

# RESPIRATORY VIRUS DETECTION REPORT

October 17 to October 23, 2021  
(Surveillance Week 2021-42)



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 42 (October 17 to October 23, 2021):

- Respiratory syncytial virus (894 detections; 8.7% positive), enterovirus/rhinovirus (688 detections; 21.5% positive), and human parainfluenza virus (309 detections; 8.4% positive) are the most common seasonal respiratory viruses detected in Canada.
  - Activity of respiratory syncytial virus remains well above expected levels. The majority of detections are found in Quebec and Eastern Ontario.
  - Activity of enterovirus/rhinovirus is decreasing and remains near expected levels for this time of year.
  - Activity of human parainfluenza virus remains well above expected levels.
- Detections of other respiratory viruses are low.
- The number of tests performed for all viruses are 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

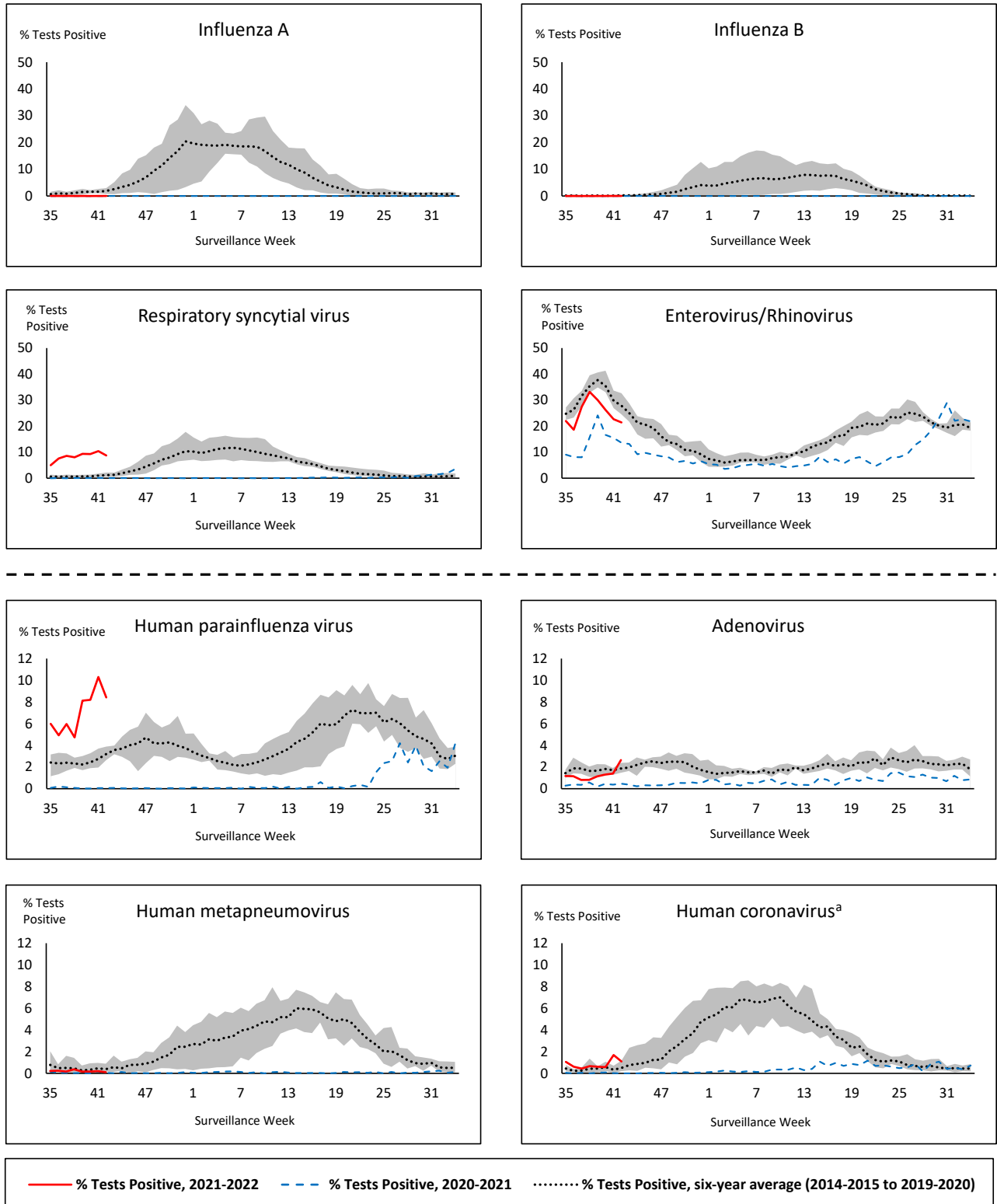
QC: Quebec

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 October 23, 2021 (surveillance week 2021-42)**

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	275	0	0	0	0	0	275	0	275	0	0	9	0	6	275	0	275	0	275	46	N.C.	N.C.
Prince Edward Island	101	0	0	0	0	0	101	0	101	0	0	12	0	0	101	0	101	0	101	25	101	1
Nova Scotia	86	0	0	0	0	0	86	0	86	0	0	4	0	0	86	0	86	0	86	3	86	0
New Brunswick	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>Atlantic</b>	<b>462</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>462</b>	<b>0</b>	<b>441</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>6</b>	<b>441</b>	<b>0</b>	<b>441</b>	<b>0</b>	<b>441</b>	<b>74</b>	<b>166</b>	<b>1</b>
Région Nord-Est	569	0	0	0	0	0	412	123	178	0	0	1	0	0	178	2	1	0	N.C.	N.C.	178	1
Québec-Chaudière-Appalaches	159	0	0	0	0	0	184	63	39	0	0	0	0	0	41	1	39	0	N.C.	N.C.	39	0
Centre-du-Québec	164	0	0	0	0	0	242	125	20	0	0	0	0	0	20	0	20	0	N.C.	N.C.	20	0
Montréal-Laval	587	0	0	0	0	0	587	138	216	0	0	1	0	0	216	51	216	1	N.C.	N.C.	216	0
Ouest du Québec	237	0	0	0	0	0	204	94	1	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Montérégie	160	0	0	0	0	0	160	42	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
<b>Province of Québec</b>	<b>1876</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1789</b>	<b>585</b>	<b>454</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>455</b>	<b>54</b>	<b>276</b>	<b>1</b>	<b>N.C.</b>	<b>N.C.</b>	<b>453</b>	<b>1</b>
P.H.O.L. - Ottawa	517	1	0	0	1	0	517	137	517	0	0	0	0	49	517	24	517	2	517	168	517	12
EORLA	199	0	0	0	0	0	199	29	20	0	0	0	0	0	20	1	0	0	20	6	0	0
P.H.O.L. - Kingston	35	0	0	0	0	0	35	1	35	0	0	0	0	10	35	1	35	0	35	9	35	0
