

# RESPIRATORY VIRUS DETECTION REPORT

October 3 to October 9, 2021  
(Surveillance Week 2021-40)



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

In week 40 (October 3 to October 9, 2021):

- Enterovirus/rhinovirus (918 detections; 27.3% positive), respiratory syncytial virus (720 detections; 8.0% positive), and human parainfluenza virus (312 detections; 8.7% positive) are the most common seasonal respiratory viruses detected in Canada.
  - Activity of enterovirus/rhinovirus is near expected levels for this time of year.
  - Activity of respiratory syncytial virus is above expected levels. The majority of detections are found in Quebec and Eastern Ontario.
  - Activity of human parainfluenza virus is above expected levels.
- Detections of other respiratory viruses are low.
- The number of tests performed for all viruses are 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

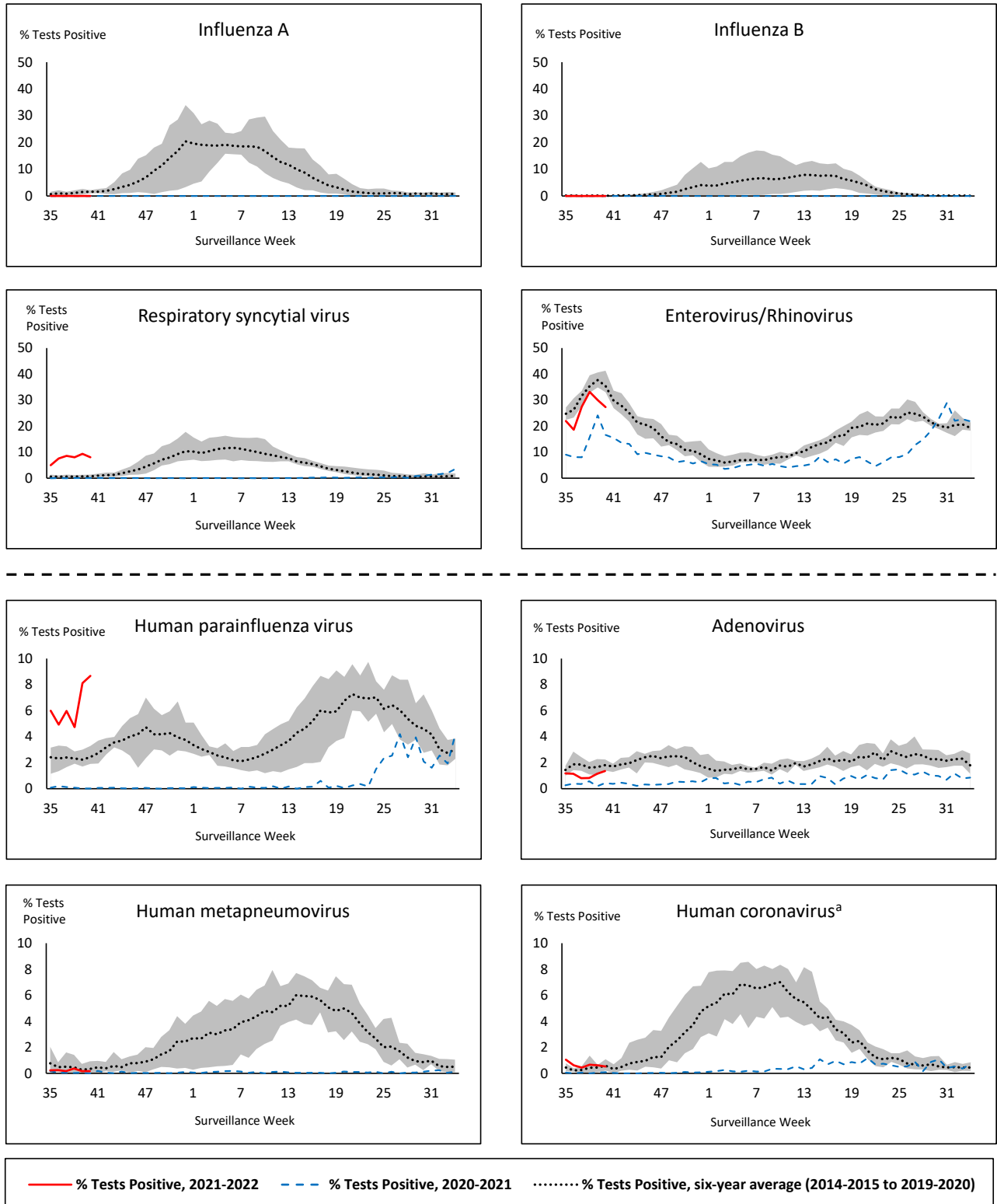
QC: Quebec

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 October 9, 2021 (surveillance week 2021-40)**

