

# RESPIRATORY VIRUS DETECTION REPORT

July 10 to July 16, 2022  
(Surveillance Week 2022-28)



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

Weekly respiratory virus detections have steadily decreased since mid-May.

- Influenza activity has continued to decrease. Activity remains far below the epidemic threshold and near expected levels for this time of year.
  - A total of 88 influenza detections were reported (82 influenza A, 6 influenza B).
- Enterovirus/Rhinovirus remains the most common seasonal respiratory virus detected in Canada (318 detections; 13.7% positive). Activity is fluctuating and below expected levels for this time of year.
- Activity of most other respiratory viruses is near expected levels.
  - With the exception of human metapneumovirus, where activity has fluctuated in recent weeks and is above expected levels for this time of year (136 detections; 4.7% positive).
- The number of tests performed for all viruses was above expected levels.
- 31/34 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

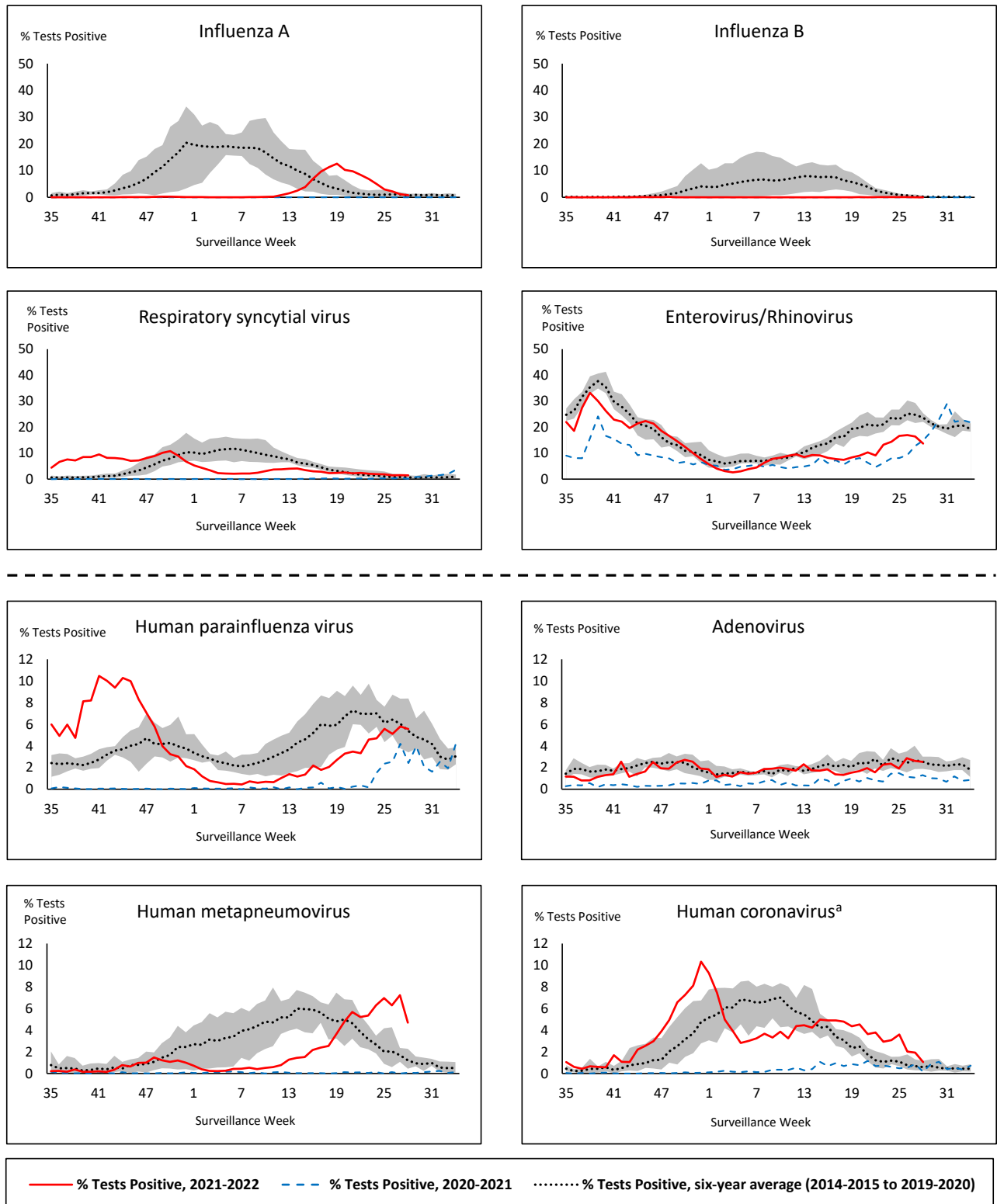
QC: Quebec

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 July 16, 2022 (surveillance week 2022-28)**

