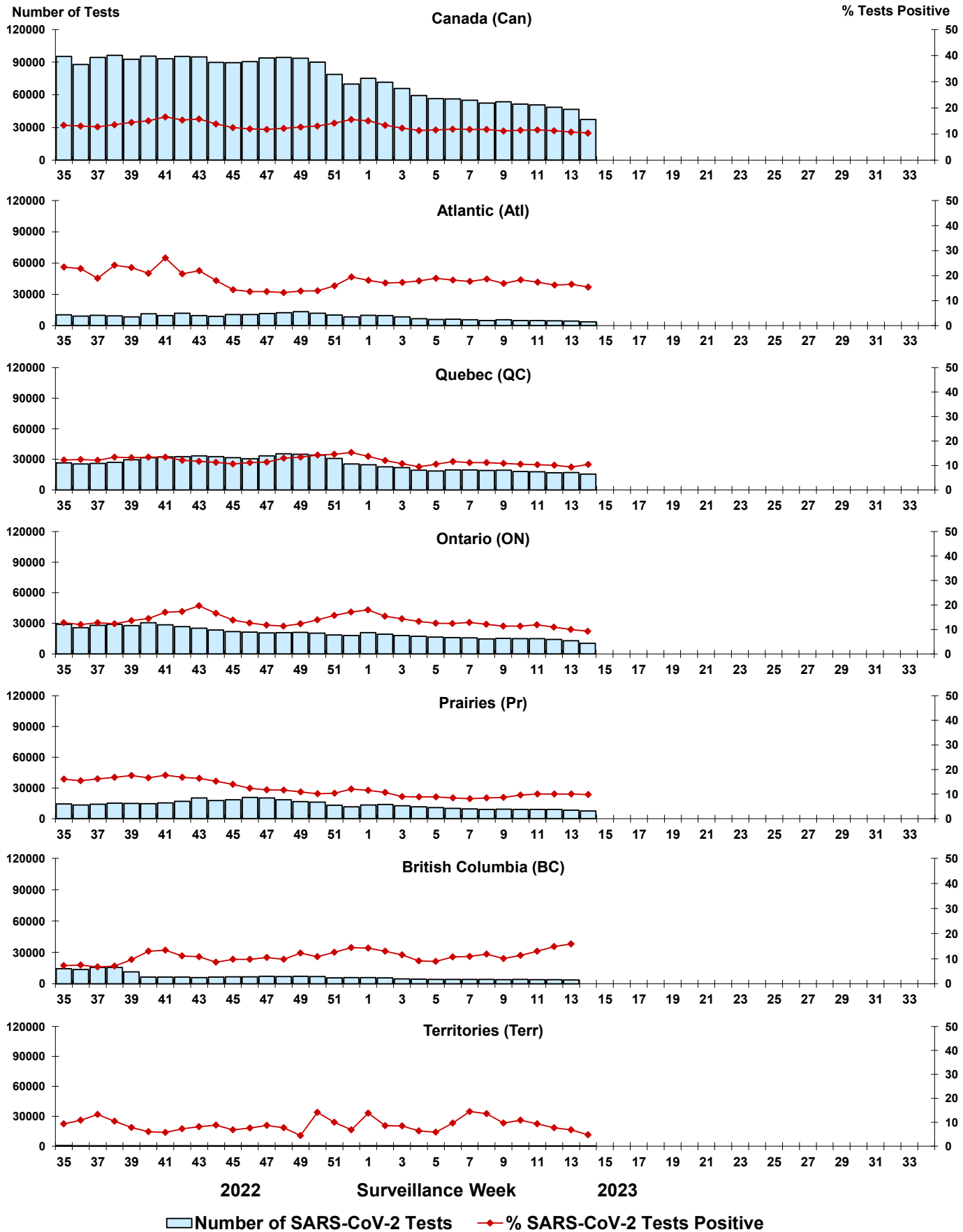
Results from British Columbia comprise of specimens from the following sites: Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Vancouver Coastal Health sites, Victoria General Hospital, BCCDC Public Health Laboratory, Interior Health Authority sites and Northern Health Authority sites.

Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts. Total influenza A and B positive counts are used to calculate percentage of tests positive.

Delays in the reporting of data may cause data to change retrospectively.



Figure 3: Positive severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) tests (%) in Canada by region by surveillance week



Note: Differences in positivity between jurisdictions can reflect differences in testing practices. Please interpret with caution.

Figure 4: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

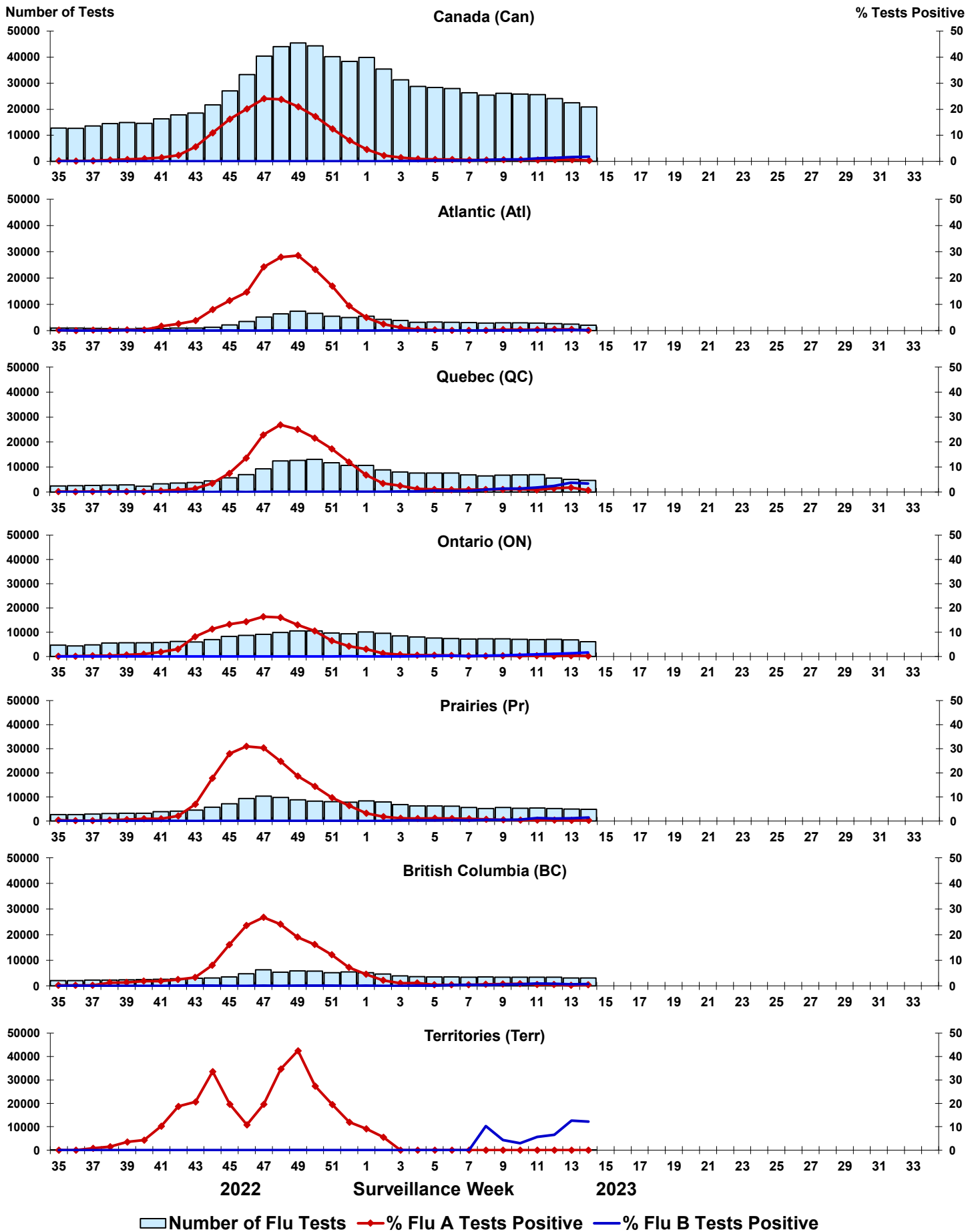