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	389	0	0	0	0	0	389	1	389	0	0	8	0	3	389	0	389	0	389	86	N.C.	N.C.
Prince Edward Island	109	0	0	0	0	0	109	0	109	0	0	25	0	0	109	1	109	0	109	29	109	1
Nova Scotia	72	0	0	0	0	0	72	1	54	0	0	6	0	0	54	0	54	0	54	7	54	0
New Brunswick	229	0	0	0	0	0	222	1	169	0	0	4	0	0	169	0	169	0	169	4	169	0
<b>Atlantic</b>	<b>799</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>792</b>	<b>3</b>	<b>721</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>0</b>	<b>3</b>	<b>721</b>	<b>1</b>	<b>721</b>	<b>0</b>	<b>721</b>	<b>126</b>	<b>332</b>	<b>1</b>
Région Nord-Est	555	0	0	2	2	0	303	107	1	0	0	0	0	0	1	0	1	0	N.C.	N.C.	1	0
Québec-Chaudière-Appalaches	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.C.	N.C.	N.R.	N.R.
Centre-du-Québec	128	0	0	0	0	0	128	79	16	0	0	1	0	0	16	0	16	0	N.C.	N.C.	16	0
Montréal-Laval	653	0	0	0	0	1	652	179	221	0	0	2	0	0	221	5	221	3	N.C.	N.C.	221	0
Ouest du Québec	102	0	0	0	0	0	102	63	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Montérégie	105	0	0	0	0	0	105	49	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
<b>Province of Québec</b>	<b>1543</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1290</b>	<b>477</b>	<b>238</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>238</b>	<b>5</b>	<b>238</b>	<b>3</b>	<b>N.C.</b>	<b>N.C.</b>	<b>238</b>	<b>0</b>
P.H.O.L. - Ottawa	517	0	0	0	0	0	517	147	517	0	0	0	0	52	517	21	517	1	517	228	517	5
EORLA	147	0	0	0	0	0	147	23	39	0	0	1	0	0	39	0	1	0	39	9	0	0
P.H.O.L. - Kingston	46	0	0	0	0	0	46	1	46	0	0	0	0	12	46	1	46	0	46	18	46	0
UHN / Mount Sinai Hospital	419	0	0	0	0	0	419	1	12	0	0	0	0	0	12	0	12	0	12	0	12	0
P.H.O.L. - Toronto	271	0	0	0	0	0	271	4	271	0	0	0	0	17	271	6	271	0	271	54	271	4
Sick Kids Hospital - Toronto	44	0	0	0	0	0	0	0	44	0	0	2	0	0	44	0	44	0	44	16	44	0
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	6	0	0	0	0	0	6	0	6	0	0	0	0	0	6	0	6	0	6	3	6	0
P.H.O.L. - Timmins	7	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	0	7	3	7	0
St. Joseph's - London	32	0	0	0	0	0	32	2	31	0	0	0	0	8	31	1	31	0	31	9	30	0
P.H.O.L. - London	83	0	0	0	0	0	83	1	83	0	0	0	0	15	83	0	83	0	83	23	83	0
P.H.O.L. - Orillia	18	0	0	0	0	0	18	0	18	0	0	0	0	3	18	0	17	1	18	4	17	0
P.H.O.L. - Thunder Bay	7	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	0	7	5	7	0
P.H.O.L. - Sudbury	20	0	0	0	0	0	20	0	20	0	0	0	0	1	20	0	20	0	20	4	20	0
P.H.O.L. - Hamilton	38	0	0	0	0	0	38	0	38	0	0	0	0	6	38	1	38	0	38	17	38	0
P.H.O.L. - Peterborough	22	0	0	0	0	0	22	1	22	0	0	0	0	0	22	0	22	0	22	6	22	0
St. Joseph's - Hamilton	383	0	0	0	0	0	383	10	383	0	0	74	0	0	383	0	383	1	383	111	0	0
<b>Province of Ontario</b>	<b>2060</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2016</b>	<b>190</b>	<b>1544</b>	<b>0</b>	<b>0</b>	<b>77</b>	<b>0</b>	<b>114</b>	<b>1544</b>	<b>30</b>	<b>1505</b>	<b>3</b>	<b>1544</b>	<b>510</b>	<b>1120</b>	<b>9</b>
Province of Manitoba	1895	0	0	0	0	0	1895	8	21	0	0	4	0	0	21	0	83	0	21	19	83	0
Province of Saskatchewan	243	0	0	0	0	0	243	1	75	0	0	0	0	0	75	3	75	0	75	19	75	0
Province of Alberta	1593	0	0	0	0	0	609	13	609	0	0	30	6	0	609	9	609	0	609	130	609	5
<b>Prairies</b>	<b>3731</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2747</b>	<b>22</b>	<b>705</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>6</b>	<b>0</b>	<b>705</b>	<b>12</b>	<b>767</b>	<b>0</b>	<b>705</b>	<b>168</b>	<b>767</b>	<b>5</b>
<b>British Columbia</b>	<b>1822</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1822</b>	<b>28</b>	<b>386</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>1</b>	<b>1</b>	<b>386</b>	<b>1</b>	<b>386</b>	<b>0</b>	<b>377</b>	<b>112</b>	<b>377</b>	<b>0</b>
Yukon	265	0	0	0	0	0	265	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	13	0	0	0	0	0	11	0	4	0	0	0	0	0	4	0	4	0	11	2	4	0
Nunavut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Territories</b>	<b>278</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>276</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>11</b>	<b>2</b>	<b>4</b>	<b>0</b>
<b>CANADA</b>	<b>10233</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>8943</b>	<b>720</b>	<b>3598</b>	<b>0</b>	<b>0</b>	<b>187</b>	<b>7</b>	<b>118</b>	<b>3598</b>	<b>49</b>	<b>3621</b>	<b>6</b>	<b>3358</b>	<b>918</b>	<b>2838</b>	<b>15</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), Northwest Territories (NT) and Nunavut (NU) are sent to reference laboratories in other provinces and reported results reflect specimens identified as originating from YT, NT or NU.

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.

Influenza co-detections may cause the sum of A(H1)pdm09, A(H3), and A(UnS) positive results to exceed the sum of Total Flu A Positive results.