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	157	0	0	4	4	0	157	5	157	0	2	0	0	0	157	3	157	4	157	8	157	0
Prince Edward Island	34	0	0	0	0	0	34	0	34	0	1	0	1	0	34	1	34	1	34	10	34	0
Nova Scotia	584	0	0	14	14	0	584	9	31	0	0	0	1	0	31	1	31	2	31	5	31	0
New Brunswick	490	0	0	2	2	0	137	13	64	1	0	3	0	0	64	9	64	3	64	7	64	0
<b>Atlantic</b>	<b>1265</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>20</b>	<b>0</b>	<b>912</b>	<b>27</b>	<b>286</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>286</b>	<b>14</b>	<b>286</b>	<b>10</b>	<b>286</b>	<b>30</b>	<b>286</b>	<b>0</b>
Région Nord-Est	843	0	0	2	2	0	539	10	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Québec-Chaudière-Appalaches	606	0	0	2	2	1	606	2	30	0	1	3	1	0	256	4	255	1	N.C.	N.C.	117	1
Centre-du-Québec	463	0	0	4	4	0	372	1	18	0	0	0	0	0	18	1	18	0	N.C.	N.C.	18	0
Montréal-Laval	1377	0	0	7	7	0	958	12	281	1	3	20	0	0	281	5	281	8	N.C.	N.C.	311	6
Ouest du Québec	157	0	0	1	1	0	157	1	12	0	0	0	0	0	12	0	12	1	N.C.	N.C.	12	0
Montérégie	407	0	0	6	6	1	155	2	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
<b>Province of Québec</b>	<b>3853</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>22</b>	<b>2</b>	<b>2787</b>	<b>28</b>	<b>341</b>	<b>1</b>	<b>4</b>	<b>23</b>	<b>1</b>	<b>0</b>	<b>567</b>	<b>10</b>	<b>566</b>	<b>10</b>	<b>N.C.</b>	<b>N.C.</b>	<b>458</b>	<b>7</b>
P.H.O.L. - Ottawa	41	0	0	0	0	0	41	0	41	0	0	0	0	3	41	0	41	7	41	1	41	0
EORLA	228	0	0	0	0	0	228	7	52	0	1	2	1	0	52	1	52	3	52	5	52	2
P.H.O.L. - Kingston	54	0	1	0	1	0	54	5	54	0	0	0	0	2	54	2	54	6	54	5	54	0
UHN / Mount Sinai Hospital	457	0	0	1	1	0	457	2	8	0	0	0	0	0	8	0	8	0	8	0	8	0
P.H.O.L. - Toronto	289	0	7	0	3	0	288	3	288	0	0	0	0	15	288	4	288	15	288	16	288	1
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	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. - Timmins	10	0	0	0	0	0	10	0	10	0	0	0	0	0	10	0	10	1	10	0	10	0
St. Joseph's - London	97	0	0	1	1	0	97	3	97	0	0	0	0	0	97	0	97	6	97	11	6	0
P.H.O.L. - London	72	0	1	0	1	0	72	1	72	0	0	0	0	3	72	0	72	7	72	4	72	2
P.H.O.L. - Orillia	35	0	0	0	0	0	35	4	35	0	0	0	0	5	35	1	35	5	35	6	35	1
P.H.O.L. - Thunder Bay	5	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	0	5	0	5	0
P.H.O.L. - Sudbury	5	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	0	5	0	5	0
P.H.O.L. - Hamilton	45	0	0	0	0	0	45	0	45	0	0	0	0	3	45	1	45	3	45	4	45	3
P.H.O.L. - Peterborough	15	0	0	0	0	0	15	3	15	0	0	0	0	4	15	0	15	3	15	3	15	0
St. Joseph's - Hamilton	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.
<b>Province of Ontario</b>	<b>1357</b>	<b>0</b>	<b>9</b>	<b>2</b>	<b>7</b>	<b>0</b>	<b>1356</b>	<b>28</b>	<b>731</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>35</b>	<b>731</b>	<b>9</b>	<b>731</b>	<b>56</b>	<b>731</b>	<b>55</b>	<b>640</b>	<b>9</b>
Province of Manitoba	232	0	0	0	0	0	232	6	126	0	0	0	3	0	126	7	130	3	126	25	130	4
Province of Saskatchewan	356	0	0	1	1	0	356	4	157	0	1	0	4	0	157	10	157	19	157	39	157	0
Province of Alberta	1566	0	5	0	5	0	1382	11	605	1	8	33	5	0	604	12	605	7	588	90	605	3
<b>Prairies</b>	<b>2154</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>1970</b>	<b>21</b>	<b>888</b>	<b>1</b>	<b>9</b>	<b>33</b>	<b>12</b>	<b>0</b>	<b>887</b>	<b>29</b>	<b>892</b>	<b>29</b>	<b>871</b>	<b>154</b>	<b>892</b>	<b>7</b>
<b>British Columbia</b>	<b>2283</b>	<b>1</b>	<b>7</b>	<b>2</b>	<b>25</b>	<b>4</b>	<b>2175</b>	<b>22</b>	<b>420</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>5</b>	<b>0</b>	<b>420</b>	<b>11</b>	<b>420</b>	<b>31</b>	<b>398</b>	<b>70</b>	<b>398</b>	<b>4</b>
Yukon	6	0	0	0	0	0	6	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	40	0	1	0	1	0	40	7	0	0	0	0	0	0	0	0	0	0	39	9	0	0
Nunavut	98	0	1	0	1	0	98	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.
<b>Territories</b>	<b>144</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>144</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>40</b>	<b>9</b>	<b>1</b>	<b>1</b>
<b>CANADA</b>	<b>11056</b>	<b>1</b>	<b>23</b>	<b>47</b>	<b>82</b>	<b>6</b>	<b>9344</b>	<b>135</b>	<b>2667</b>	<b>3</b>	<b>17</b>	<b>72</b>	<b>21</b>	<b>35</b>	<b>2892</b>	<b>73</b>	<b>2896</b>	<b>136</b>	<b>2326</b>	<b>318</b>	<b>2675</b>	<b>28</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 July 16, 2022 (surveillance week 2021-35 to 2022-28)**