Figure 5: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

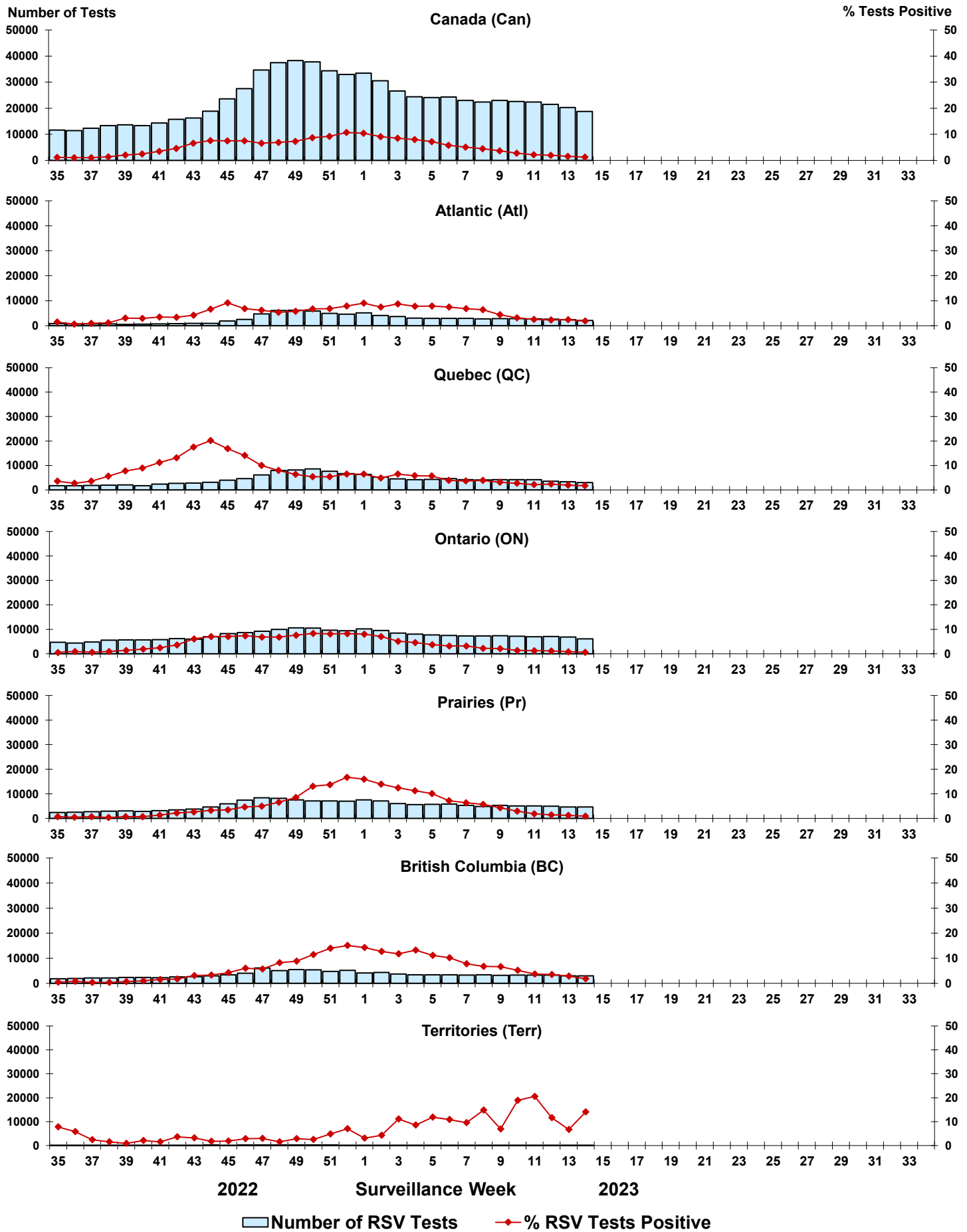




Figure 6: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