**Table 2: Cumulative respiratory virus detections from August 29, 2021 to October 9, 2021 (surveillance week 2021-35 to 2021-40)**

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	3865	0	0	0	0	0	3865	8	3865	0	3	32	0	41	3868	12	3865	0	3865	1313	N.C.	N.C.
Prince Edward Island	427	0	0	0	0	0	427	0	427	0	0	92	0	0	427	10	427	0	427	138	427	2
Nova Scotia	344	0	0	0	0	0	344	2	283	0	2	18	0	0	283	2	283	0	283	33	283	0
New Brunswick	665	0	0	0	0	0	624	2	510	0	0	15	0	0	503	0	510	0	510	12	419	0
<b>Atlantic</b>	<b>5301</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5260</b>	<b>12</b>	<b>5085</b>	<b>0</b>	<b>5</b>	<b>157</b>	<b>0</b>	<b>41</b>	<b>5081</b>	<b>24</b>	<b>5085</b>	<b>0</b>	<b>5085</b>	<b>1496</b>	<b>1129</b>	<b>2</b>
Région Nord-Est	2645	0	0	2	2	0	1112	426	7	0	0	0	0	0	7	0	7	0	N.C.	N.C.	7	0
Québec-Chaudière-Appalaches	94	0	0	0	0	0	248	45	57	0	0	3	0	0	53	1	53	0	N.C.	N.C.	55	0
Centre-du-Québec	458	0	0	0	0	0	587	314	99	0	0	9	0	0	99	1	99	0	N.C.	N.C.	92	0
Montréal-Laval	3958	0	0	1	1	1	3960	1628	952	1	0	9	0	0	952	29	952	15	N.C.	N.C.	952	1
Ouest du Québec	555	0	0	0	0	0	556	255	3	0	0	0	0	0	0	0	3	0	N.C.	N.C.	3	0
Montérégie	359	0	0	0	0	0	359	188	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
<b>Province of Québec</b>	<b>8069</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>6822</b>	<b>2856</b>	<b>1118</b>	<b>1</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>1111</b>	<b>31</b>	<b>1114</b>	<b>15</b>	<b>N.C.</b>	<b>N.C.</b>	<b>1109</b>	<b>1</b>
P.H.O.L. - Ottawa	2208	0	1	0	1	0	2208	390	2208	0	0	0	0	315	2208	70	2207	11	2208	968	2207	37
EORLA	645	0	0	0	0	0	645	55	156	0	0	5	0	0	156	0	1	0	156	34	25	1
P.H.O.L. - Kingston	284	0	0	0	0	0	284	9	284	0	0	0	0	74	284	5	283	1	284	121	283	1
UHN / Mount Sinai Hospital	2451	0	0	1	1	0	2451	5	94	0	0	0	0	0	94	0	94	0	94	3	94	0
P.H.O.L. - Toronto	1223	0	1	0	1	0	1222	12	1222	0	0	0	0	86	1223	8	1222	2	1222	212	1223	4
Sick Kids Hospital - Toronto	222	0	0	0	0	0	0	0	222	0	0	17	0	0	222	1	222	1	222	59	222	0
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	14	0	0	0	0	0	14	0	14	0	0	0	0	0	14	0	14	0	14	6	14	0
P.H.O.L. - Timmins	45	0	0	0	0	0	45	2	45	0	0	0	0	3	45	0	45	0	45	7	45	0
St. Joseph's - London	192	0	0	0	0	0	192	6	192	0	0	7	0	18	192	2	192	1	196	42	195	0
P.H.O.L. - London	268	0	0	0	0	0	268	3	268	0	0	0	0	27	268	2	268	0	268	72	268	0
P.H.O.L. - Orillia	70	0	0	0	0	0	70	1	70	0	0	0	0	8	70	1	68	1	70	25	68	0
P.H.O.L. - Thunder Bay	40	0	0	0	0	0	40	0	40	0	0	0	0	0	40	0	40	0	40	16	40	0
P.H.O.L. - Sudbury	92	0	0	0	0	0	92	0	92	0	0	0	0	1	92	0	92	0	92	21	92	0
P.H.O.L. - Hamilton	147	0	0	0	0	0	146	1	146	0	0	0	0	12	146	2	146	4	146	48	146	0
P.H.O.L. - Peterborough	67	0	0	0	0	0	67	2	67	0	0	0	0	3	67	0	66	0	67	13	66	0
St. Joseph's - Hamilton	1766	0	0	0	0	0	1760	42	1760	0	0	232	0	0	1760	7	1760	2	1760	393	0	0
<b>Province of Ontario</b>	<b>9734</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>9504</b>	<b>528</b>	<b>6880</b>	<b>0</b>	<b>0</b>	<b>261</b>	<b>0</b>	<b>547</b>	<b>6881</b>	<b>98</b>	<b>6720</b>	<b>23</b>	<b>6884</b>	<b>2040</b>	<b>4988</b>	<b>43</b>
Manitoba	9205	1	0	0	1	0	9205	19	157	0	0	8	0	0	157	2	482	2	157	74	482	1
Province of Saskatchewan	695	0	0	0	0	0	667	2	487	0	0	11	2	0	487	8	487	0	487	122	486	0
Province of Alberta	10558	0	1	2	3	0	4235	35	4235	0	3	120	16	0	4235	27	4235	1	4235	880	4235	44
<b>Prairies</b>	<b>20458</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>14107</b>	<b>56</b>	<b>4879</b>	<b>0</b>	<b>3</b>	<b>139</b>	<b>18</b>	<b>0</b>	<b>4879</b>	<b>37</b>	<b>5204</b>	<b>3</b>	<b>4879</b>	<b>1076</b>	<b>5203</b>	<b>45</b>
<b>British Columbia</b>	<b>7565</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>7565</b>	<b>79</b>	<b>2429</b>	<b>0</b>	<b>0</b>	<b>114</b>	<b>11</b>	<b>9</b>	<b>2429</b>	<b>26</b>	<b>2425</b>	<b>5</b>	<b>2389</b>	<b>597</b>	<b>2385</b>	<b>4</b>
Yukon	1188	0	0	0	0	0	1260	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	122	0	0	0	0	0	112	0	24	0	0	0	0	0	24	2	24	0	112	18	24	0
Nunavut	4	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	0	4	2	4	0
<b>Territories</b>	<b>1314</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1376</b>	<b>2</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>2</b>	<b>28</b>	<b>0</b>	<b>116</b>	<b>20</b>	<b>28</b>	<b>0</b>
<b>CANADA</b>	<b>52441</b>	<b>1</b>	<b>3</b>	<b>7</b>	<b>11</b>	<b>1</b>	<b>44634</b>	<b>3533</b>	<b>20419</b>	<b>1</b>	<b>8</b>	<b>692</b>	<b>29</b>	<b>597</b>	<b>20409</b>	<b>218</b>	<b>20576</b>	<b>46</b>	<b>19353</b>	<b>5229</b>	<b>14842</b>	<b>95</b>

