

# RESPIRATORY VIRUS DETECTION REPORT

May 29 to June 4, 2022  
(Surveillance Week 2022-22)



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

Detections of seasonal respiratory viruses have decreased in recent weeks.

- Influenza is the most common seasonal respiratory virus detected in Canada. Influenza activity has continued to decrease but remains above the epidemic threshold.
  - A total of 1,329 influenza detections were reported (1,320 influenza A, 9 influenza B).
  - Activity of influenza A (8.5% positive) has decreased, but remains above expected levels for this time of year.
- Activity of other respiratory viruses is low, and is near expected levels for most viruses.
- The number of tests performed for all viruses was above expected levels.
- 32/34 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

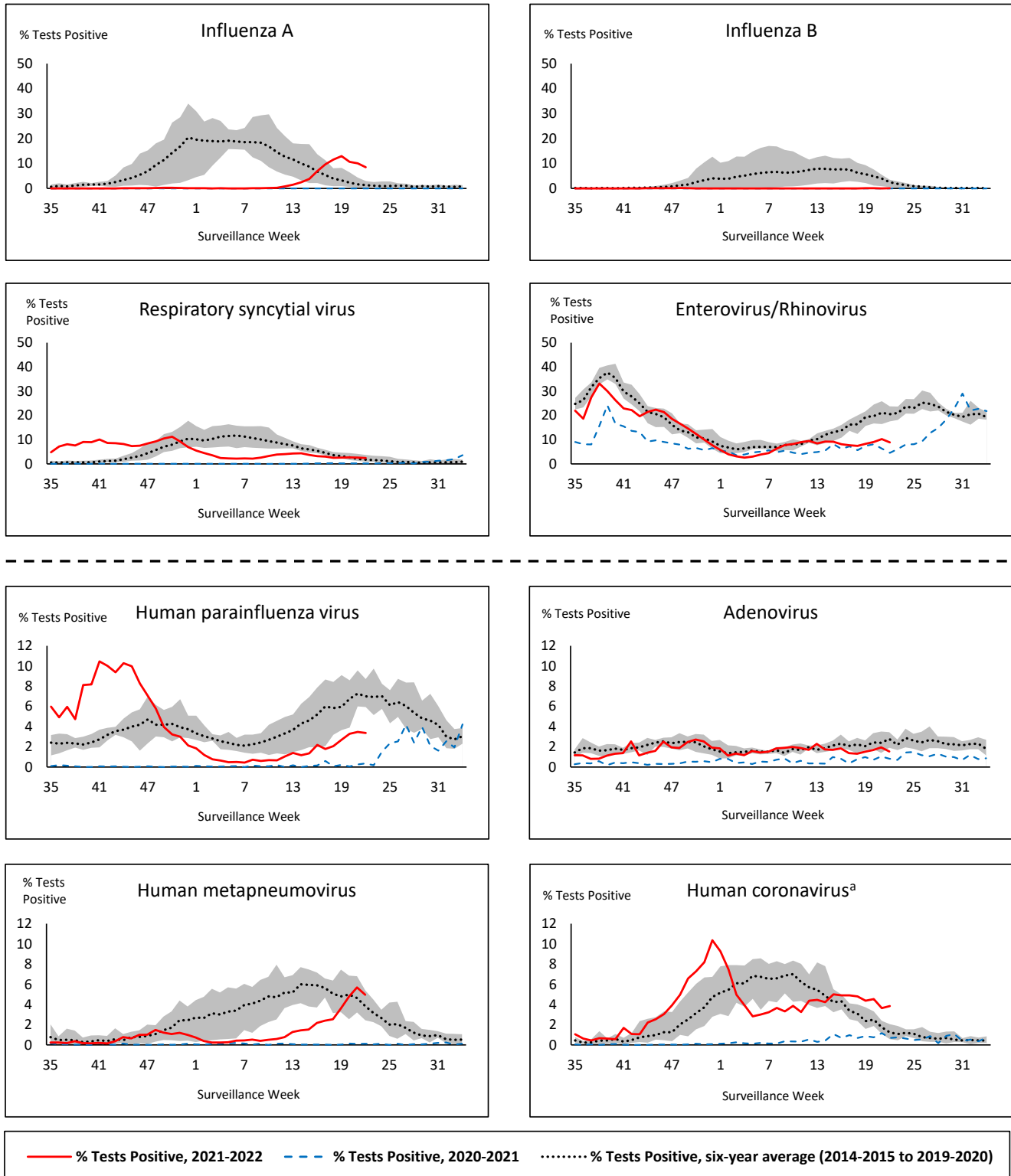
QC: Quebec

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 June 4, 2022 (surveillance week 2022-22)**