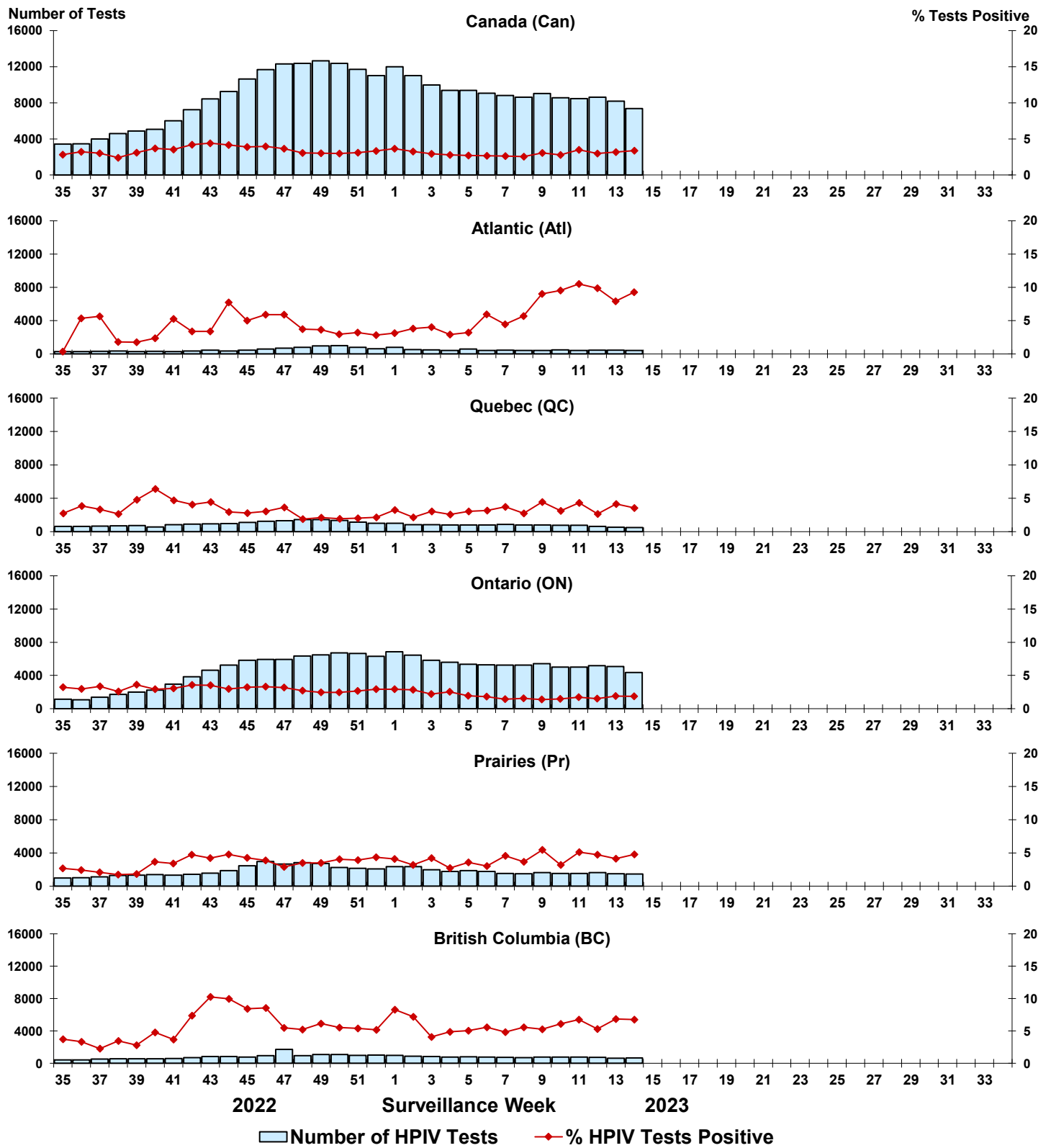


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

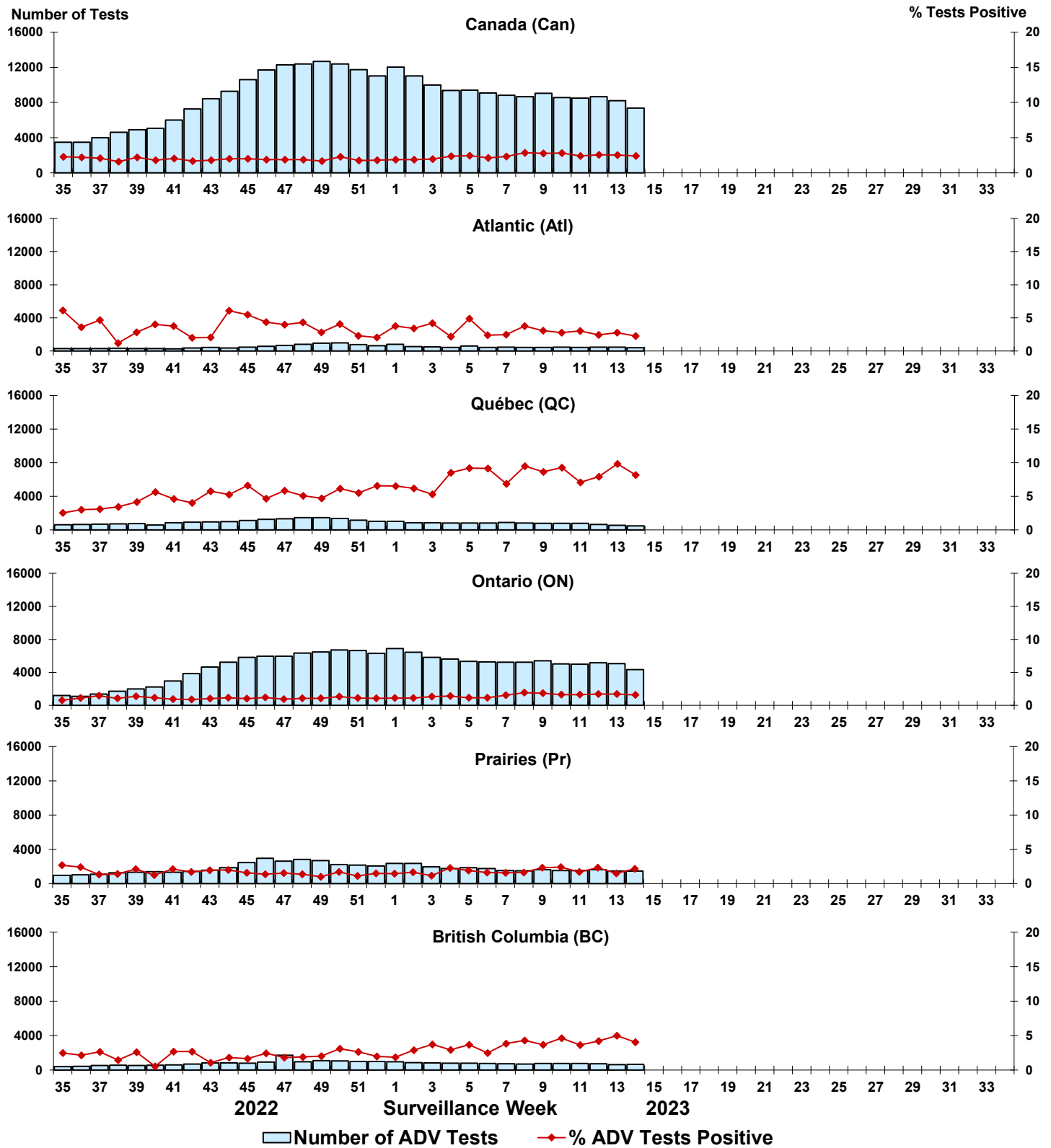


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