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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.

Influenza co-detections may cause the sum of A(H1N1)pdm09, A(H3), and A(UnS) positive results to exceed the sum of Total Flu A Positive results.

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

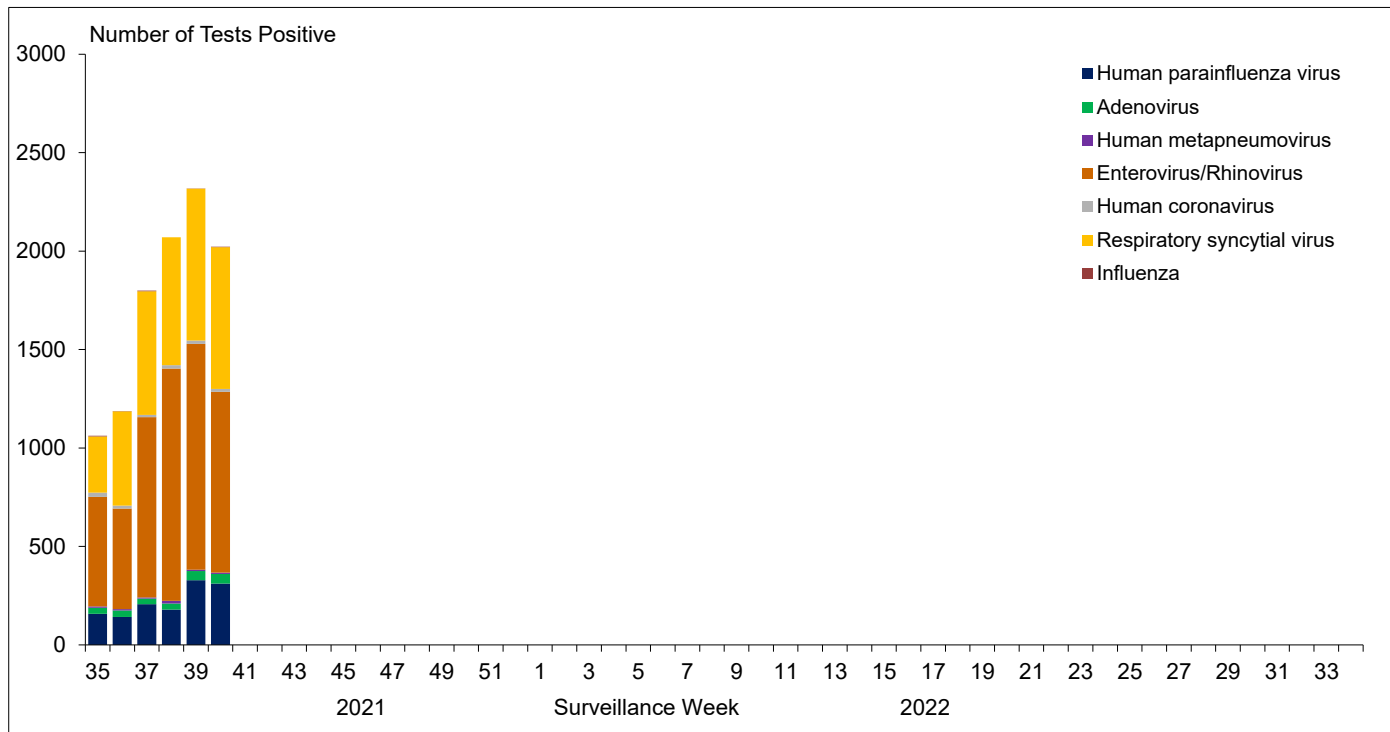


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