UHN / Mount Sinai Hospital	464	0	0	0	0	0	464	0	8	0	0	0	0	0	8	0	8	0	8	0	8	0
P.H.O.L. - Toronto	321	0	0	0	0	0	321	15	321	0	0	0	0	21	321	0	321	0	321	79	321	3
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	8	0	0	0	0	0	8	0	8	0	0	0	0	0	8	0	8	0	8	1	8	0
P.H.O.L. - Timmins	4	0	0	0	0	0	4	0	4	0	0	0	0	1	4	0	4	0	4	0	4	0
St. Joseph's - London	42	0	0	0	0	0	42	2	40	0	0	0	0	9	40	3	40	0	40	5	40	0
P.H.O.L. - London	93	0	0	0	0	0	93	2	93	0	0	0	0	20	93	2	93	0	93	28	93	1
P.H.O.L. - Orillia	14	0	0	0	0	0	14	2	14	0	0	0	0	0	14	1	14	0	14	5	14	0
P.H.O.L. - Thunder Bay	2	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	0	2	2	2	0
P.H.O.L. - Sudbury	12	0	0	0	0	0	12	0	12	0	0	0	0	1	12	0	12	0	12	1	12	0
P.H.O.L. - Hamilton	50	0	0	0	0	0	49	0	49	0	0	0	0	6	49	0	49	0	49	15	49	0
P.H.O.L. - Peterborough	30	0	0	0	0	0	30	3	30	0	0	0	0	1	30	0	30	0	30	5	30	0
St. Joseph's - Hamilton	411	0	0	0	0	0	411	21	411	0	0	64	0	0	411	4	411	0	411	69	0	0
<b>Province of Ontario</b>	<b>2202</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2201</b>	<b>212</b>	<b>1564</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>0</b>	<b>118</b>	<b>1564</b>	<b>36</b>	<b>1544</b>	<b>2</b>	<b>1564</b>	<b>393</b>	<b>1133</b>	<b>16</b>
Province of Manitoba	1579	0	0	0	0	0	1579	11	19	1	0	0	0	0	19	1	77	0	19	10	77	1
Province of Saskatchewan	831	0	0	0	0	0	831	5	67	0	0	2	0	0	67	1	67	0	67	9	67	0
Province of Alberta	1878	0	0	0	0	0	637	14	637	0	0	52	1	0	637	4	637	0	637	143	637	12
<b>Prairies</b>	<b>4288</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3047</b>	<b>30</b>	<b>723</b>	<b>1</b>	<b>0</b>	<b>54</b>	<b>1</b>	<b>0</b>	<b>723</b>	<b>6</b>	<b>781</b>	<b>0</b>	<b>723</b>	<b>162</b>	<b>781</b>	<b>13</b>
<b>British Columbia</b>	<b>2437</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>2437</b>	<b>67</b>	<b>484</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>1</b>	<b>10</b>	<b>484</b>	<b>1</b>	<b>484</b>	<b>1</b>	<b>468</b>	<b>56</b>	<b>468</b>	<b>2</b>
Yukon	291	0	0	1	1	1	291	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	9	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0
Nunavut	3	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	0	2	2	1	0
<b>Territories</b>	<b>303</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>301</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>10</b>	<b>3</b>	<b>1</b>	<b>0</b>
<b>CANADA</b>	<b>11568</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>10237</b>	<b>894</b>	<b>3668</b>	<b>1</b>	<b>0</b>	<b>172</b>	<b>2</b>	<b>134</b>	<b>3669</b>	<b>97</b>	<b>3528</b>	<b>4</b>	<b>3206</b>	<b>688</b>	<b>3002</b>	<b>33</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.

