

# RESPIRATORY VIRUS DETECTION REPORT

November 6 to November 12, 2022  
(Surveillance Week 2022-45)



In this Respiratory Virus Report, the number of detections of coronavirus reflects only seasonal human coronaviruses, not the novel pandemic coronavirus (SARS-CoV-2) that causes COVID-19. For information on COVID-19, see the [Coronavirus disease \(COVID-19\): Outbreak update](#).

## Overall Summary

Respiratory virus activity has increased in recent weeks in Canada, and activity of several viruses is above expected levels.

- Among seasonal respiratory viruses, activity of influenza is highest and continues to increase. Influenza A accounts for nearly all influenza detections in Canada.
  - Influenza A activity is above expected levels for this time of year (3,897 detections; 15.8% positive).
- Respiratory syncytial virus activity is similar to previous weeks but remains above expected levels for this time of year (1,661 detections; 7.7% positive). Level of activity is variable across regions (range: 1.9%–17.2% positive).
- Activity of most other respiratory viruses is near expected levels for this time of year.
- 33/34 sentinel laboratories reported surveillance data.

## Abbreviations

Flu: Influenza

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

Flu A(H3): Influenza A(H3N2)

Flu A (UnS): Influenza A(Unsubtyped)

RSV: Respiratory syncytial virus

HPIV: Human parainfluenza virus

HMPV: Human metapneumovirus

ADV: Adenovirus

EV/RV: Enterovirus/Rhinovirus

HCoV: Human coronavirus

Atl: Atlantic Canada

BC: British Columbia

Can: Canada

EORLA: Eastern Ontario Regional Laboratory Association

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

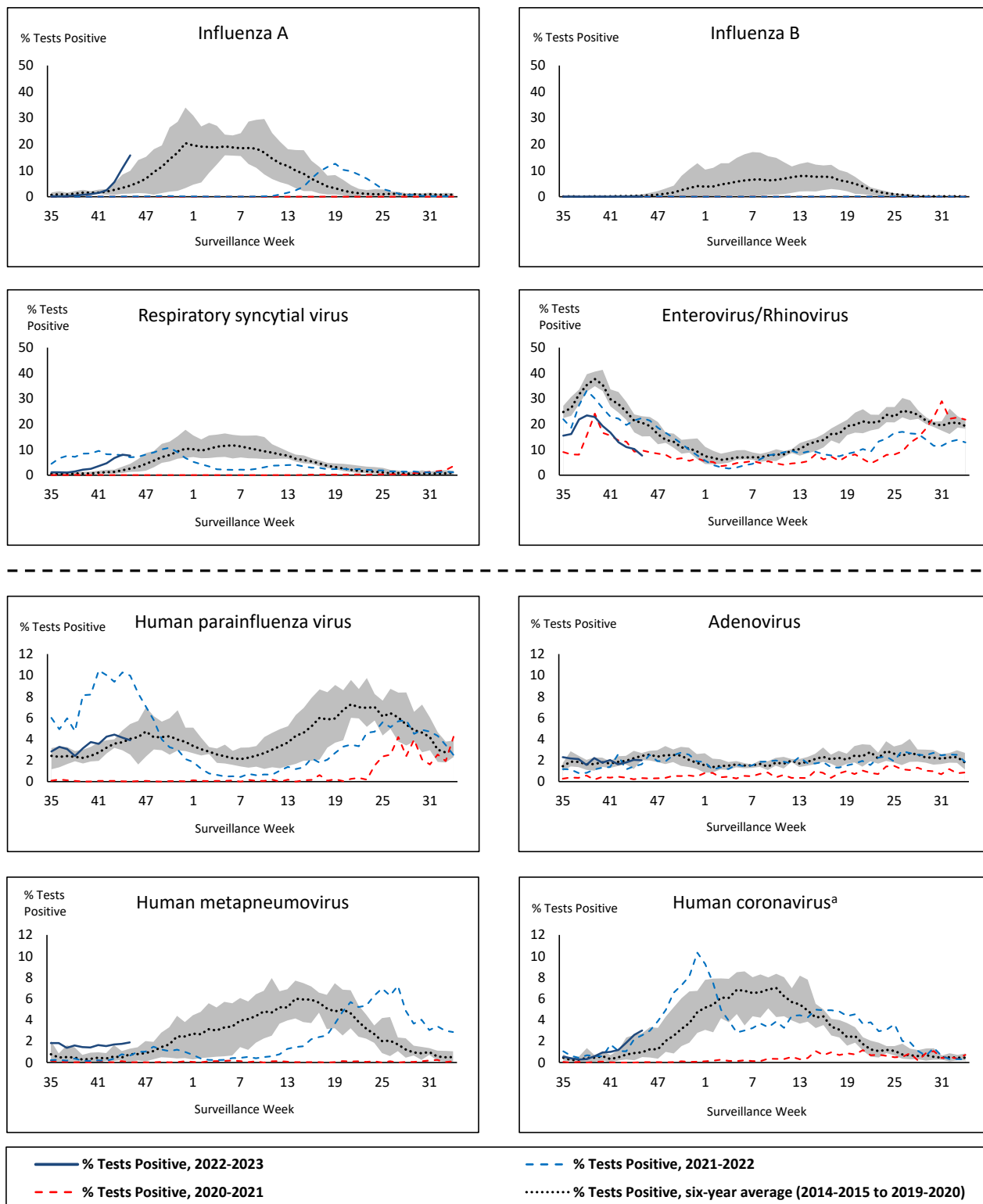
QC: Quebec

Terr: Territories of Canada

UHN: University Health Network



**Figure 1: Positive respiratory 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: 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

<sup>a</sup> Human coronavirus excludes human coronaviruses SARS-CoV, MERS-CoV and SARS-CoV-2; Includes seasonal human coronaviruses HCoV-229E, HCoV-OC43, HCoV-NL63, HCoV-HKU1.