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	14898	0	0	321	321	0	14896	223	14899	1	30	116	0	314	14906	51	14893	89	14960	2144	680	19
Prince Edward Island	2635	0	48	17	65	0	2635	259	2590	0	1	158	25	1	2635	71	2635	102	2635	617	2635	140
Nova Scotia	24691	0	2	415	417	8	24696	391	1885	0	4	42	30	0	1905	24	1905	54	1905	171	1905	48
New Brunswick	19709	0	111	383	494	0	12387	352	3473	1	8	36	29	0	3466	47	3473	46	3473	139	3382	18
<b>Atlantic</b>	<b>61933</b>	<b>0</b>	<b>161</b>	<b>1136</b>	<b>1297</b>	<b>8</b>	<b>54614</b>	<b>1225</b>	<b>22847</b>	<b>2</b>	<b>43</b>	<b>352</b>	<b>84</b>	<b>315</b>	<b>22912</b>	<b>193</b>	<b>22906</b>	<b>291</b>	<b>22973</b>	<b>3071</b>	<b>8602</b>	<b>225</b>
Région Nord-Est	35293	45	1	2191	2237	26	16111	1475	820	2	1	10	1	0	911	18	424	16	N.C.	N.C.	1255	24
Québec-Chaudière-Appalaches	13714	0	0	1429	1429	55	14784	1013	1815	1	18	14	19	0	4964	140	4861	132	N.C.	N.C.	2976	113
Centre-du-Québec	14074	0	3	1285	1288	11	12568	1102	1443	4	8	30	3	0	1443	42	1451	27	N.C.	N.C.	1436	30
Montréal-Laval	37026	0	5	1556	1561	8	31276	2500	10025	27	90	114	10	0	10024	564	10022	410	N.C.	N.C.	10312	256
Ouest du Québec	8609	0	6	651	657	0	8551	943	297	1	8	8	7	0	290	25	286	16	N.C.	N.C.	286	6
Montérégie	6454	0	0	319	319	1	5411	396	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
<b>Province of Québec</b>	<b>115170</b>	<b>45</b>	<b>15</b>	<b>7431</b>	<b>7491</b>	<b>101</b>	<b>88701</b>	<b>7429</b>	<b>14400</b>	<b>35</b>	<b>125</b>	<b>176</b>	<b>40</b>	<b>0</b>	<b>17632</b>	<b>789</b>	<b>17044</b>	<b>601</b>	<b>N.C.</b>	<b>N.C.</b>	<b>16265</b>	<b>429</b>
P.H.O.L. - Ottawa	7137	2	81	1	84	0	7137	1442	7137	0	0	0	0	745	7137	313	7135	54	7137	2255	7135	295
EORLA	8699	0	0	175	175	0	8674	660	1307	0	3	29	13	0	1307	26	988	30	1307	209	965	32
P.H.O.L. - Kingston	1671	0	220	0	9	0	1678	146	1675	0	0	0	0	144	1676	29	1657	35	1675	380	1657	100
UHN / Mount Sinai Hospital	21503	0	0	57	57	5	21504	120	706	0	0	0	0	0	706	1	706	2	706	18	706	13
P.H.O.L. - Toronto	11667	2	384	1	127	0	11653	300	11653	0	0	0	0	434	11659	174	11643	223	11653	1302	11644	494
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	368	0	4	1	4	0	367	12	367	0	0	0	0	9	367	4	367	2	367	57	367	23
P.H.O.L. - Timmins	534	0	17	0	10	0	534	28	534	0	0	0	0	23	534	1	533	6	534	42	533	33
St. Joseph's - London	13207	0	0	73	73	0	13210	789	11653	0	0	7	0	96	11653	156	11653	109	11607	661	561	4
P.H.O.L. - London	4137	0	57	10	59	0	4136	469	4136	0	0	0	0	192	4136	98	4133	109	4136	531	4133	302
P.H.O.L. - Orillia	1111	0	8	1	9	0	1111	150	1111	0	0	0	0	75	1111	39	1108	71	1111	272	1108	81
P.H.O.L. - Thunder Bay	368	0	6	0	5	0	368	27	368	0	0	0	0	25	368	1	368	12	368	63	368	37
P.H.O.L. - Sudbury	389	0	6	0	6	0	389	12	389	0	0	0	0	12	389	2	389	7	389	35	389	14
P.H.O.L. - Hamilton	2164	0	25	2	23	0	2159	79	2159	0	0	0	0	77	2160	23	2159	57	2159	283	2159	117
P.H.O.L. - Peterborough	702	0	2	0	2	0	702	54	695	0	0	0	0	19	695	6	692	7	695	117	692	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>98825</b>	<b>4</b>	<b>814</b>	<b>558</b>	<b>884</b>	<b>6</b>	<b>97945</b>	<b>5939</b>	<b>69052</b>	<b>5</b>	<b>5</b>	<b>767</b>	<b>14</b>	<b>1851</b>	<b>69060</b>	<b>1119</b>	<b>68693</b>	<b>988</b>	<b>69006</b>	<b>8556</b>	<b>33256</b>	<b>1600</b>
Manitoba	57935	1	85	487	573	0	57935	1421	3777	2	15	80	28	0	3777	73	5200	55	3777	495	5006	102
Province of Saskatchewan	30672	2	477	296	775	0	30637	1759	6325	1	20	211	101	0	6325	134	6325	154	6325	974	6314	313
Province of Alberta	92683	8	1806	841	2655	3	71975	3675	37959	7	171	898	263	0	37949	415	37935	616	37562	4352	37959	1555
<b>Prairies</b>	<b>181290</b>	<b>11</b>	<b>2368</b>	<b>1624</b>	<b>4003</b>	<b>3</b>	<b>160547</b>	<b>6855</b>	<b>48061</b>	<b>10</b>	<b>206</b>	<b>1189</b>	<b>392</b>	<b>0</b>	<b>48051</b>	<b>622</b>	<b>49460</b>	<b>825</b>	<b>47664</b>	<b>5821</b>	<b>49279</b>	<b>1970</b>
British Columbia	209632	15	951	8	1388	92	204588	9426	28787	12	31	1134	335	189	28787	580	28783	659	28224	4368	28242	995
Yukon	5479	1	5	2	14	7	5488	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	2042	0	206	1	207	0	2002	219	128	0	1	2	0	0	128	3	128	0	1959	234	128	1
Nunavut	16605	0	403	7	410	0	16603	427	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>24126</b>	<b>1</b>	<b>614</b>	<b>10</b>	<b>631</b>	<b>7</b>	<b>24093</b>	<b>954</b>	<b>182</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>182</b>	<b>6</b>	<b>182</b>	<b>0</b>	<b>2013</b>	<b>247</b>	<b>165</b>	<b>2</b>
<b>CANADA</b>	<b>690976</b>	<b>76</b>	<b>4923</b>	<b>10767</b>	<b>15694</b>	<b>217</b>	<b>630488</b>	<b>31828</b>	<b>183329</b>	<b>64</b>	<b>411</b>	<b>3624</b>	<b>865</b>	<b>2355</b>	<b>186624</b>	<b>3309</b>	<b>187068</b>	<b>3364</b>	<b>169880</b>	<b>22063</b>	<b>135809</b>	<b>5221</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**