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.

**Table 2: Cumulative respiratory virus detections from August 29, 2021 to October 23, 2021 (surveillance week 2021-35 to 2021-42)**

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	4433	0	0	0	0	0	4433	8	4433	0	3	54	0	47	4436	12	4433	1	4433	1402	N.C.	N.C.
Prince Edward Island	647	0	0	0	0	0	647	0	647	0	0	125	0	0	647	10	647	0	647	198	647	7
Nova Scotia	512	0	0	0	0	0	512	3	401	0	2	23	0	0	401	3	401	0	401	44	401	0
New Brunswick	785	0	0	0	0	0	738	2	588	0	0	15	0	0	581	0	588	0	588	14	497	0
<b>Atlantic</b>	<b>6377</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6330</b>	<b>13</b>	<b>6069</b>	<b>0</b>	<b>5</b>	<b>217</b>	<b>0</b>	<b>47</b>	<b>6065</b>	<b>25</b>	<b>6069</b>	<b>1</b>	<b>6069</b>	<b>1658</b>	<b>1545</b>	<b>7</b>
Région Nord-Est	3683	0	0	0	0	0	1800	695	292	0	0	4	0	0	292	9	9	0	N.C.	N.C.	292	2
Québec-Chaudière-Appalaches	534	0	0	0	0	2	971	416	211	0	0	4	0	0	209	6	131	0	N.C.	N.C.	133	0
Centre-du-Québec	744	0	0	0	0	0	1050	550	167	0	0	9	0	0	167	4	167	0	N.C.	N.C.	160	0
Montréal-Laval	5068	0	0	1	1	3	5073	1907	1309	1	0	10	0	0	1309	84	1309	18	N.C.	N.C.	1309	3
Ouest du Québec	1068	0	0	0	0	0	1036	469	4	0	0	0	0	0	0	0	3	0	N.C.	N.C.	3	0
Montérégie	650	0	0	0	0	0	650	267	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
<b>Province of Québec</b>	<b>11747</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>10580</b>	<b>4304</b>	<b>1983</b>	<b>1</b>	<b>0</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>1977</b>	<b>103</b>	<b>1619</b>	<b>18</b>	<b>N.C.</b>	<b>N.C.</b>	<b>1897</b>	<b>5</b>
P.H.O.L. - Ottawa	3064	1	1	0	2	0	3064	630	3064	0	0	0	0	402	3064	107	3063	13	3064	1255	3063	52
EORLA	1016	0	0	0	0	0	991	113	201	0	0	6	0	0	201	1	1	0	201	45	25	1
P.H.O.L. - Kingston	365	0	0	0	0	0	365	10	364	0	0	0	0	94	364	6	363	1	364	144	363	7
UHN / Mount Sinai Hospital	3276	0	0	1	1	0	3276	6	123	0	0	0	0	0	123	0	123	0	123	5	123	0
P.H.O.L. - Toronto	1854	0	1	0	1	0	1853	35	1853	0	0	0	0	128	1854	11	1853	2	1853	356	1854	14
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	26	0	0	0	0	0	26	0	26	0	0	0	0	0	26	0	26	0	26	8	26	0
P.H.O.L. - Timmins	55	0	0	0	0	0	55	2	55	0	0	0	0	4	55	0	55	0	55	9	55	0
St. Joseph's - London	276	0	0	0	0	0	276	9	273	0	0	7	0	38	273	8	273	1	277	60	276	0