**Table 1: Respiratory virus detections for the week ending November 12, 2022 (surveillance week 2022-45)**

Reporting Laboratory	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	244	0	0	7	7	0	244	19	244	0	1	2	0	0	244	8	244	12	244	33	244	1
Prince Edward Island	84	0	17	1	18	0	84	0	84	4	3	6	0	0	84	7	84	2	84	27	84	1
Nova Scotia	1151	0	0	105	105	0	1151	138	64	0	0	2	0	0	64	5	64	0	64	14	64	1
New Brunswick	666	0	1	113	114	1	388	14	66	0	1	4	0	0	66	5	66	0	66	17	66	1
<b>Atlantic</b>	<b>2145</b>	<b>0</b>	<b>18</b>	<b>226</b>	<b>244</b>	<b>1</b>	<b>1867</b>	<b>171</b>	<b>458</b>	<b>4</b>	<b>5</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>458</b>	<b>25</b>	<b>458</b>	<b>14</b>	<b>458</b>	<b>91</b>	<b>458</b>	<b>4</b>
Région Nord-Est	1007	0	0	11	11	1	302	43	31	0	0	2	0	0	31	1	31	4	N.C.	N.C.	31	1
Québec-Chaudière-Appalaches	609	0	0	12	12	1	613	154	230	2	0	1	0	0	242	20	230	14	N.C.	N.C.	230	9
Centre-du-Québec	486	0	0	36	36	1	477	78	26	1	0	2	0	0	26	4	26	3	N.C.	N.C.	26	0
Montréal-Laval	2504	0	3	228	231	1	1551	228	734	9	1	8	0	0	734	32	755	55	N.C.	N.C.	718	13
Ouest du Québec	406	0	1	47	48	1	332	71	45	3	0	1	0	0	45	13	45	4	N.C.	N.C.	45	3
Montréal	363	0	0	54	54	0	363	53	9	0	0	0	0	0	9	0	9	0	N.C.	N.C.	9	0
<b>Province of Québec</b>	<b>5375</b>	<b>0</b>	<b>4</b>	<b>388</b>	<b>392</b>	<b>5</b>	<b>3638</b>	<b>627</b>	<b>1075</b>	<b>15</b>	<b>1</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>1087</b>	<b>70</b>	<b>1096</b>	<b>80</b>	<b>N.C.</b>	<b>N.C.</b>	<b>1059</b>	<b>26</b>
P.H.O.L. - Ottawa	118	0	10	0	10	0	118	4	118	0	0	0	0	6	118	1	118	0	118	12	118	5
EORLA	538	0	0	67	67	0	538	105	23	2	1	3	2	0	23	2	23	1	23	11	23	5
P.H.O.L. - Kingston	61	0	4	0	4	0	61	3	59	0	0	0	0	1	59	2	59	1	59	3	59	3
UHN / Mount Sinai Hospital	657	0	4	34	38	2	657	5	33	0	0	0	0	0	0	0	33	0	33	1	33	1
P.H.O.L. - Toronto	970	2	222	2	72	0	959	23	953	0	0	0	0	34	953	10	953	10	953	78	953	25
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.
Shared Hospital Laboratory	2518	3	215	47	265	0	2518	165	2120	0	0	1	0	35	2121	17	2126	4	2125	65	2124	46
P.H.O.L. - Sault Ste. Marie	20	0	1	0	1	0	20	0	20	0	0	0	0	0	20	0	20	0	20	0	20	0
P.H.O.L. - Timmins	27	0	5	0	5	0	27	0	27	0	0	0	0	5	27	0	27	0	27	2	27	0
St. Joseph's - London	615	0	0	62	62	0	615	62	53	0	0	0	0	3	53	2	53	0	53	6	44	6
P.H.O.L. - London	301	2	73	3	78	0	301	28	301	0	0	0	0	28	301	4	301	2	301	19	301	13
P.H.O.L. - Orillia	141	2	57	1	60	0	141	8	141	0	0	0	0	14	141	1	141	2	141	12	141	4
P.H.O.L. - Thunder Bay	65	0	24	0	24	0	64	0	64	0	0	0	0	0	64	2	64	0	64	0	64	1
P.H.O.L. - Sudbury	23	0	1	0	1	0	23	0	23	0	0	0	0	0	23	0	23	0	23	0	23	5
P.H.O.L. - Hamilton	276	0	34	3	37	1	276	27	245	0	0	0	0	7	245	1	245	1	245	13	245	7
P.H.O.L. - Peterborough	21	0	5	0	5	0	21	1	21	0	0	0	0	1	21	0	21	0	21	2	21	0
St. Joseph's - Hamilton	1502	0	0	343	343	0	1502	146	1502	0	0	43	0	0	1502	15	1502	3	1502	56	0	0
<b>Province of Ontario</b>	<b>7853</b>	<b>9</b>	<b>655</b>	<b>562</b>	<b>1072</b>	<b>3</b>	<b>7841</b>	<b>577</b>	<b>5703</b>	<b>2</b>	<b>1</b>	<b>47</b>	<b>2</b>	<b>134</b>	<b>5671</b>	<b>57</b>	<b>5709</b>	<b>24</b>	<b>5708</b>	<b>280</b>	<b>4196</b>	<b>121</b>
Manitoba	815	1	15	44	60	0	815	45	197	0	0	10	0	0	197	8	210	16	197	31	210	4
Saskatchewan	1239	0	0	396	396	0	1037	20	533	2	2	29	0	0	533	11	533	35	533	44	532	24
Alberta	3719	34	904	228	1166	2	2928	106	1416	7	4	35	3	0	1416	17	1411	8	1390	97	1416	69
<b>Prairies</b>	<b>5773</b>	<b>35</b>	<b>919</b>	<b>668</b>	<b>1622</b>	<b>2</b>	<b>4780</b>	<b>171</b>	<b>2146</b>	<b>9</b>	<b>6</b>	<b>74</b>	<b>3</b>	<b>0</b>	<b>2146</b>	<b>36</b>	<b>2154</b>	<b>59</b>	<b>2120</b>	<b>172</b>	<b>2158</b>	<b>97</b>
<b>British Columbia</b>	<b>3416</b>	<b>12</b>	<b>160</b>	<b>0</b>	<b>538</b>	<b>1</b>	<b>3299</b>	<b>112</b>	<b>695</b>	<b>19</b>	<b>13</b>	<b>25</b>	<b>4</b>	<b>0</b>	<b>695</b>	<b>13</b>	<b>695</b>	<b>14</b>	<b>671</b>	<b>136</b>	<b>671</b>	<b>9</b>
Yukon	10	0	0	0	0	0	10	0	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	56	0	2	0	2	0	56	3	0	0	0	0	0	0	0	0	0	0	56	13	0	0
Nunavut	96	0	27	0	27	0	96	0	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>162</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>162</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>13</b>	<b>0</b>	<b>0</b>
<b>CANADA</b>	<b>24724</b>	<b>56</b>	<b>1785</b>	<b>1844</b>	<b>3897</b>	<b>12</b>	<b>21587</b>	<b>1661</b>	<b>10077</b>	<b>49</b>	<b>26</b>	<b>174</b>	<b>9</b>	<b>134</b>	<b>10057</b>	<b>201</b>	<b>10112</b>	<b>191</b>	<b>9013</b>	<b>692</b>	<b>8542</b>	<b>257</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.