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	998	0	0	40	40	0	998	25	998	0	1	0	0	31	998	2	998	10	1058	66	N.C.	N.C.
Prince Edward Island	50	0	9	0	9	0	50	4	50	0	0	0	5	0	50	3	50	12	50	10	50	5
Nova Scotia	654	0	0	44	44	0	654	5	42	0	0	0	1	0	48	0	48	7	48	7	48	0
New Brunswick	441	0	3	54	57	0	293	6	48	0	0	0	4	0	48	2	48	2	48	6	48	2
<b>Atlantic</b>	<b>2143</b>	<b>0</b>	<b>12</b>	<b>138</b>	<b>150</b>	<b>0</b>	<b>1995</b>	<b>40</b>	<b>1138</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>10</b>	<b>31</b>	<b>1144</b>	<b>7</b>	<b>1144</b>	<b>31</b>	<b>1204</b>	<b>89</b>	<b>146</b>	<b>7</b>
Région Nord-Est	1340	4	0	123	127	0	627	0	2	0	0	0	0	0	2	0	2	0	N.C.	N.C.	2	0
Québec-Chaudière-Appalaches	692	0	0	101	101	7	692	1	33	1	0	0	2	0	275	0	274	8	N.C.	N.C.	123	9
Centre-du-Québec	622	0	0	100	100	2	507	1	15	0	0	0	0	0	15	1	15	0	N.C.	N.C.	15	1
Montréal-Laval	1334	0	0	123	123	0	827	3	138	1	0	1	0	0	138	7	138	4	N.C.	N.C.	168	6
Ouest du Québec	316	0	0	55	55	0	316	0	16	0	0	1	0	0	16	3	16	2	N.C.	N.C.	16	1
Montréal	303	0	0	41	41	0	57	1	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
<b>Province of Québec</b>	<b>4607</b>	<b>4</b>	<b>0</b>	<b>543</b>	<b>547</b>	<b>9</b>	<b>3026</b>	<b>6</b>	<b>204</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>446</b>	<b>11</b>	<b>445</b>	<b>14</b>	<b>N.C.</b>	<b>N.C.</b>	<b>324</b>	<b>17</b>
P.H.O.L. - Ottawa	28	0	1	0	1	0	28	1	28	0	0	0	0	1	28	0	28	0	28	0	28	3
EORLA	199	0	0	19	19	0	199	9	46	0	0	0	1	0	46	1	46	3	46	12	46	3
P.H.O.L. - Kingston	21	0	0	0	0	0	21	0	21	0	0	0	0	0	21	2	21	2	21	5	21	1
UHN / Mount Sinai Hospital	513	0	0	3	3	0	513	0	20	0	0	0	0	0	20	0	20	0	20	1	20	2
P.H.O.L. - Toronto	290	0	51	0	21	0	290	4	290	0	0	0	0	10	290	6	290	21	290	9	290	19
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.
Sunnybrook & Women's College HSC	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.
P.H.O.L. - Sault Ste. Marie	3	0	0	0	0	0	3	1	3	0	0	0	0	0	3	0	3	0	3	1	3	0
P.H.O.L. - Timmins	12	0	1	2	3	0	12	0	12	0	0	0	0	0	12	0	12	0	12	1	12	2
St. Joseph's - London	59	0	0	4	4	0	59	0	59	0	0	0	0	2	59	3	59	6	59	7	1	0
P.H.O.L. - London	69	0	0	0	0	0	69	3	69	0	0	0	0	3	69	3	69	6	69	6	69	4
P.H.O.L. - Orillia	14	0	0	0	0	0	14	3	14	0	0	0	0	3	14	0	14	2	14	1	14	1
P.H.O.L. - Thunder Bay	17	0	3	0	3	0	17	4	17	0	0	0	0	0	17	0	17	3	17	1	17	0
P.H.O.L. - Sudbury	4	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	0	4	0	4	0
P.H.O.L. - Hamilton	40	0	1	0	1	0	40	1	40	0	0	0	0	4	40	1	40	3	40	9	40	1
P.H.O.L. - Peterborough	16	0	0	0	0	0	16	2	16	0	0	0	0	0	16	0	16	1	16	1	16	0
St. Joseph's - Hamilton	591	0	0	29	29	0	591	5	591	1	0	7	0	0	591	7	591	52	591	38	0	0
<b>Province of Ontario</b>	<b>1876</b>	<b>0</b>	<b>57</b>	<b>57</b>	<b>84</b>	<b>0</b>	<b>1876</b>	<b>33</b>	<b>1230</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>23</b>	<b>1230</b>	<b>23</b>	<b>1230</b>	<b>99</b>	<b>1230</b>	<b>92</b>	<b>581</b>	<b>36</b>
Province of Manitoba	673	0	4	26	30	0	673	19	121	0	0	1	1	0	121	3	122	3	121	16	122	0
Province of Saskatchewan	543	0	0	37	37	0	543	40	164	0	2	2	5	0	164	7	164	5	164	33	164	7
Province of Alberta	2264	0	32	264	296	0	783	73	783	0	13	15	6	0	783	7	783	34	783	65	783	21
<b>Prairies</b>	<b>3480</b>	<b>0</b>	<b>36</b>	<b>327</b>	<b>363</b>	<b>0</b>	<b>1999</b>	<b>132</b>	<b>1068</b>	<b>0</b>	<b>15</b>	<b>18</b>	<b>12</b>	<b>0</b>	<b>1068</b>	<b>17</b>	<b>1069</b>	<b>42</b>	<b>1068</b>	<b>114</b>	<b>1069</b>	<b>28</b>
<b>British Columbia</b>	<b>3271</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>127</b>	<b>0</b>	<b>3174</b>	<b>44</b>	<b>555</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>13</b>	<b>0</b>	<b>555</b>	<b>9</b>	<b>555</b>	<b>35</b>	<b>536</b>	<b>63</b>	<b>506</b>	<b>13</b>
Yukon	5	0	0	0	0	0	5	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	85	0	11	2	13	0	82	7	1	0	0	0	0	0	1	0	1	0	82	7	1	0
Nunavut	100	0	33	3	36	0	98	38	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>190</b>	<b>0</b>	<b>44</b>	<b>5</b>	<b>49</b>	<b>0</b>	<b>185</b>	<b>46</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>88</b>	<b>7</b>	<b>3</b>	<b>0</b>
<b>CANADA</b>	<b>15567</b>	<b>4</b>	<b>189</b>	<b>1070</b>	<b>1320</b>	<b>9</b>	<b>12255</b>	<b>301</b>	<b>4202</b>	<b>3</b>	<b>18</b>	<b>29</b>	<b>38</b>	<b>54</b>	<b>4450</b>	<b>68</b>	<b>4450</b>	<b>221</b>	<b>4126</b>	<b>365</b>	<b>2629</b>	<b>101</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.

The reporting laboratory previously listed as CHEO - Ottawa is now listed as EORLA to better reflect data submitted by this provider.

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: BC Children's and Women's Hospital, Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Powell River Hospital, St. Paul's Hospital, Vancouver General Hospital, Victoria General Hospital, BCCDC Public Health Laboratory, Interior Health Authority sites and Northern Health Authority sites.

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

For British Columbia, only data from subtyped influenza A specimens are included in the weekly number of influenza detections. The sum of A(H1N1)pdm09, A(H3), and A(UnS) positive results may not equal the sum of total Flu A positive results.

Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts, as some subtype detections are not available through routine testing but are subsequently reported if further subtype testing is conducted. In these instances, subtype counts do not reflect influenza A detections intended to be captured by routine surveillance, and are excluded from total detections and percent positivity.

**Table 2: Cumulative respiratory virus detections from August 29, 2021 to June 4, 2022 (surveillance week 2021-35 to 2022-22)**

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	13532	0	0	275	275	0	13530	173	13533	1	18	116	0	294	13540	42	13527	62	13594	2051	N.C.	N.C.
Prince Edward Island	2451	0	40	15	55	0	2451	256	2406	0	0	158	14	1	2451	64	2451	83	2451	559	2451	138
Nova Scotia	21149	0	2	235	237	8	21154	338	1638	0	2	41	24	0	1658	16	1658	27	1658	142	1658	42
New Brunswick	17206	0	7	230	237	0	10916	300	3126	0	0	26	22	0	3119	27	3126	25	3126	81	3035	14
<b>Atlantic</b>	<b>54338</b>	<b>0</b>	<b>49</b>	<b>755</b>	<b>804</b>	<b>8</b>	<b>48051</b>	<b>1067</b>	<b>20703</b>	<b>1</b>	<b>20</b>	<b>341</b>	<b>60</b>	<b>295</b>	<b>20768</b>	<b>149</b>	<b>20762</b>	<b>197</b>	<b>20829</b>	<b>2833</b>	<b>7144</b>	<b>194</b>
Région Nord-Est	27860	36	1	2073	2110	4	13265	1444	811	2	0	10	1	0	902	18	413	12	N.C.	N.C.	1246	23
Québec-Chaudière-Appalaches	10093	0	0	1320	1320	31	10691	1005	1663	1	12	8	14	0	3442	106	3348	122	N.C.	N.C.	2245	98
Centre-du-Québec	10758	0	2	1118	1120	9	9914	1087	1314	2	8	24	3	0	1314	38	1322	22	N.C.	N.C.	1307	24
Montréal-Laval	27687	0	5	1345	1350	8	25374	2459	8057	10	55	32	8	0	8056	478	8054	361	N.C.	N.C.	8158	196
Ouest du Québec	7022	0	6	522	528	0	6964	935	200	0	8	4	5	0	193	14	189	11	N.C.	N.C.	189	5
Montréal	4356	0	0	217	217	0	3812	388	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
<b>Province of Québec</b>	<b>87776</b>	<b>36</b>	<b>14</b>	<b>6595</b>	<b>6645</b>	<b>52</b>	<b>70020</b>	<b>7318</b>	<b>12045</b>	<b>15</b>	<b>83</b>	<b>78</b>	<b>31</b>	<b>0</b>	<b>13907</b>	<b>654</b>	<b>13326</b>	<b>528</b>	<b>N.C.</b>	<b>N.C.</b>	<b>13145</b>	<b>346</b>
P.H.O.L. - Ottawa	6955	2	80	1	83	0	6955	1442	6955	0	0	0	0	737	6955	312	6953	44	6955	2242	6953	290
EORLA	7281	0	0	143	143	0	7256	640	1070	0	2	20	6	0	1070	18	751	12	1070	172	728	27
P.H.O.L. - Kingston	1457	0	219	0	8	0	1464	128	1463	0	0	0	0	132	1464	23	1445	6	1463	327	1445	97
UHN / Mount Sinai Hospital	18889	0	0	47	47	3	18889	108	621	0	0	0	0	0	621	1	621	1	621	16	621	11
P.H.O.L. - Toronto	10072	2	307	1	98	0	10060	289	10060	0	0	0	0	345	10064	144	10052	108	10060	1111	10053	397
Sick Kids Hospital - Toronto	839	0	0	0	0	0	0	0	839	0	2	68	1	0	839	12	839	1	839	233	839	10
Sunnybrook & Women's College HSC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P.H.O.L. - Sault Ste. Marie	337	0	4	1	4	0	336	9	336	0	0	0	0	7	336	3	336	1	336	51	336	23
P.H.O.L. - Timmins	479	0	14	2	9	0	479	26	479	0	0	0	0	18	479	1	478	1	479	38	478	30
St. Joseph's - London	12813	0	0	62	62	0	12816	775	11259	0	0	7	0	91	11259	148	11259	63	11213	603	535	4
P.H.O.L. - London	3724	0	47	8	47	0	3723	463	3723	0	0	0	0	176	3723	90	3720	59	3723	485	3720	277
P.H.O.L. - Orillia	921	0	6	1	7	0	921	125	921	0	0	0	0	55	921	29	918	21	921	227	918	70
P.H.O.L. - Thunder Bay	343	0	4	0	4	0	343	26	343	0	0	0	0	24	343	1	343	10	343	60	343	37
P.H.O.L. - Sudbury	350	0	6	0	6	0	350	12	350	0	0	0	0	9	350	2	350	5	350	32	350	10
P.H.O.L. - Hamilton	1882	0	20	2	18	0	1877	76	1877	0	0	0	0	56	1878	15	1877	30	1877	253	1877	110
P.H.O.L. - Peterborough	653	0	0	0	0	0	653	47	646	0	0	0	0	13	646	4	643	3	646	104	643	45
St. Joseph's - Hamilton	24329	0	4	237	241	1	24323	1651	24323	5	0	663	0	0	24323	234	24323	263	24323	2098	0	0
<b>Province of Ontario</b>	<b>91324</b>	<b>4</b>	<b>711</b>	<b>505</b>	<b>777</b>	<b>4</b>	<b>90445</b>	<b>5817</b>	<b>65265</b>	<b>5</b>	<b>4</b>	<b>768</b>	<b>7</b>	<b>1663</b>	<b>65271</b>	<b>1037</b>	<b>64908</b>	<b>628</b>	<b>65219</b>	<b>8052</b>	<b>29839</b>	<b>1438</b>
Manitoba	55552	1	76	450	527	0	55552	1344	3037	2	10	75	13	0	3037	49	4433	21	3037	363	4239	89
Province of Saskatchewan	28308	2	406	305	713	0	28273	1707	5417	1	12	200	74	0	5417	98	5417	64	5417	762	5406	295
Province of Alberta	85052	3	535	2055	2593	3	33607	3473	33607	2	109	727	228	0	33607	353	33607	432	33607	3749	33607	1512
<b>Prairies</b>	<b>168912</b>	<b>6</b>	<b>1017</b>	<b>2810</b>	<b>3833</b>	<b>3</b>	<b>117432</b>	<b>6524</b>	<b>42061</b>	<b>5</b>	<b>131</b>	<b>1002</b>	<b>315</b>	<b>0</b>	<b>42061</b>	<b>500</b>	<b>43457</b>	<b>517</b>	<b>42061</b>	<b>4874</b>	<b>43252</b>	<b>1896</b>
<b>British Columbia</b>	<b>193432</b>	<b>7</b>	<b>589</b>	<b>6</b>	<b>1032</b>	<b>87</b>	<b>188977</b>	<b>9234</b>	<b>25033</b>	<b>8</b>	<b>20</b>	<b>1082</b>	<b>286</b>	<b>172</b>	<b>25033</b>	<b>493</b>	<b>25029</b>	<b>293</b>	<b>24536</b>	<b>3724</b>	<b>24554</b>	<b>916</b>
Yukon	5445	1	3	2	12	7	5455	308	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	1733	0	182	3	185	0	1661	154	108	0	1	1	0	0	108	3	108	0	1660	175	108	1
Nunavut	15879	0	223	9	232	0	15857	292	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>23057</b>	<b>1</b>	<b>408</b>	<b>14</b>	<b>429</b>	<b>7</b>	<b>22973</b>	<b>754</b>	<b>156</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>156</b>	<b>6</b>	<b>156</b>	<b>0</b>	<b>1708</b>	<b>187</b>	<b>139</b>	<b>1</b>
<b>CANADA</b>	<b>618839</b>	<b>54</b>	<b>2788</b>	<b>10685</b>	<b>13520</b>	<b>161</b>	<b>537898</b>	<b>30714</b>	<b>165263</b>	<b>34</b>	<b>259</b>	<b>3266</b>	<b>699</b>	<b>2130</b>	<b>167196</b>	<b>2839</b>	<b>167638</b>	<b>2163</b>	<b>154353</b>	<b>19670</b>	<b>118073</b>	<b>4791</b>