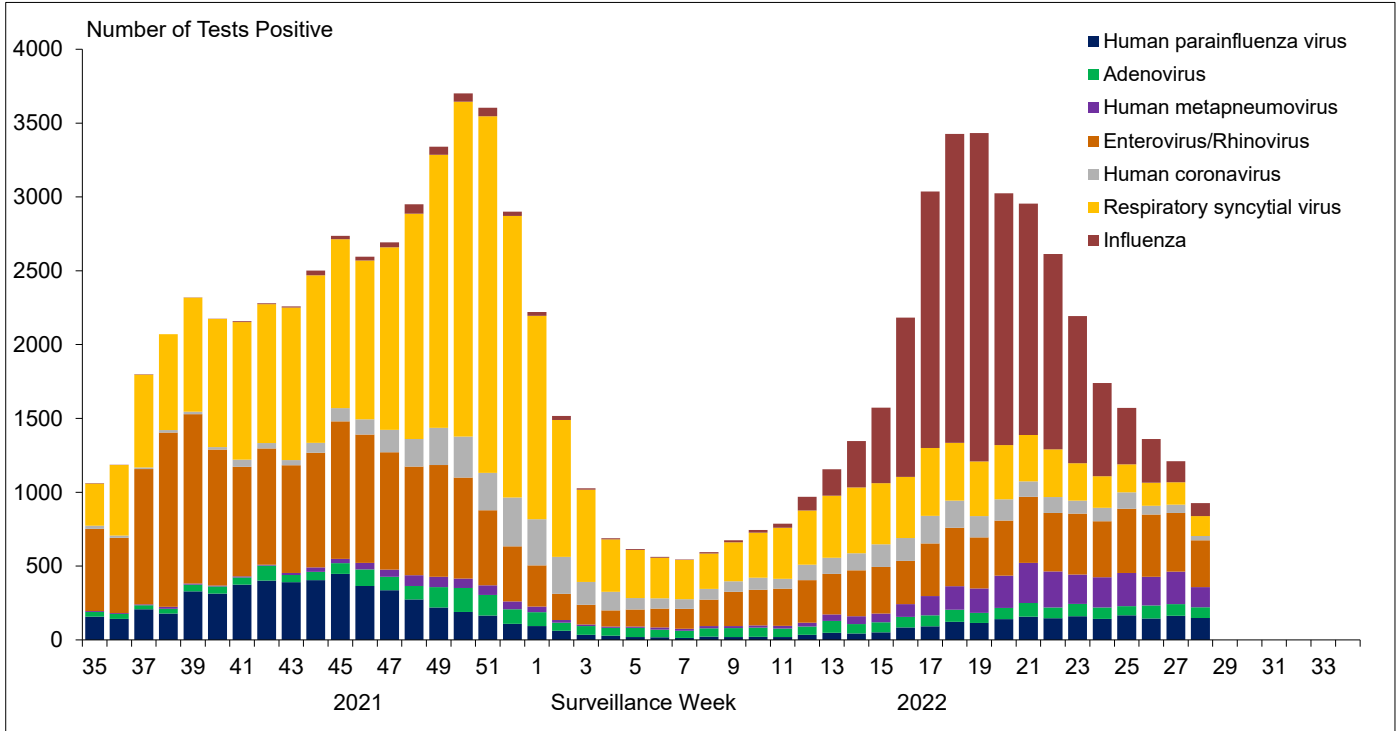


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

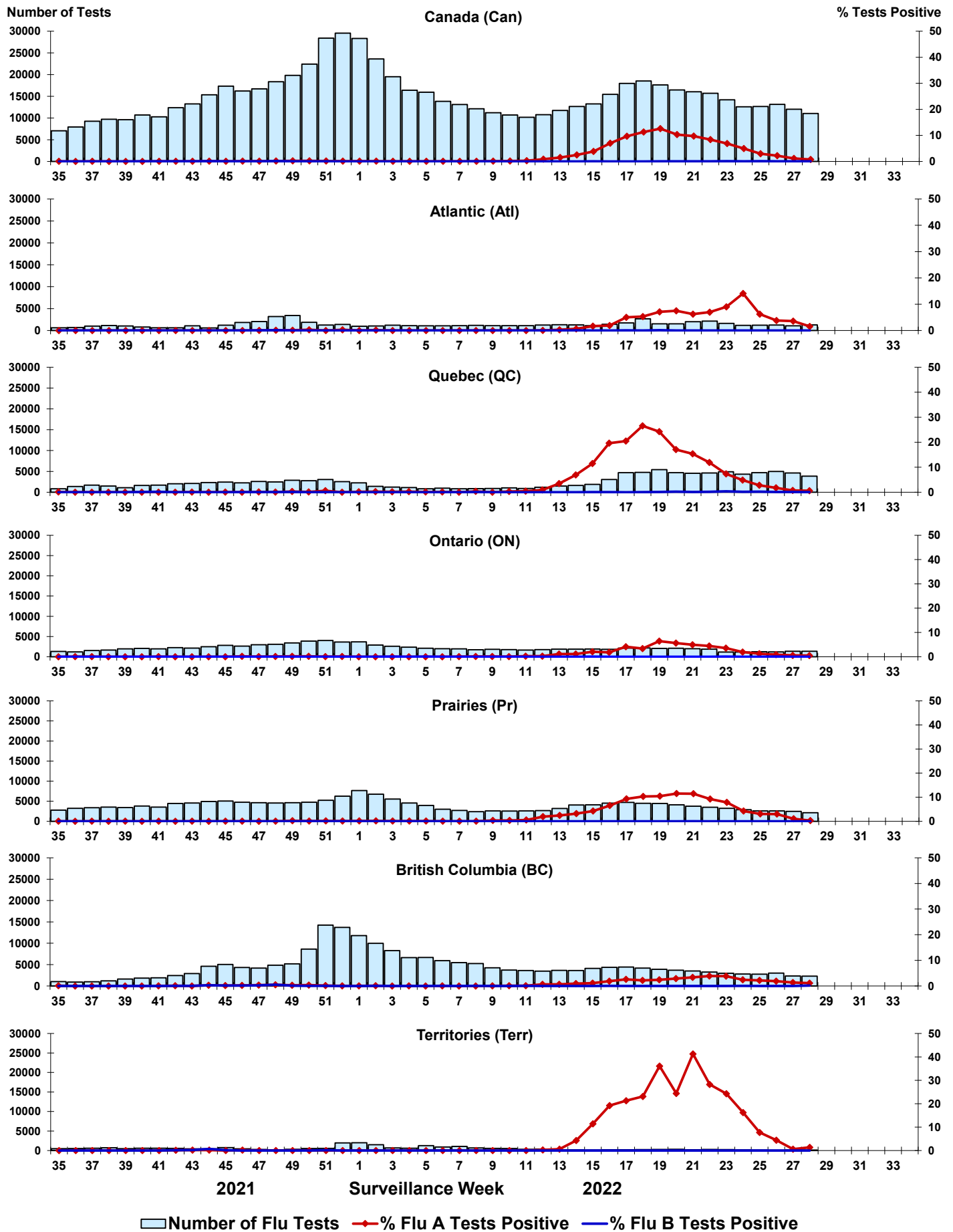