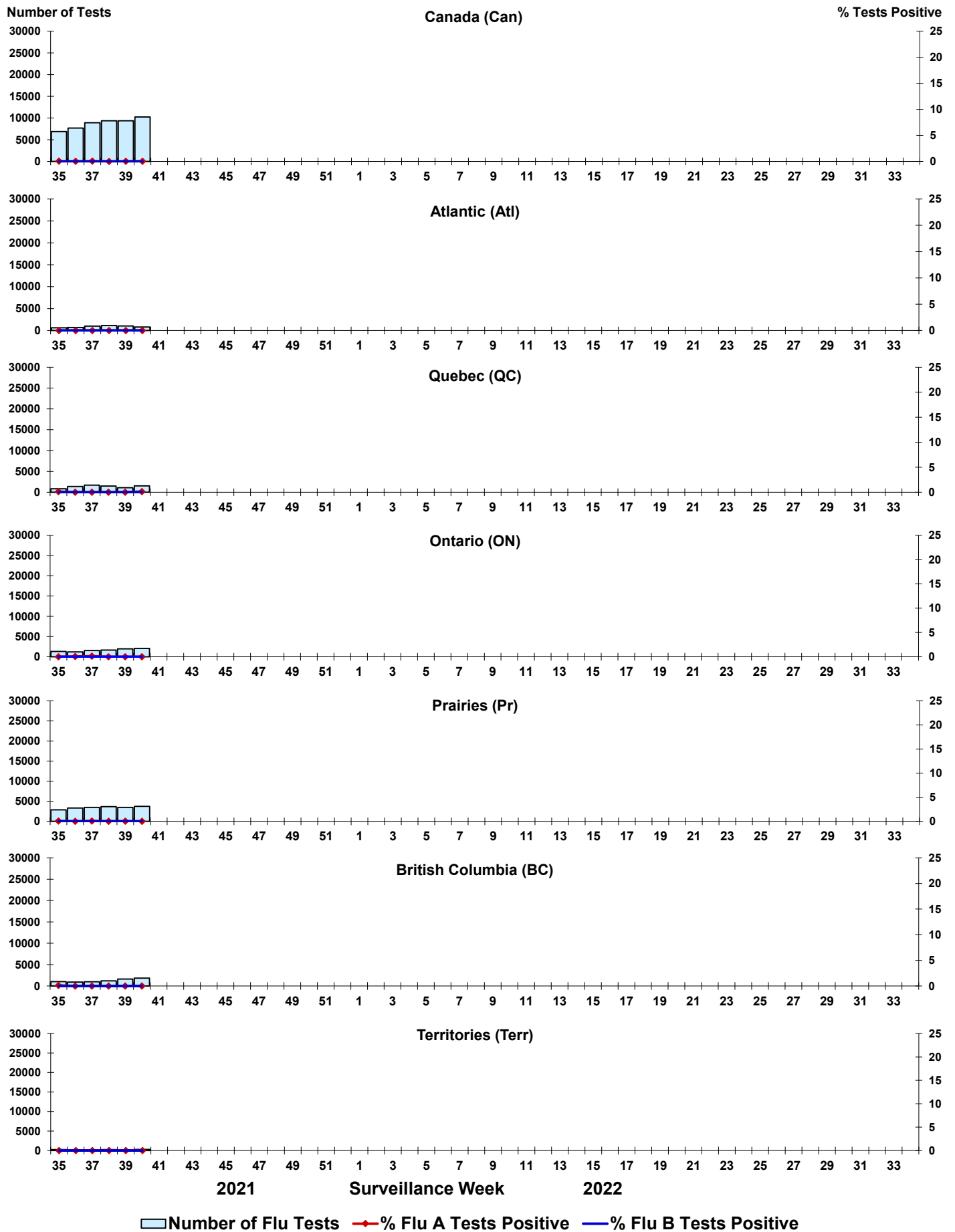


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

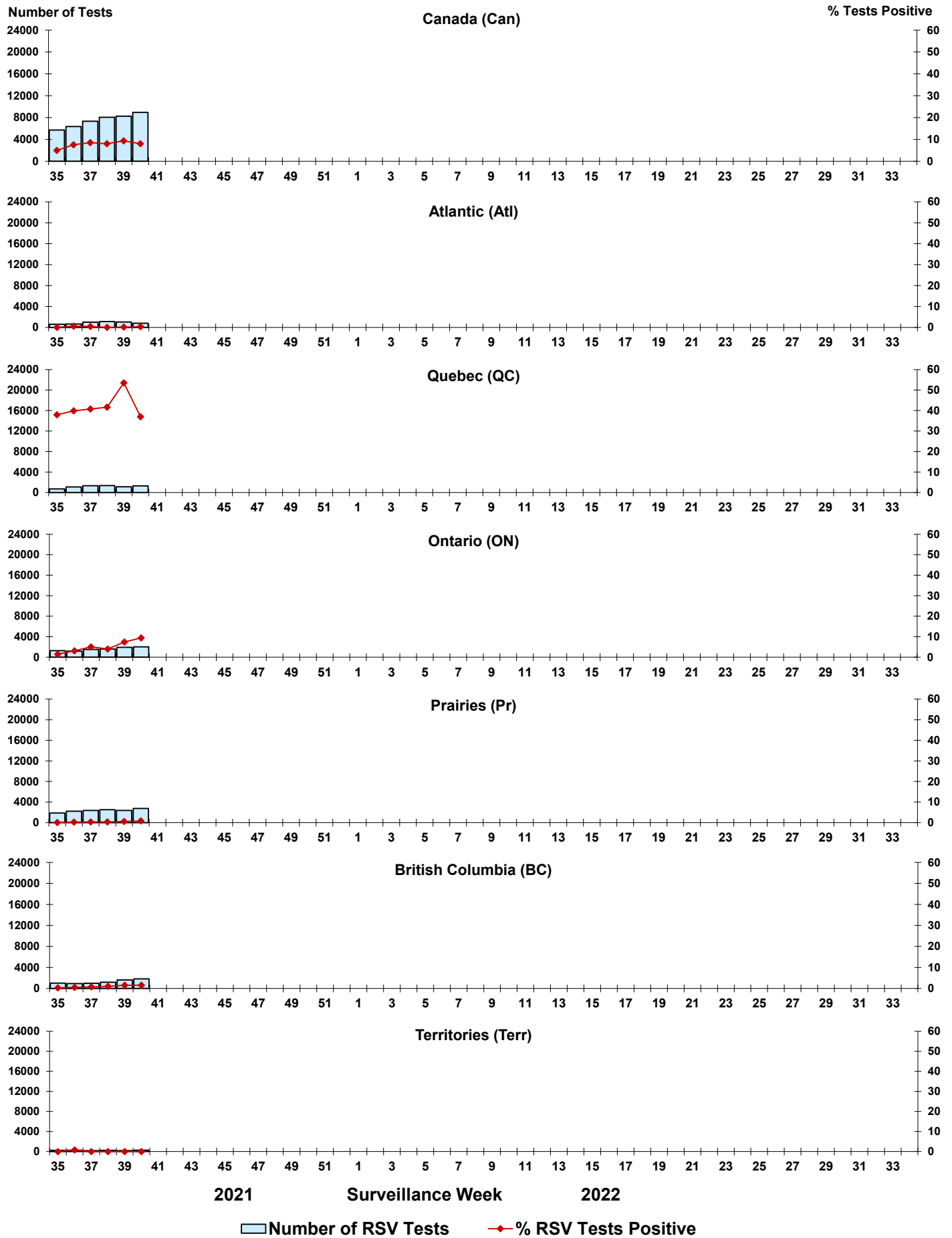


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