P.H.O.L. - London	439	0	0	0	0	0	439	5	439	0	0	0	0	63	439	5	439	0	439	131	439	1
P.H.O.L. - Orillia	106	0	0	0	0	0	106	3	106	0	0	0	0	13	106	2	104	1	106	39	104	0
P.H.O.L. - Thunder Bay	58	0	0	0	0	0	58	0	58	0	0	0	0	0	58	0	58	0	58	29	58	0
P.H.O.L. - Sudbury	118	0	0	0	0	0	118	0	118	0	0	0	0	2	118	0	118	0	118	22	118	0
P.H.O.L. - Hamilton	242	0	1	0	1	0	239	1	239	0	0	0	0	21	239	2	239	4	239	75	239	0
P.H.O.L. - Peterborough	130	0	0	0	0	0	130	6	130	0	0	0	0	5	130	1	129	0	130	27	129	0
St. Joseph's - Hamilton	2581	0	0	0	0	0	2575	76	2575	0	0	379	0	0	2575	13	2575	3	2575	545	0	0
<b>Province of Ontario</b>	<b>13828</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>13571</b>	<b>896</b>	<b>9846</b>	<b>0</b>	<b>0</b>	<b>409</b>	<b>0</b>	<b>770</b>	<b>9847</b>	<b>157</b>	<b>9641</b>	<b>26</b>	<b>9850</b>	<b>2809</b>	<b>7094</b>	<b>75</b>
Manitoba	12471	1	0	1	2	0	12471	37	206	1	0	8	0	0	206	4	641	2	206	89	641	2
Province of Saskatchewan	1978	0	0	0	0	0	1950	8	628	0	0	15	2	0	628	9	628	0	628	143	627	0
Province of Alberta	14084	0	1	2	3	0	5503	60	5503	0	3	221	19	0	5503	37	5503	1	5503	1119	5503	78
<b>Prairies</b>	<b>28533</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>0</b>	<b>19924</b>	<b>105</b>	<b>6337</b>	<b>1</b>	<b>3</b>	<b>244</b>	<b>21</b>	<b>0</b>	<b>6337</b>	<b>50</b>	<b>6772</b>	<b>3</b>	<b>6337</b>	<b>1351</b>	<b>6771</b>	<b>80</b>
<b>British Columbia</b>	<b>11906</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>11906</b>	<b>185</b>	<b>3561</b>	<b>0</b>	<b>0</b>	<b>208</b>	<b>19</b>	<b>27</b>	<b>3561</b>	<b>28</b>	<b>3557</b>	<b>9</b>	<b>3497</b>	<b>798</b>	<b>3493</b>	<b>11</b>
Yukon	1745	0	0	1	1	1	1817	3	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	144	0	0	0	0	0	133	0	24	0	0	0	0	0	24	2	24	0	132	21	24	0
Nunavut	8	0	0	0	0	0	6	0	6	0	0	0	0	0	6	0	6	0	6	4	5	0
<b>Territories</b>	<b>1897</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1956</b>	<b>3</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>2</b>	<b>30</b>	<b>0</b>	<b>138</b>	<b>25</b>	<b>29</b>	<b>0</b>
<b>CANADA</b>	<b>74288</b>	<b>2</b>	<b>5</b>	<b>8</b>	<b>16</b>	<b>7</b>	<b>64267</b>	<b>5506</b>	<b>27826</b>	<b>2</b>	<b>8</b>	<b>1105</b>	<b>40</b>	<b>844</b>	<b>27817</b>	<b>365</b>	<b>27688</b>	<b>57</b>	<b>25891</b>	<b>6641</b>	<b>20829</b>	<b>178</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.