The data in the RVDSS report represent surveillance data available at the time of writing. Data not collected by reporting lab denoted by N.C.

Note: Included in the cumulative detections this season are 11 co-infections of influenza A and B (total of 22 detections) that are suspected to be associated with recent live attenuated influenza vaccine (LAIV) receipt. Co-infections known or reported to be associated with recent LAIV are removed by the submitting laboratory or by PHAC beginning in week 44 as they do not represent community transmission of seasonal influenza viruses.

The reporting laboratory previously listed as CHEO - Ottawa is now listed as EORLA to better reflect data submitted by this provider.

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: BC Children's and Women's Hospital, Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Powell River Hospital, St. Paul's Hospital, Vancouver General Hospital, Victoria General Hospital, BCCDC Public Health Laboratory, Interior Health Authority sites and Northern Health Authority sites.

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.

For British Columbia, only data from subtyped influenza A specimens are included in the weekly number of influenza detections. The sum of A(H1N1)pdm09, A(H3), and A(UnS) positive results may not equal the sum of total Flu A positive results.

Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts, as some subtype detections are not available through routine testing but are subsequently reported if further subtype testing is conducted. In these instances, subtype counts do not reflect influenza A detections intended to be captured by routine surveillance, and are excluded from total detections and percent positivity.

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

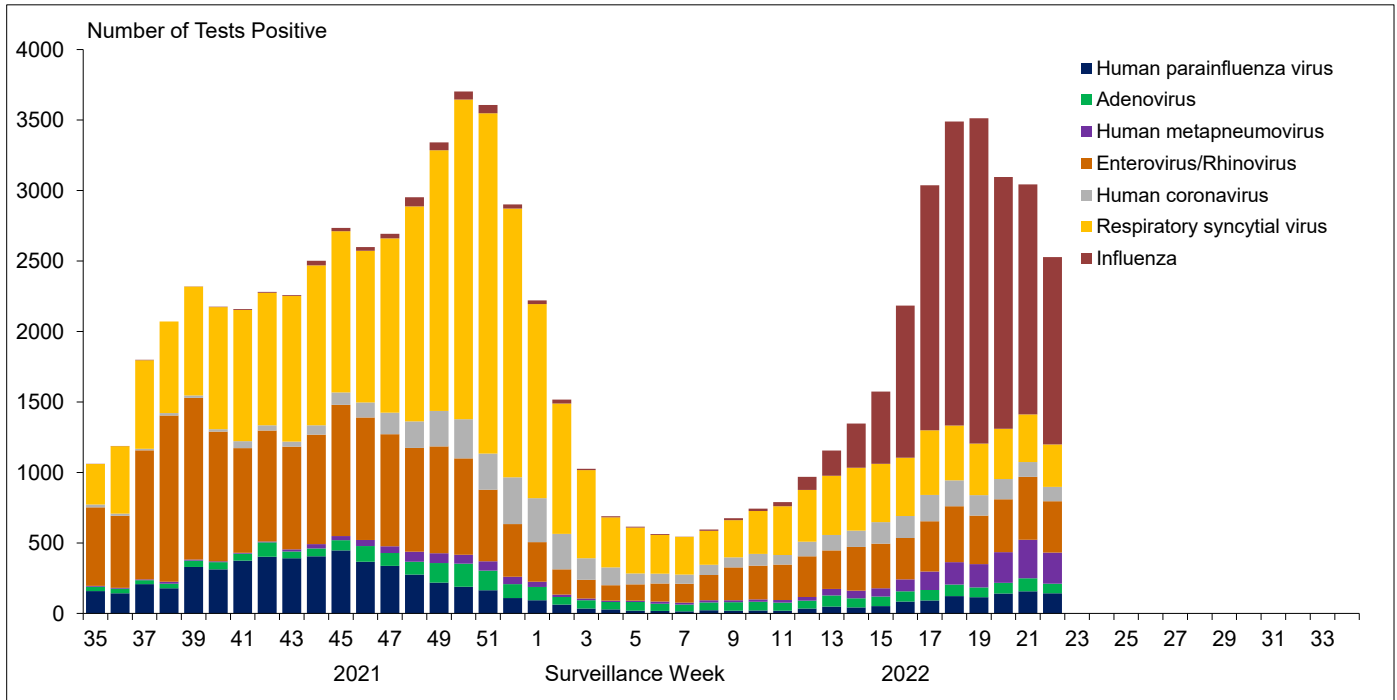


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

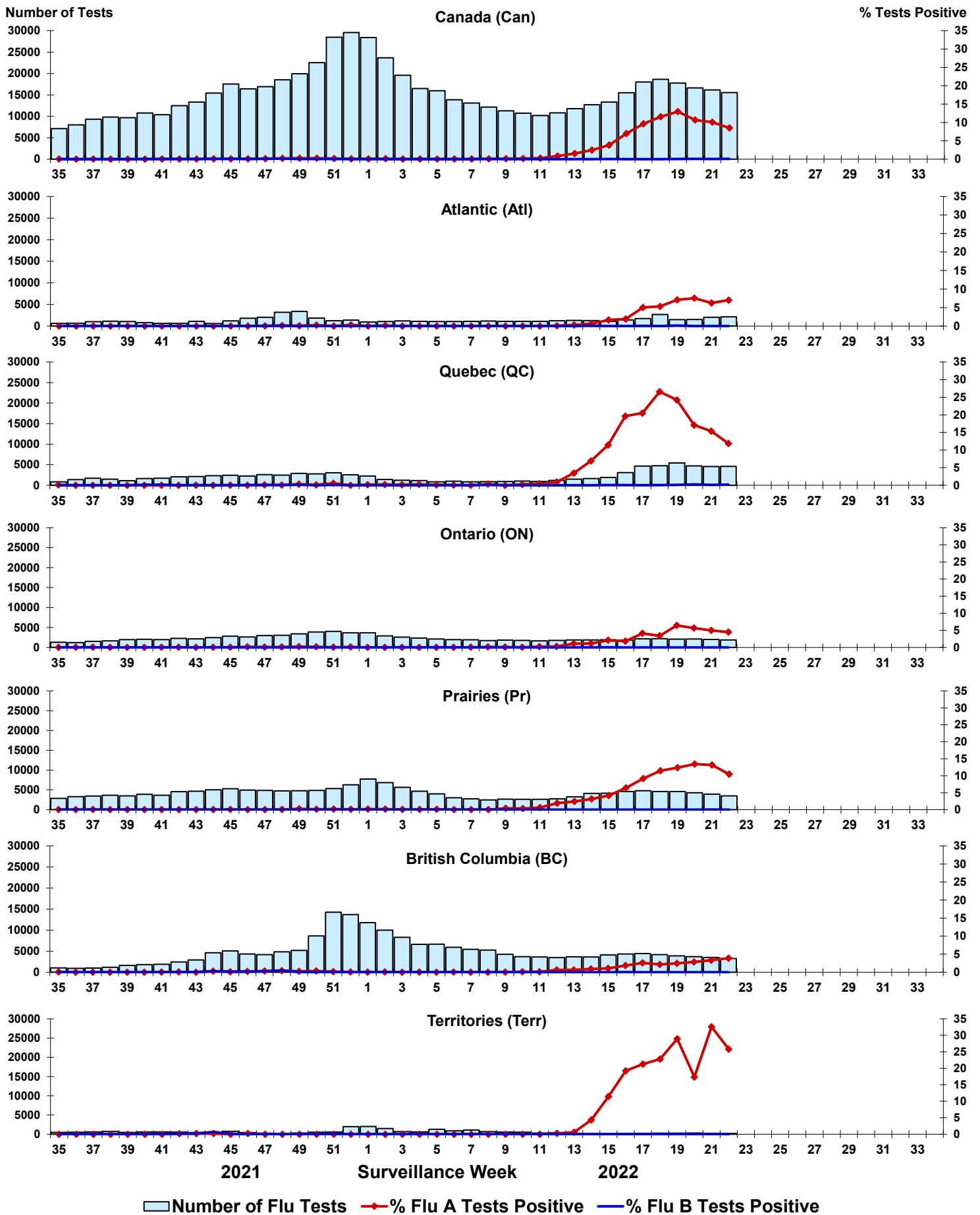


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