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

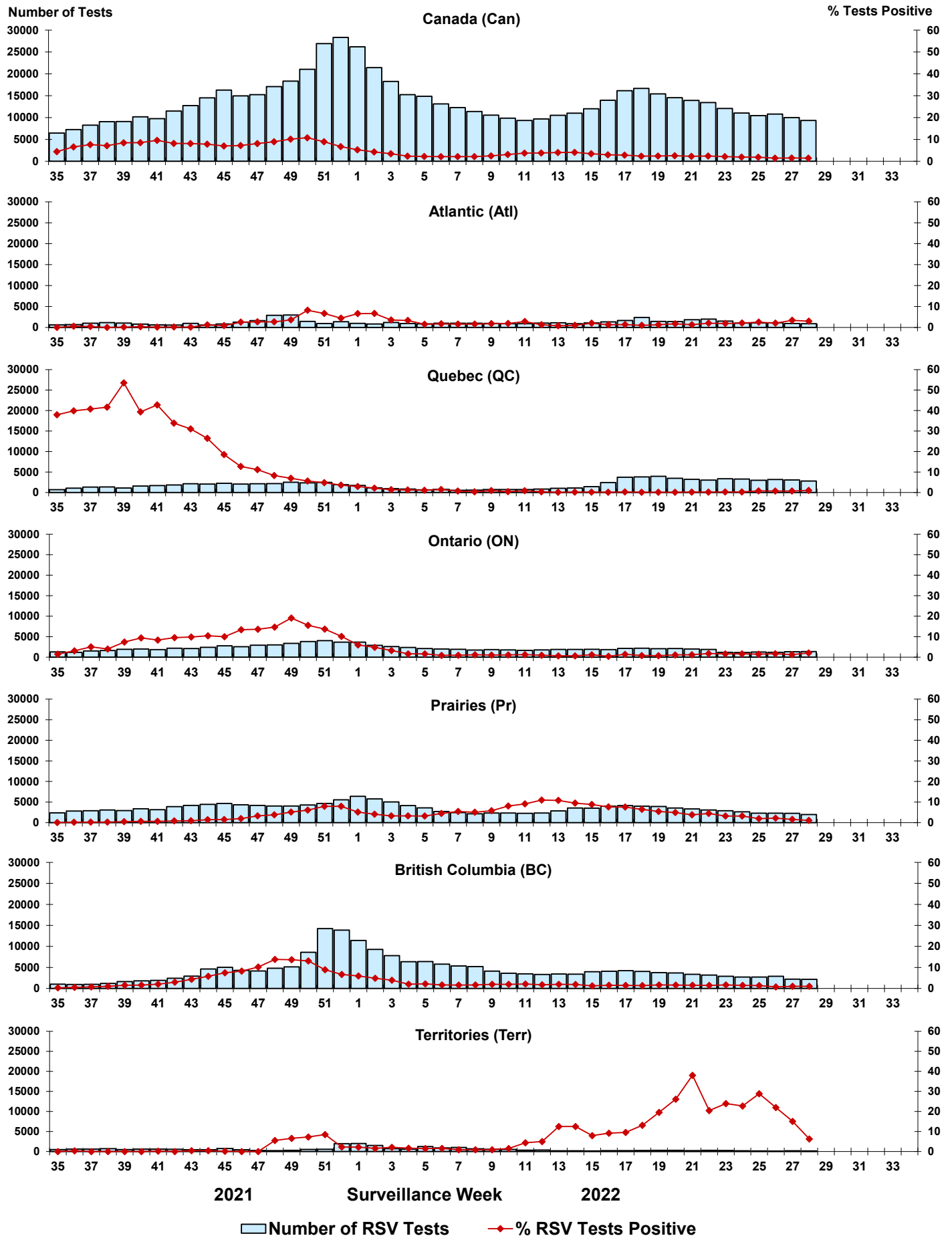


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