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.

**Table 2: Cumulative respiratory virus detections from August 28, 2022 to November 12, 2022 (surveillance weeks 2022-35 to 2022-45)**

Reporting Laboratory	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	2090	0	1	8	9	0	2090	84	2090	2	8	14	3	0	2090	35	2090	62	2090	293	2090	3
Prince Edward Island	507	0	23	2	25	0	507	8	507	8	13	30	2	0	507	35	507	8	507	239	507	3
Nova Scotia	3796	0	3	159	162	1	3795	257	519	3	4	9	1	0	519	21	519	0	519	130	519	4
New Brunswick	4693	0	12	215	227	2	3140	45	557	0	9	33	4	0	557	48	557	1	557	174	502	9
<b>Atlantic</b>	<b>11086</b>	<b>0</b>	<b>39</b>	<b>384</b>	<b>423</b>	<b>3</b>	<b>9532</b>	<b>394</b>	<b>3673</b>	<b>13</b>	<b>34</b>	<b>86</b>	<b>10</b>	<b>0</b>	<b>3673</b>	<b>139</b>	<b>3673</b>	<b>71</b>	<b>3673</b>	<b>836</b>	<b>3618</b>	<b>19</b>
Région Nord-Est	9758	0	0	19	19	2	1881	129	271	3	2	16	0	0	271	12	271	8	N.C.	N.C.	271	3
Québec-Chaudière-Appalaches	3494	0	0	20	20	1	3504	548	1664	16	4	20	0	0	1801	104	1664	84	N.C.	N.C.	1664	26
Centre-du-Québec	2709	0	0	56	56	2	2669	330	287	12	0	14	0	0	287	18	287	35	N.C.	N.C.	287	1
Montréal-Laval	13395	0	4	392	396	7	11194	1171	5979	81	9	103	4	0	5979	193	6049	341	N.C.	N.C.	5824	50
Ouest du Québec	2534	0	1	79	80	1	2181	340	455	15	0	33	0	0	455	73	455	22	N.C.	N.C.	455	13
Montréal	4114	0	0	105	105	3	4048	416	40	0	0	1	0	0	40	0	40	0	N.C.	N.C.	40	0
<b>Province of Québec</b>	<b>36004</b>	<b>0</b>	<b>5</b>	<b>671</b>	<b>676</b>	<b>16</b>	<b>25477</b>	<b>2934</b>	<b>8696</b>	<b>127</b>	<b>15</b>	<b>187</b>	<b>4</b>	<b>0</b>	<b>8833</b>	<b>400</b>	<b>8766</b>	<b>490</b>	<b>N.C.</b>	<b>N.C.</b>	<b>8541</b>	<b>93</b>
P.H.O.L. - Ottawa	715	0	15	0	15	0	715	12	715	0	0	0	0	16	715	1	715	10	715	64	715	6
EORLA	3459	0	0	145	145	2	3459	369	440	6	3	12	4	0	440	17	440	12	440	146	440	11
P.H.O.L. - Kingston	614	0	20	2	22	0	614	36	606	0	0	0	0	25	606	14	606	6	606	98	606	9
UHN / Mount Sinai Hospital	5385	0	5	101	106	7	5385	32	231	0	0	1	0	0	198	1	231	0	231	10	231	16
P.H.O.L. - Toronto	4760	24	594	4	199	0	4746	82	4740	0	0	0	0	223	4742	69	4739	48	4740	557	4739	71
Sick Kids Hospital - Toronto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shared Hospital Laboratory	30038	12	545	245	802	2	30039	637	8976	4	0	16	0	140	8989	58	9002	21	8973	335	8849	94
P.H.O.L. - Sault Ste. Marie	80	0	1	0	1	0	80	0	80	0	0	0	0	0	80	0	80	0	80	8	80	0
P.H.O.L. - Timmins	166	0	14	0	14	0	166	0	166	0	0	0	0	14	166	1	166	6	166	29	166	9
St. Joseph's - London	1648	0	0	96	96	0	1648	148	580	0	0	0	0	16	614	15	614	0	614	126	194	12
P.H.O.L. - London	1712	4	169	6	172	0	1712	106	1712	0	0	0	0	92	1712	29	1712	5	1712	214	1712	25
P.H.O.L. - Orillia	696	2	138	2	142	0	696	36	696	0	0	0	0	52	696	13	696	8	696	130	696	14
P.H.O.L. - Thunder Bay	195	0	46	0	46	0	194	0	194	0	0	0	0	1	194	3	194	0	194	32	194	2
P.H.O.L. - Sudbury	89	0	1	0	1	0	89	2	89	0	0	0	0	3	89	2	89	1	89	11	89	5
P.H.O.L. - Hamilton	1254	0	85	3	88	3	1251	102	1220	0	0	0	0	49	1220	14	1220	9	1220	157	1220	16
P.H.O.L. - Peterborough	340	0	29	0	29	0	340	18	340	0	0	0	0	16	340	5	340	2	340	77	340	3
St. Joseph's - Hamilton	10468	0	0	901	901	4	10468	554	10468	0	0	326	0	0	10468	81	10468	36	10468	1121	0	0
<b>Province of Ontario</b>	<b>61619</b>	<b>42</b>	<b>1662</b>	<b>1505</b>	<b>2779</b>	<b>18</b>	<b>61602</b>	<b>2134</b>	<b>31253</b>	<b>10</b>	<b>3</b>	<b>355</b>	<b>4</b>	<b>647</b>	<b>31269</b>	<b>323</b>	<b>31312</b>	<b>164</b>	<b>31284</b>	<b>3115</b>	<b>20271</b>	<b>293</b>
Manitoba	6747	5	24	73	102	0	6747	138	1615	0	2	41	4	0	1615	58	1823	71	1615	402	1823	10
Saskatchewan	7178	0	0	723	723	1	6104	61	2784	8	18	128	8	0	2786	82	2788	125	2786	459	2783	61
Alberta	25852	90	1776	386	2252	9	22247	429	10996	67	32	209	13	0	10995	145	10982	64	10771	1673	10996	301
<b>Prairies</b>	<b>39777</b>	<b>95</b>	<b>1800</b>	<b>1182</b>	<b>3077</b>	<b>10</b>	<b>35098</b>	<b>628</b>	<b>15395</b>	<b>75</b>	<b>52</b>	<b>378</b>	<b>25</b>	<b>0</b>	<b>15396</b>	<b>285</b>	<b>15593</b>	<b>260</b>	<b>15172</b>	<b>2534</b>	<b>15602</b>	<b>372</b>
<b>British Columbia</b>	<b>27643</b>	<b>85</b>	<b>529</b>	<b>12</b>	<b>1049</b>	<b>8</b>	<b>25826</b>	<b>444</b>	<b>6511</b>	<b>58</b>	<b>78</b>	<b>222</b>	<b>30</b>	<b>6</b>	<b>6511</b>	<b>130</b>	<b>6511</b>	<b>110</b>	<b>6319</b>	<b>1595</b>	<b>6319</b>	<b>34</b>
Yukon	74	0	0	0	0	0	71	1	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	448	0	3	0	3	0	448	18	0	0	0	0	0	0	0	0	0	0	448	170	0	0
Nunavut	919	3	159	1	163	0	919	21	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>1441</b>	<b>3</b>	<b>162</b>	<b>1</b>	<b>166</b>	<b>0</b>	<b>1438</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>448</b>	<b>170</b>	<b>0</b>	<b>0</b>
<b>CANADA</b>	<b>177570</b>	<b>225</b>	<b>4197</b>	<b>3755</b>	<b>8170</b>	<b>55</b>	<b>158973</b>	<b>6574</b>	<b>65528</b>	<b>283</b>	<b>182</b>	<b>1228</b>	<b>73</b>	<b>653</b>	<b>65682</b>	<b>1277</b>	<b>65855</b>	<b>1095</b>	<b>56896</b>	<b>8250</b>	<b>54351</b>	<b>811</b>