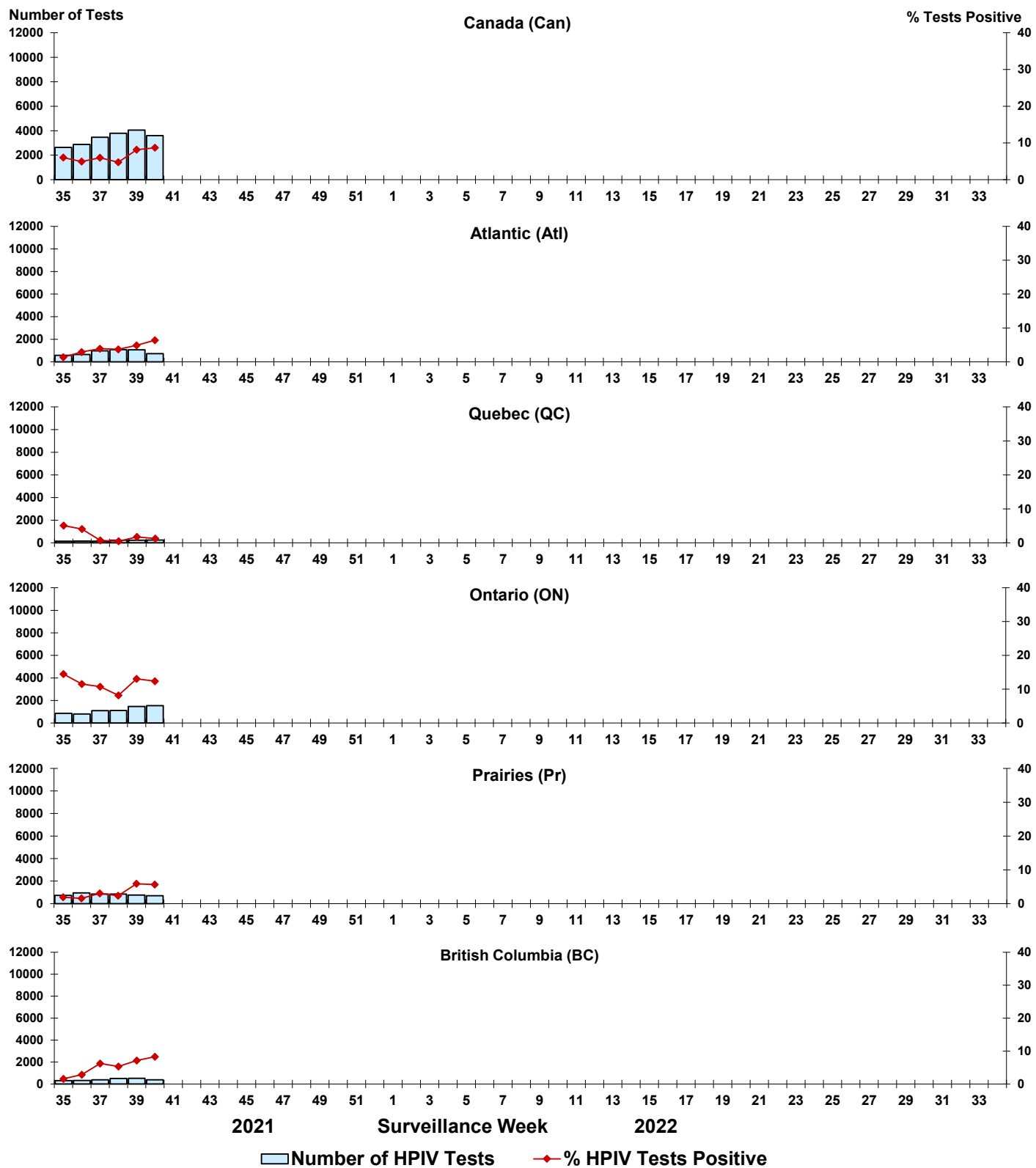




Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

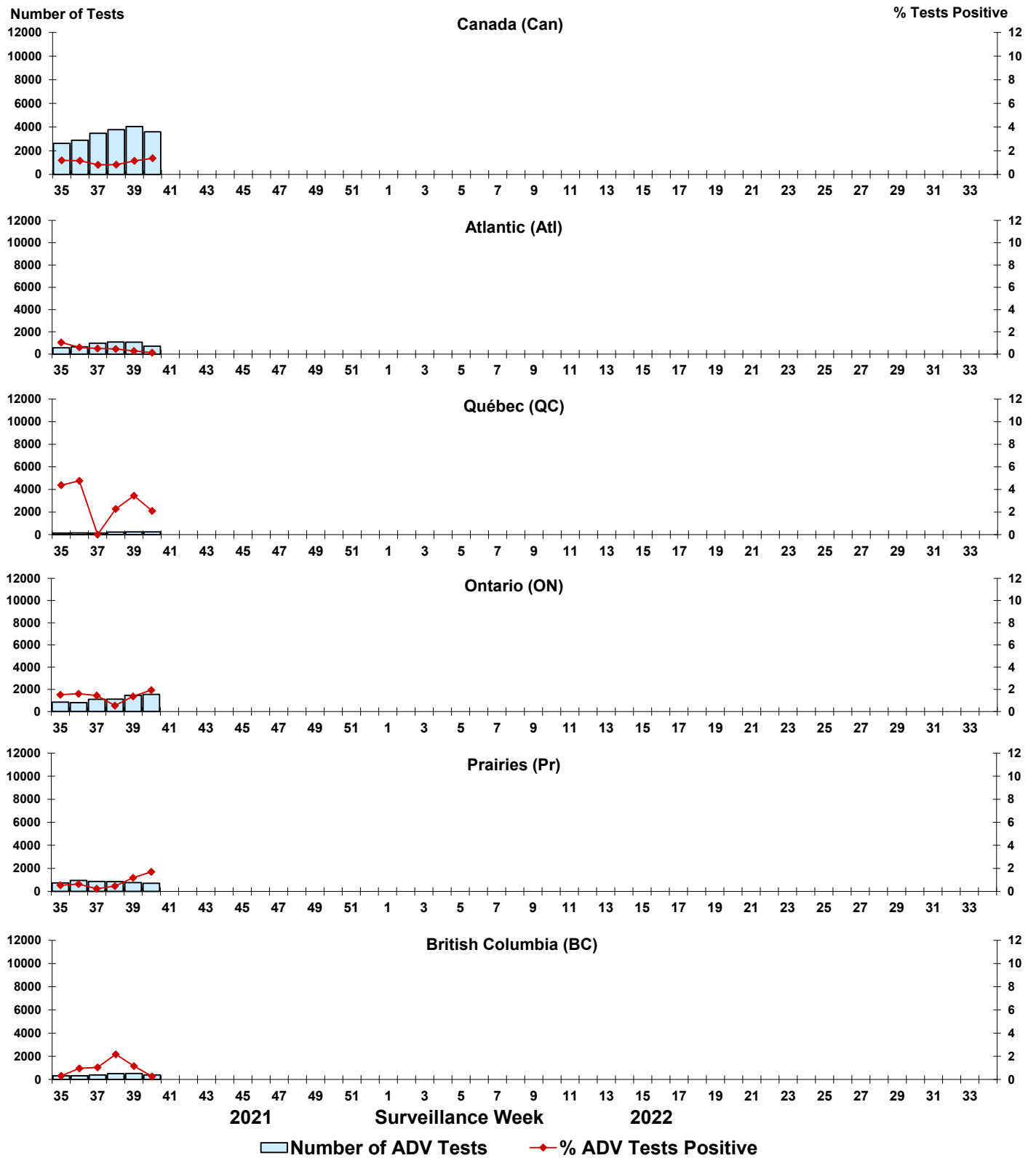


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