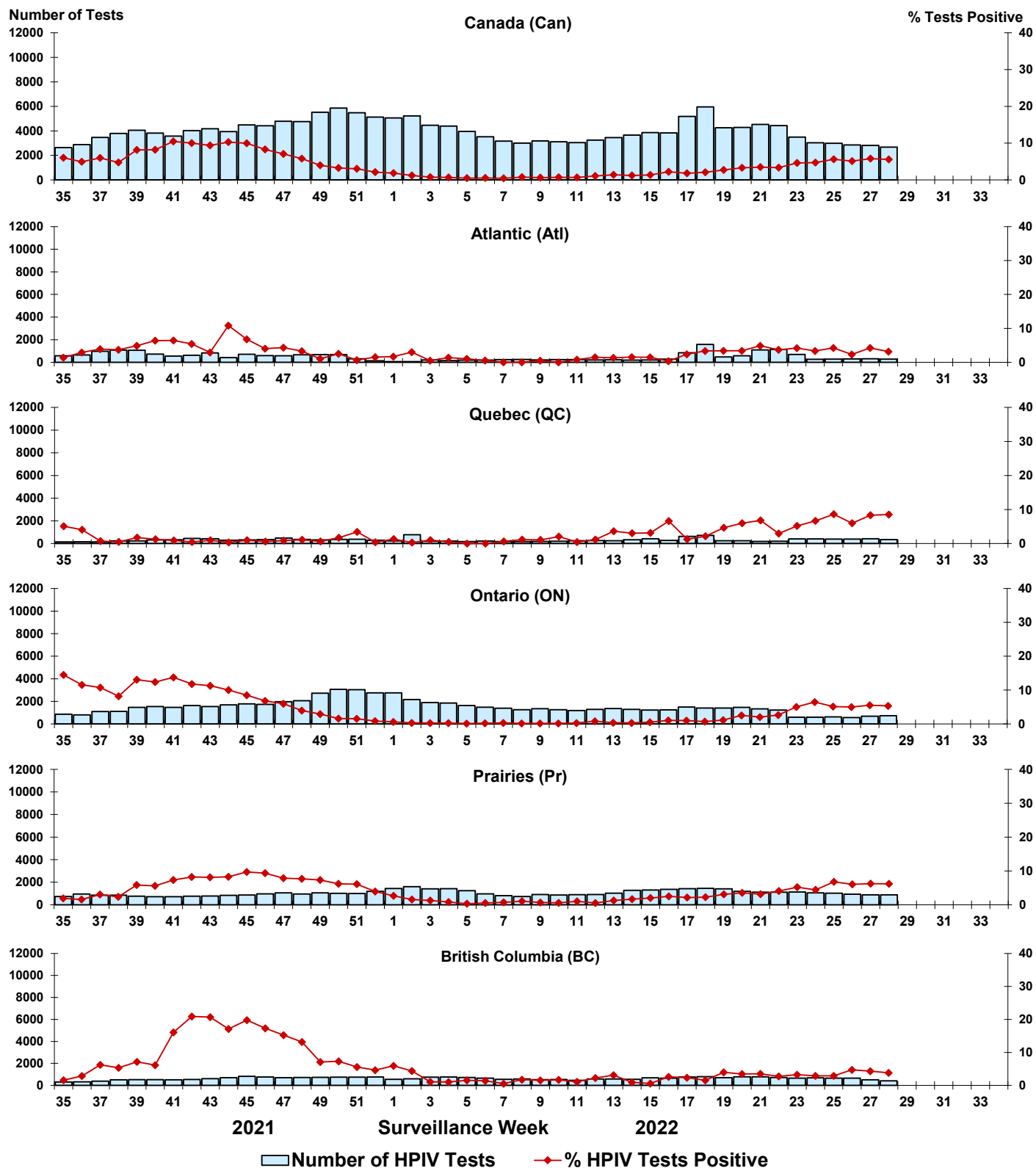




Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