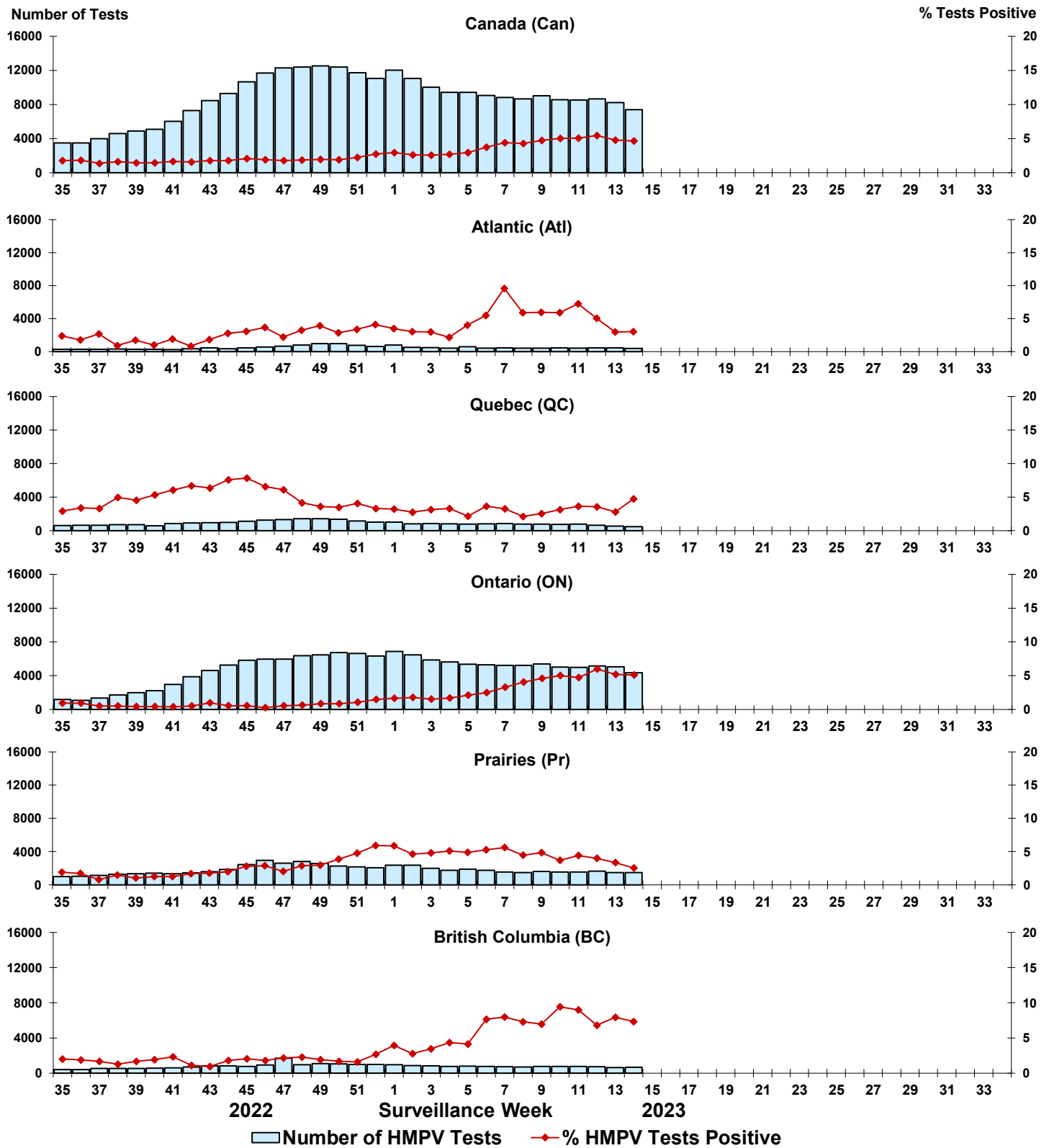


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

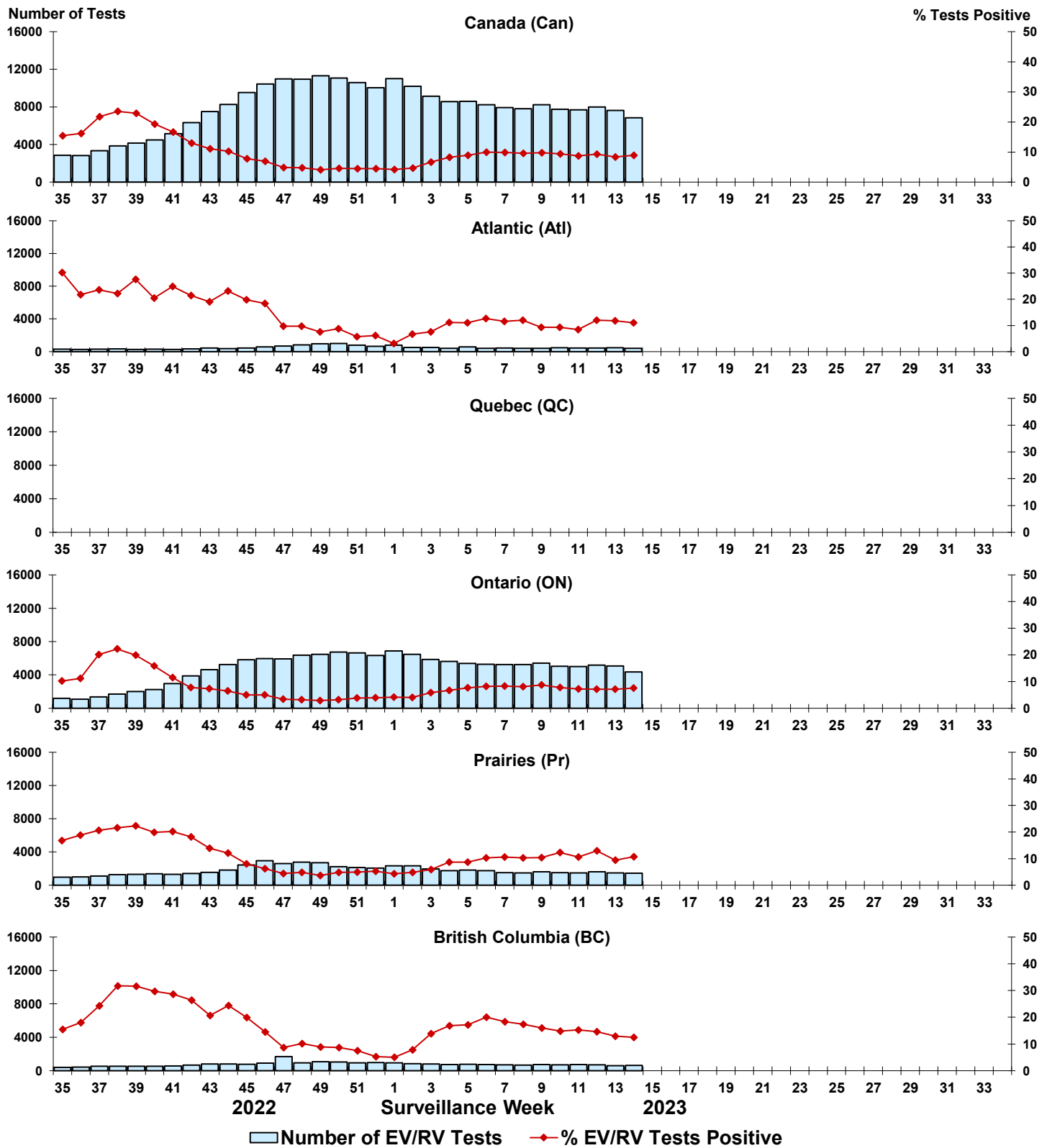


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