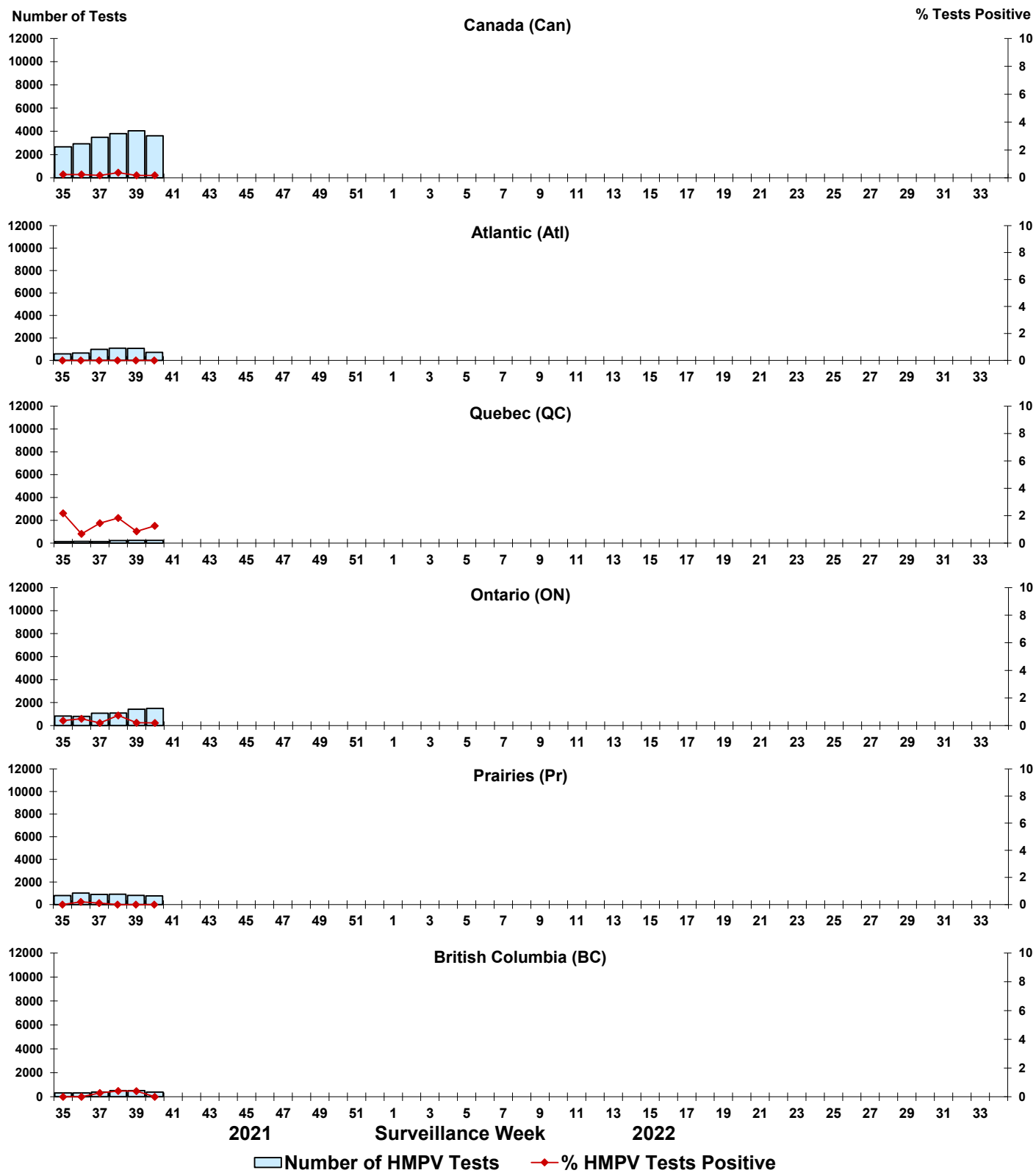


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

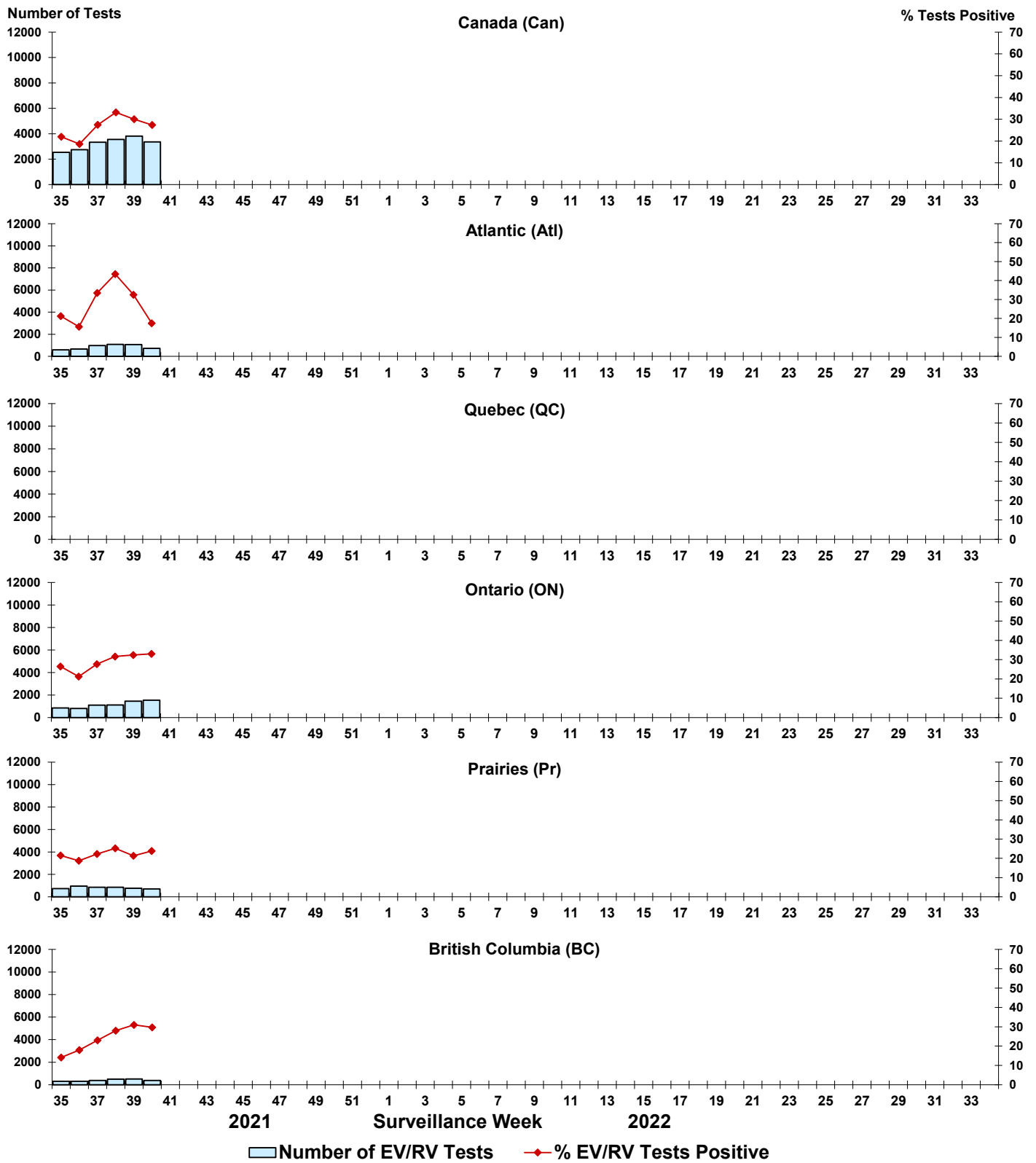


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