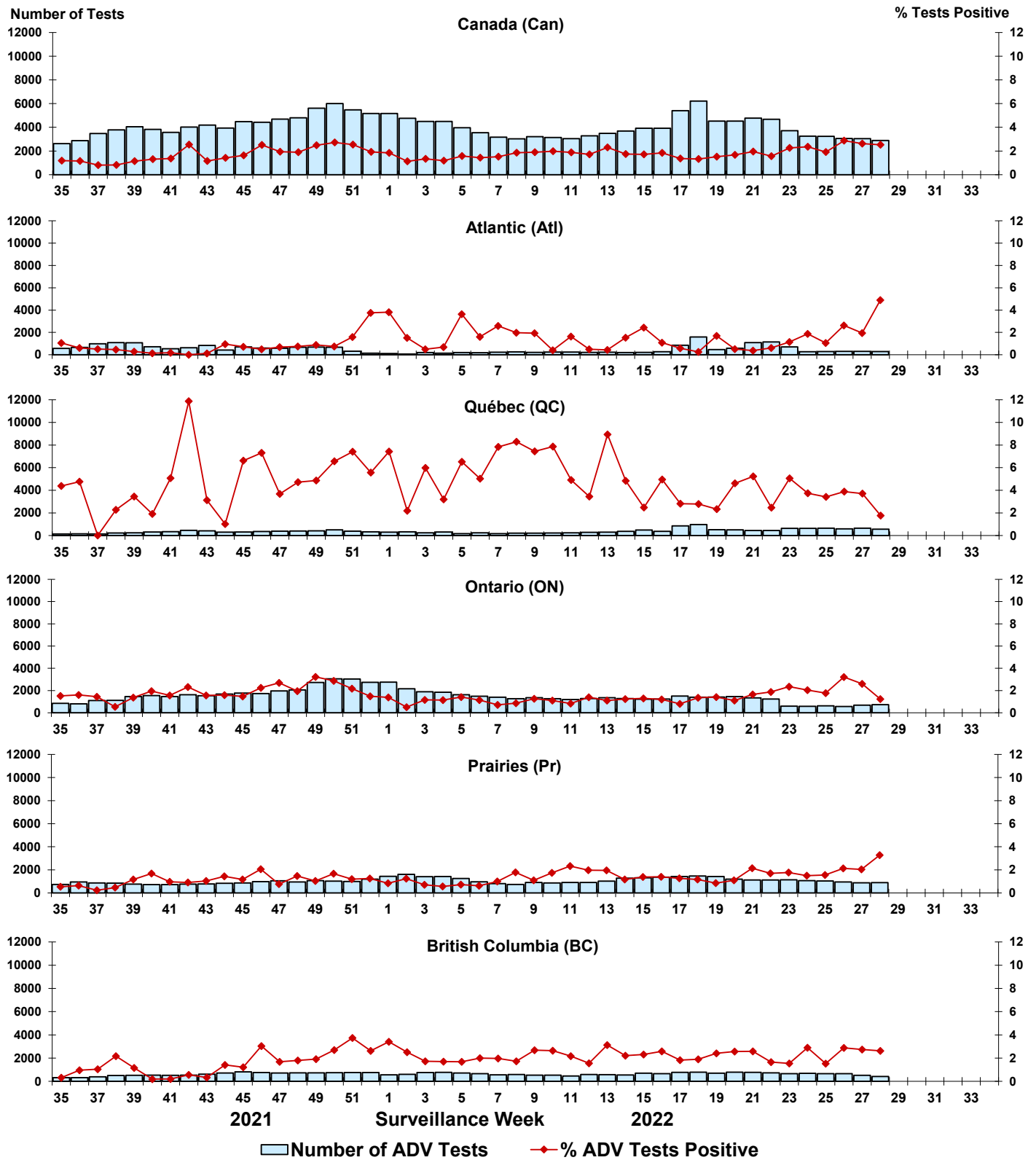


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

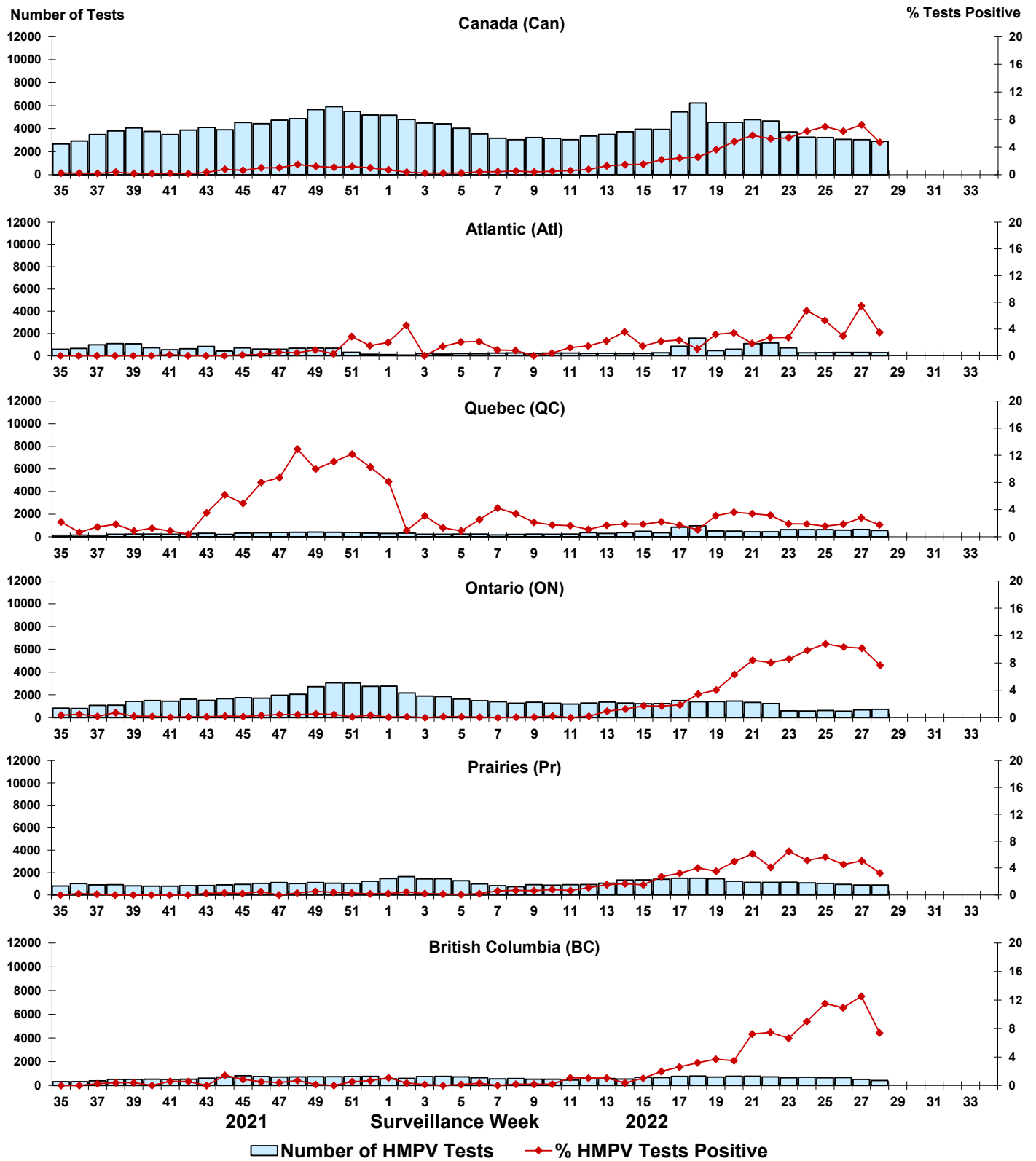