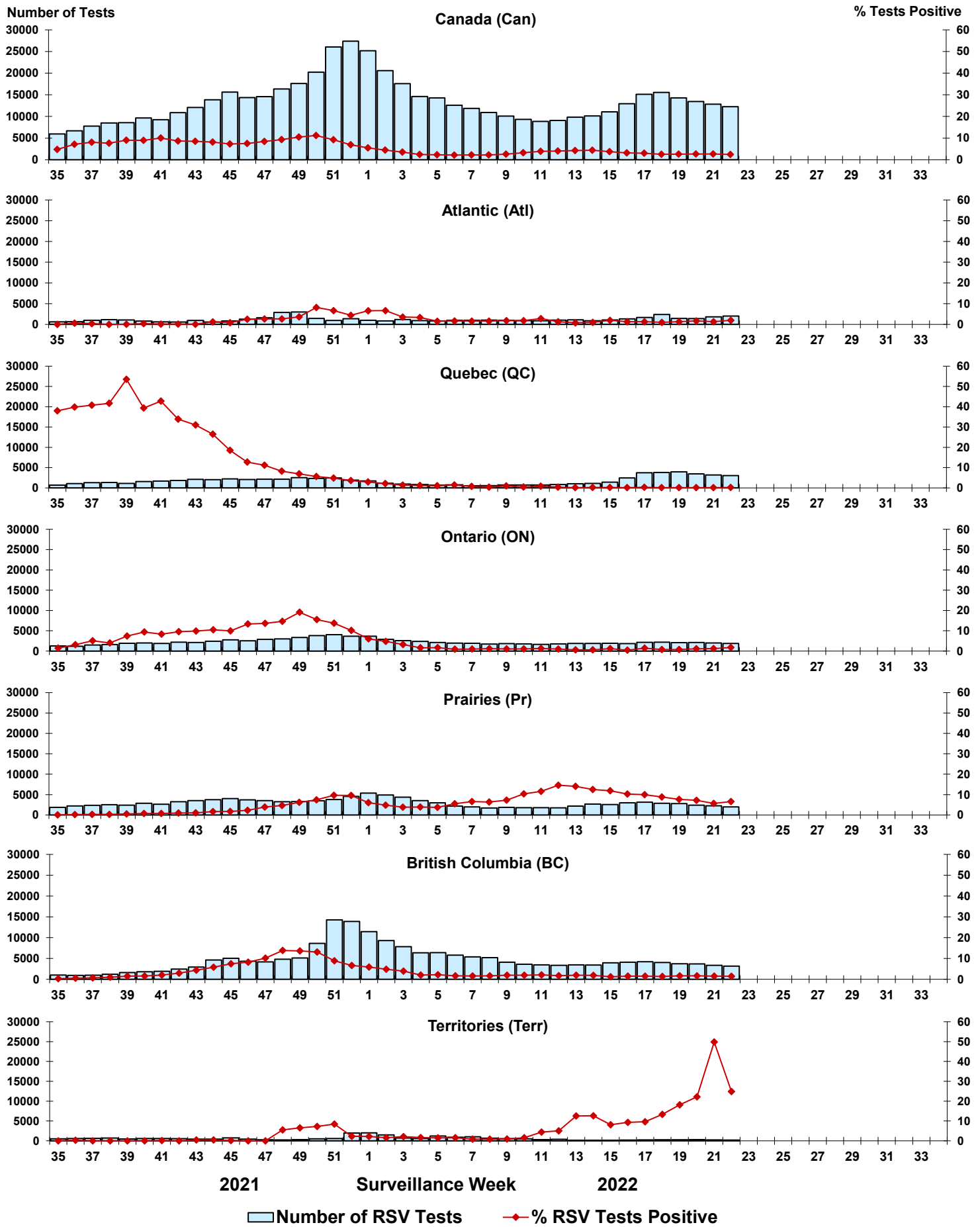


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

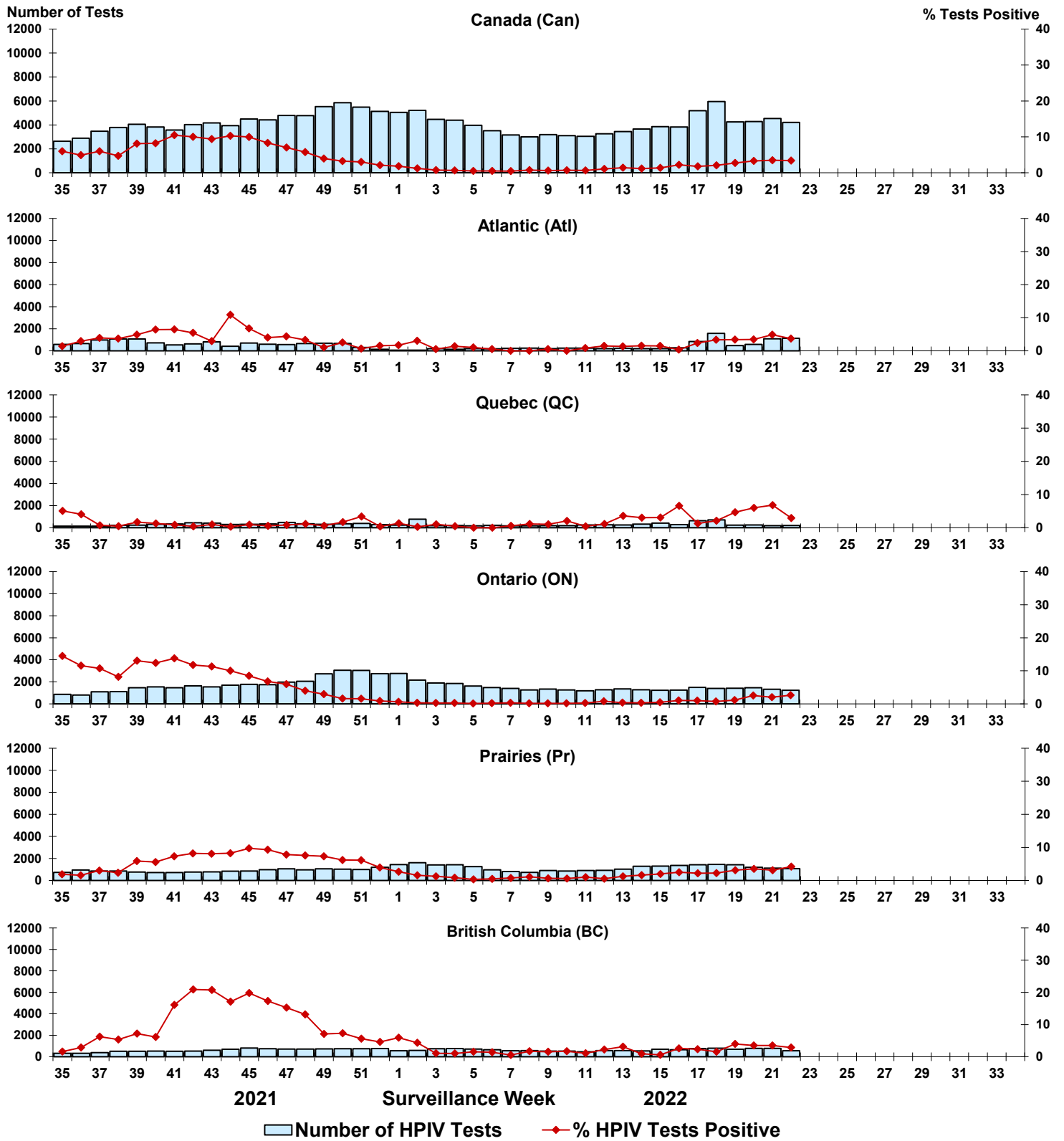




Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

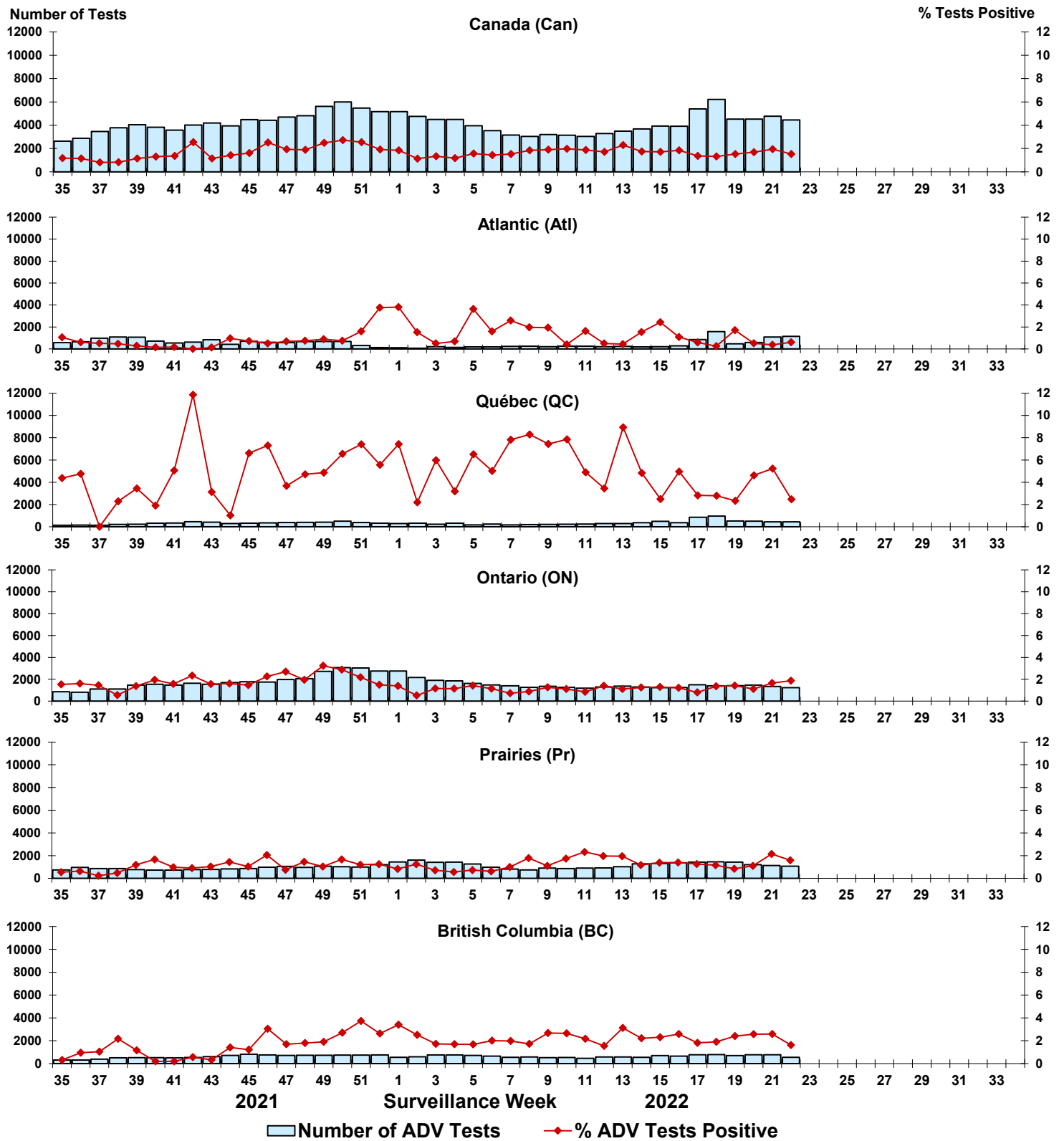


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

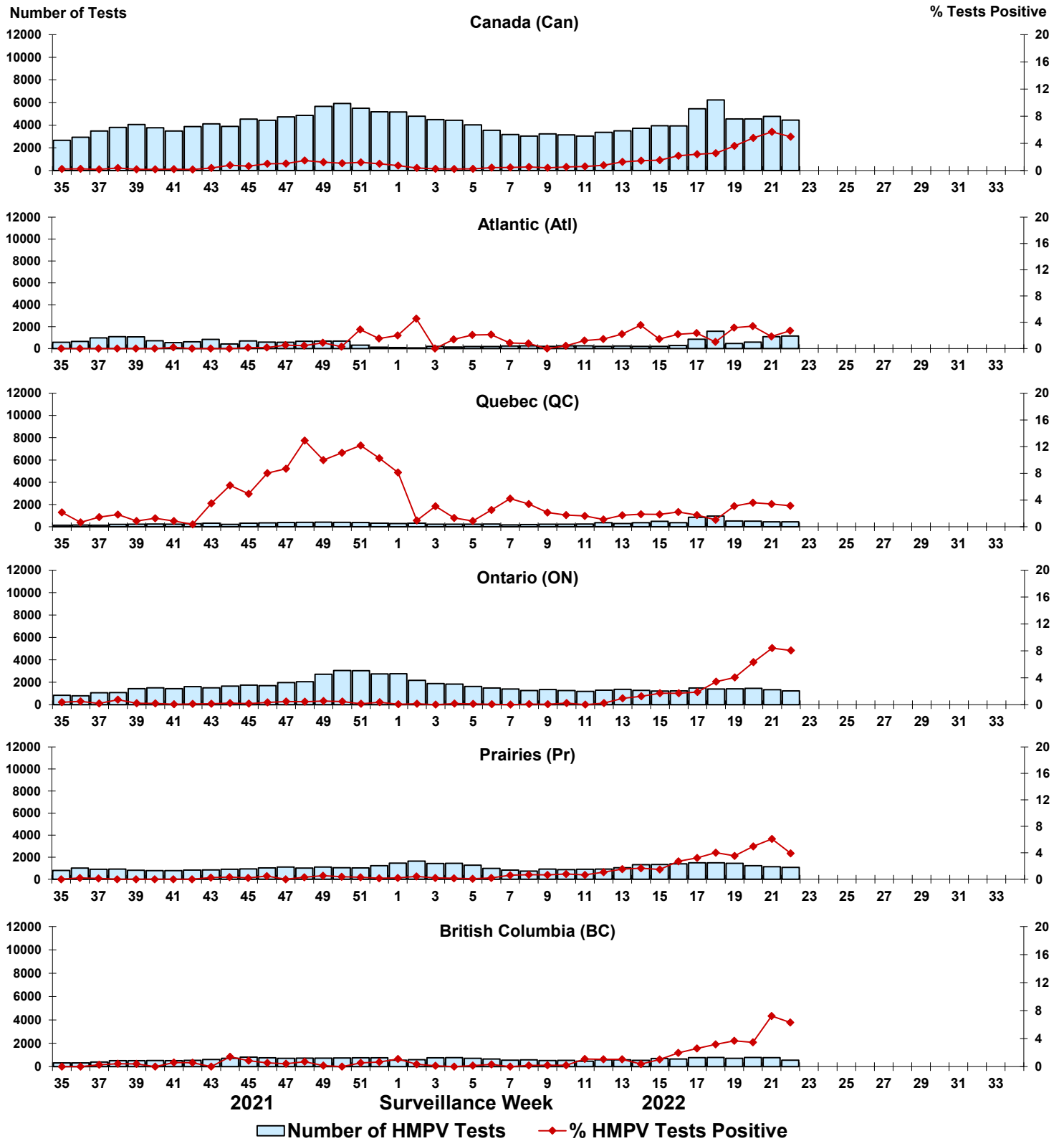


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

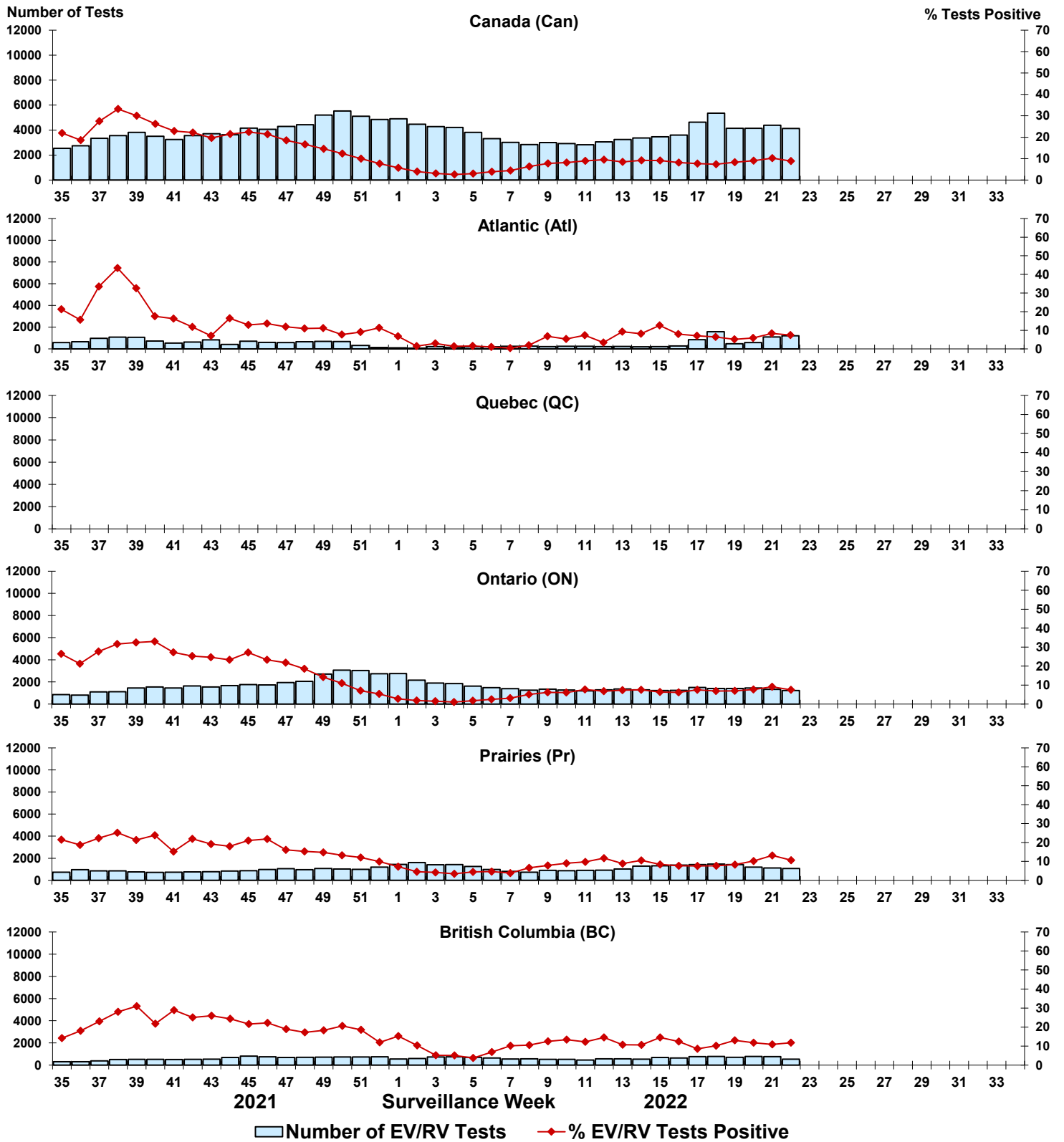


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