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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. Due to these delays, the sum of weekly report totals do not add up to cumulative totals.

**Figure 2: Number of positive respiratory virus tests reported by participating laboratories in Canada by surveillance week**

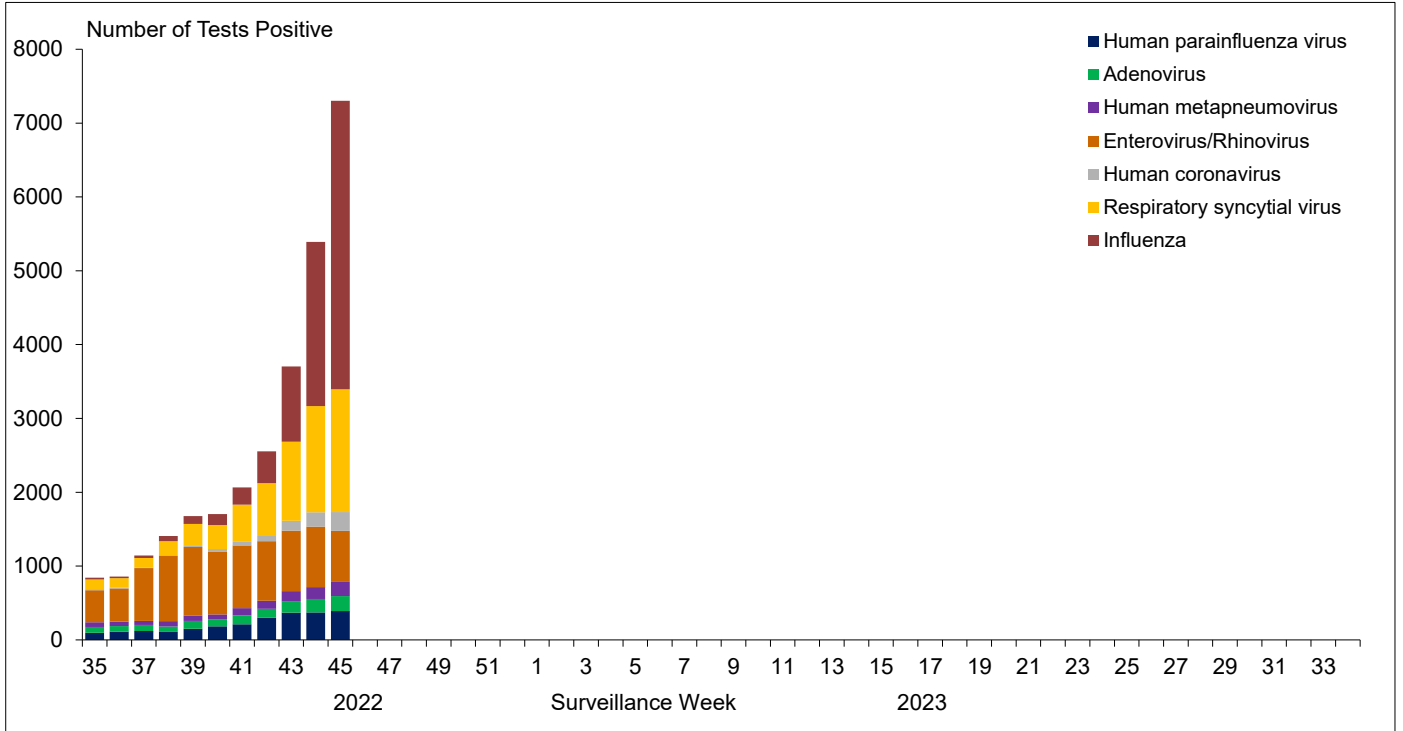


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