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

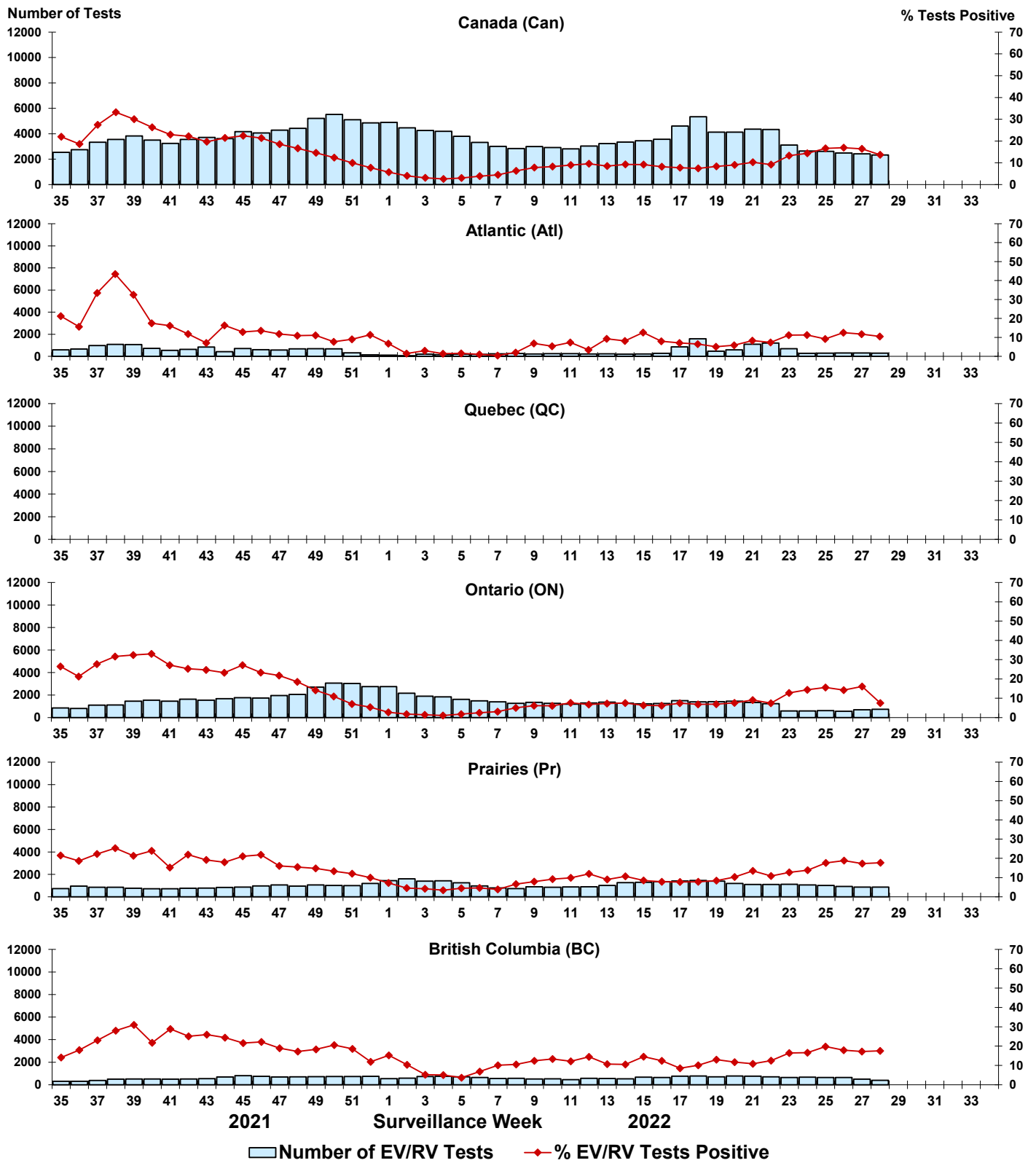


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