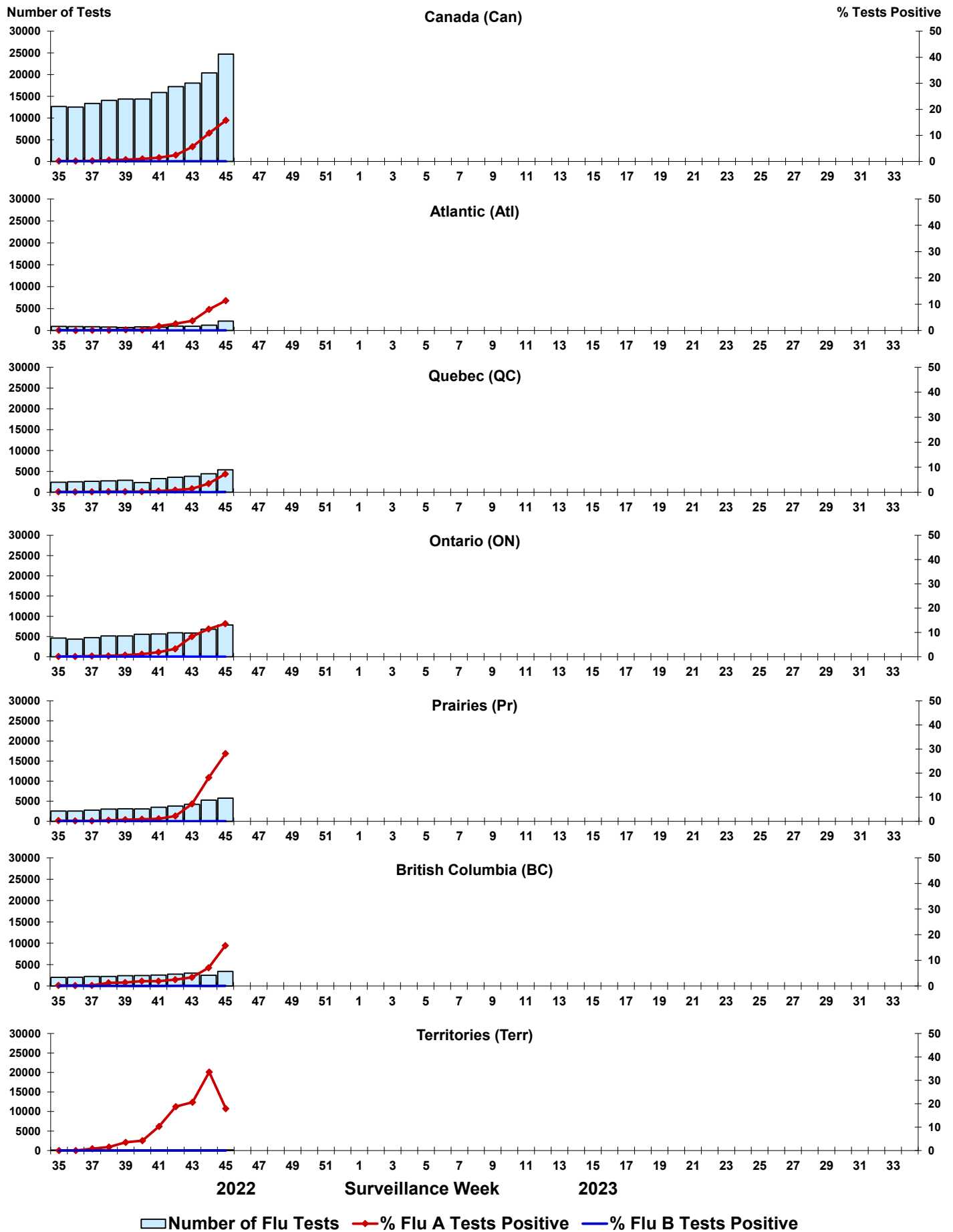


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

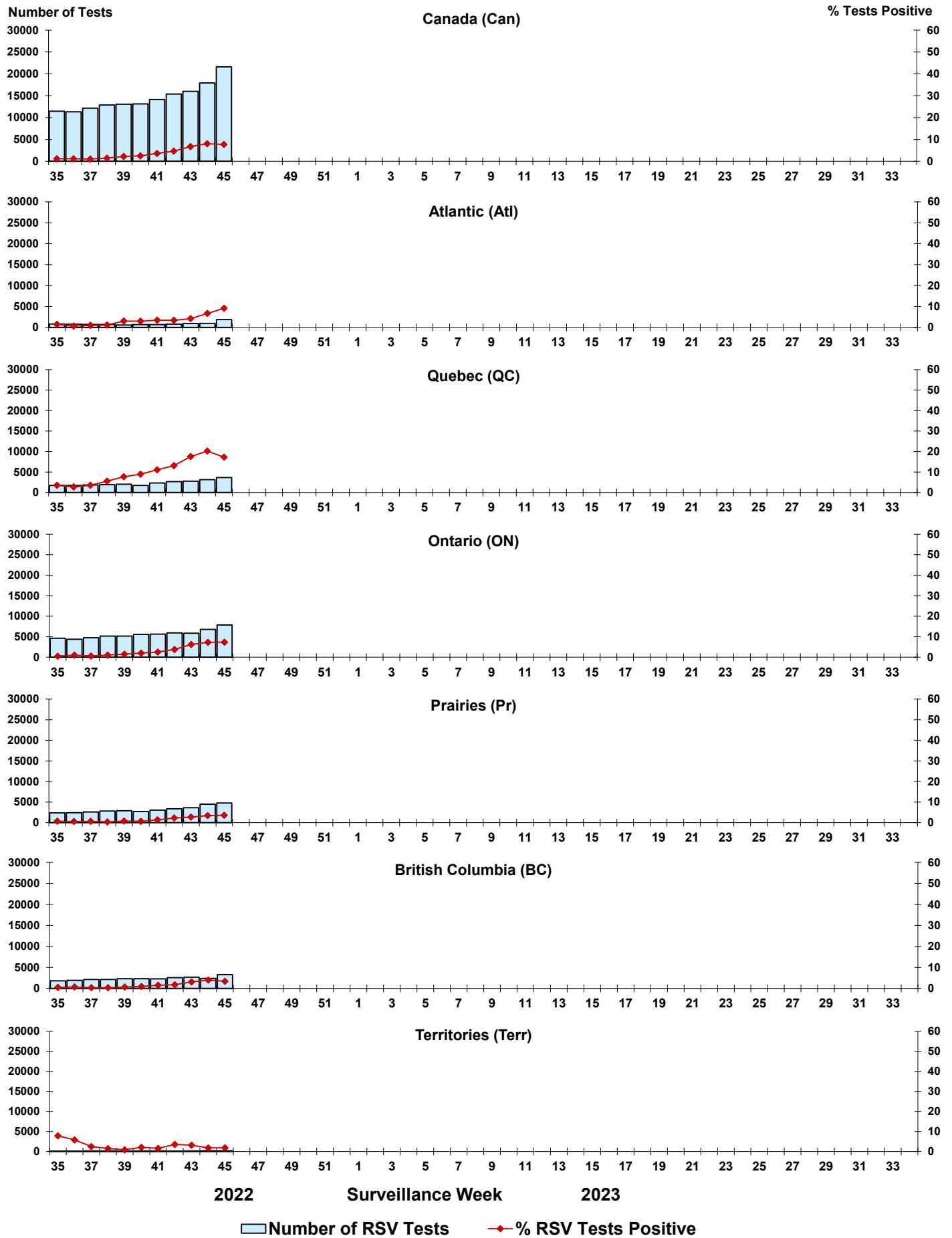


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

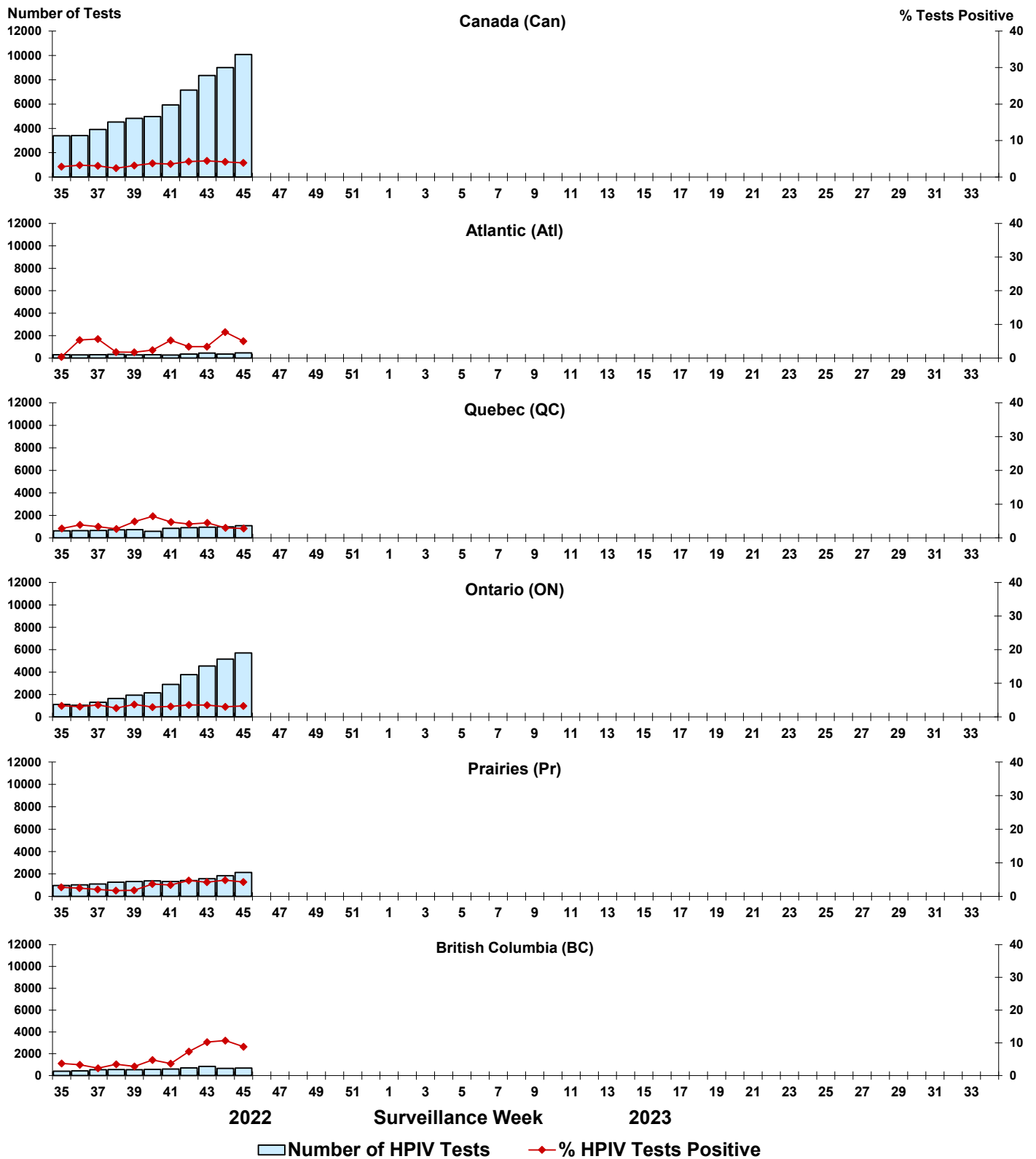




Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

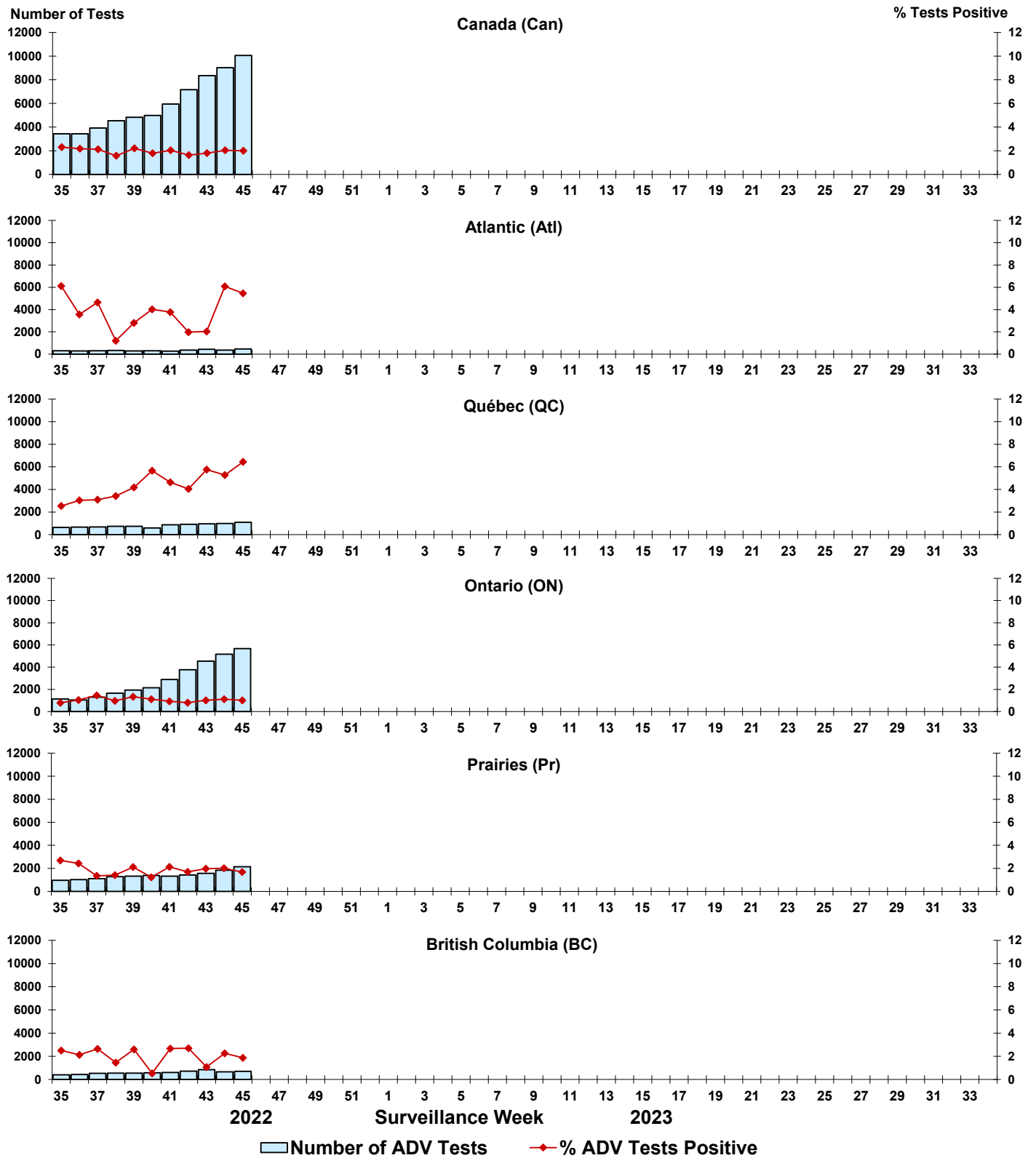


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

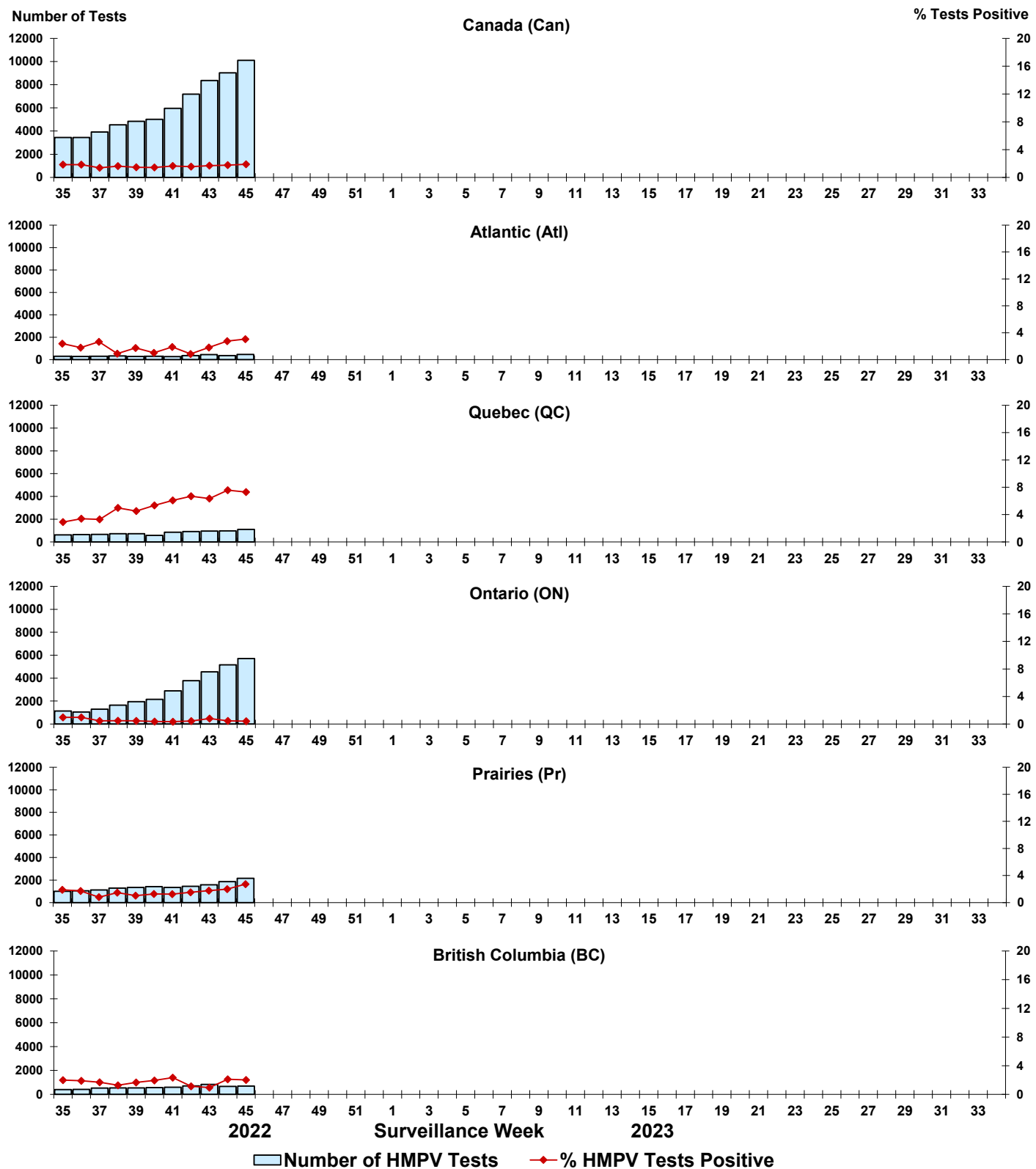


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

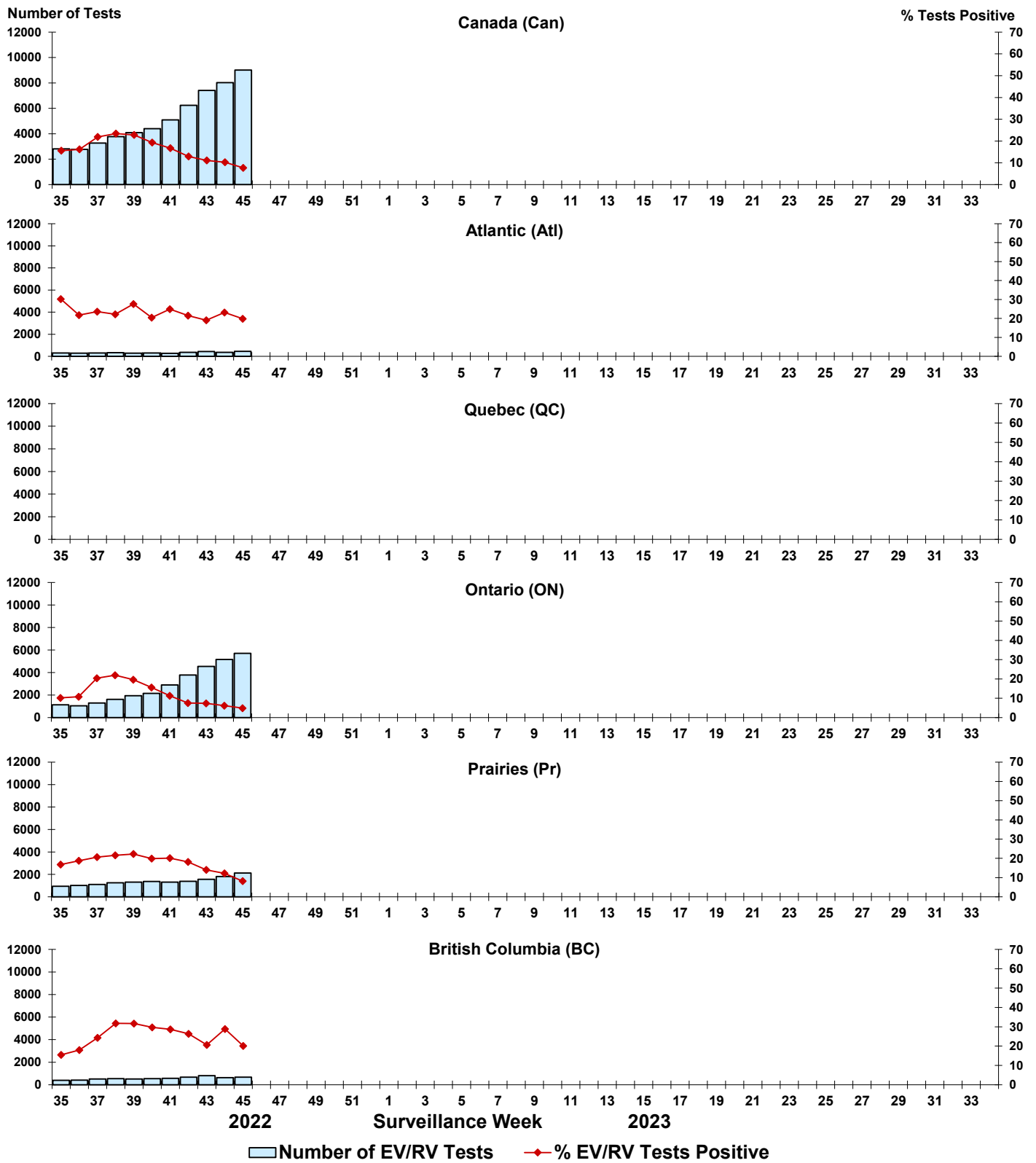


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