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. 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.

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

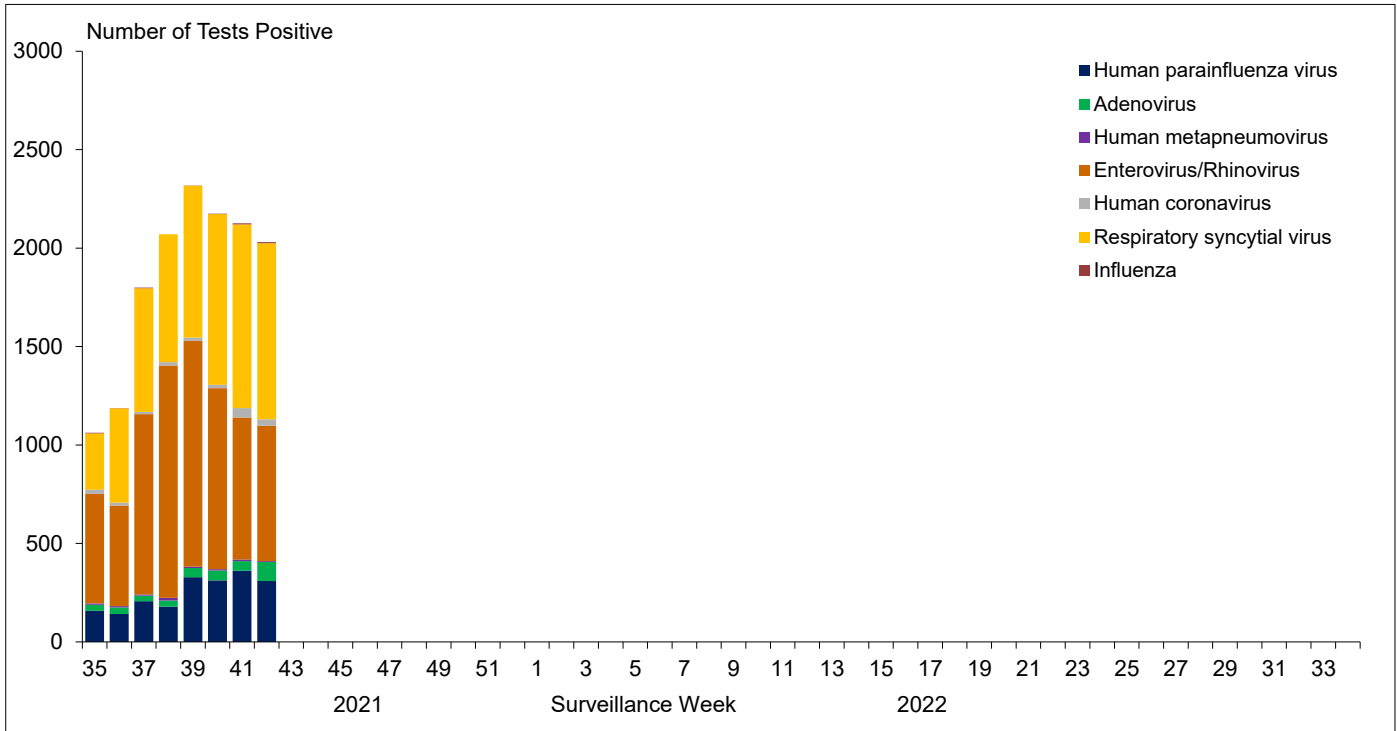


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

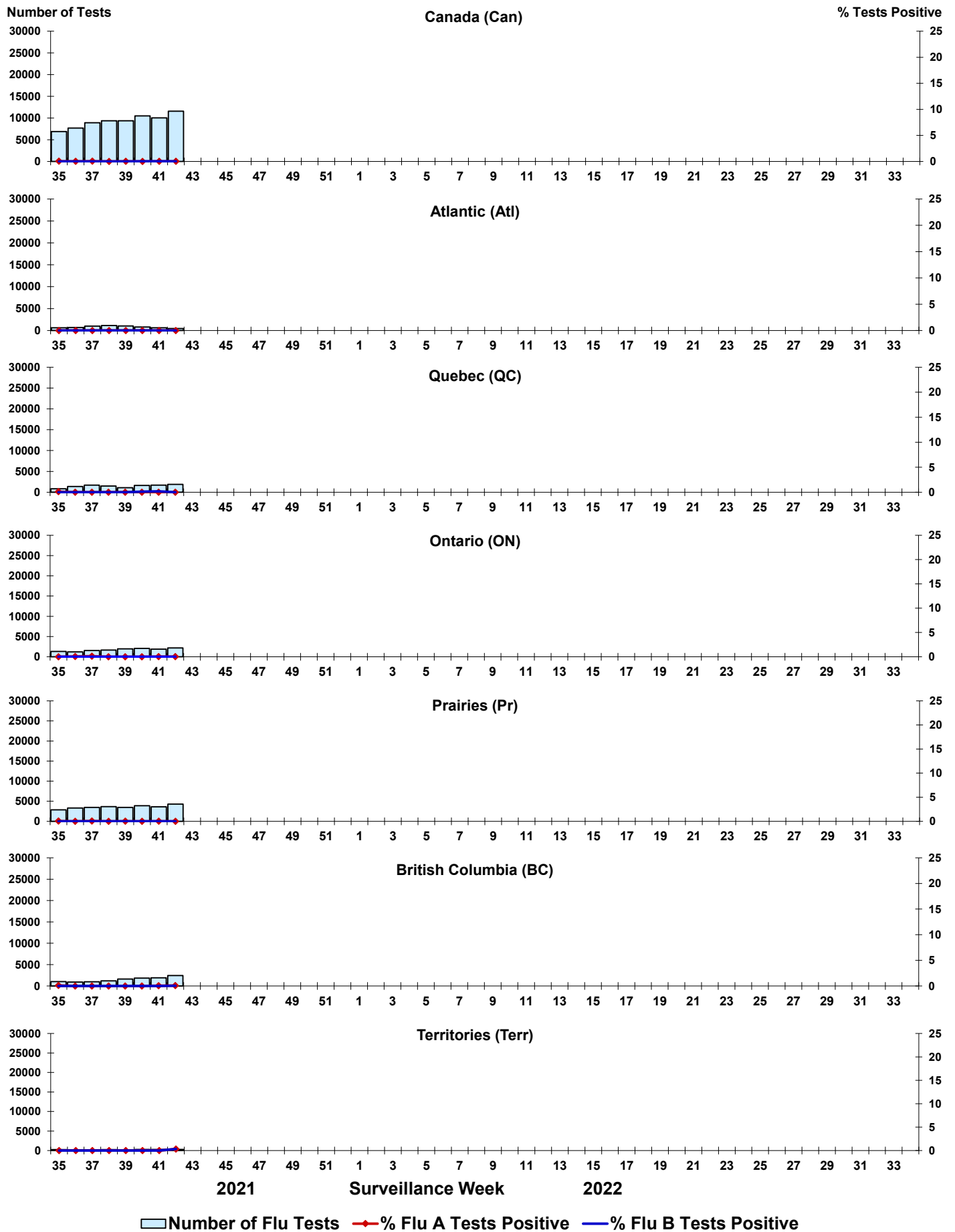
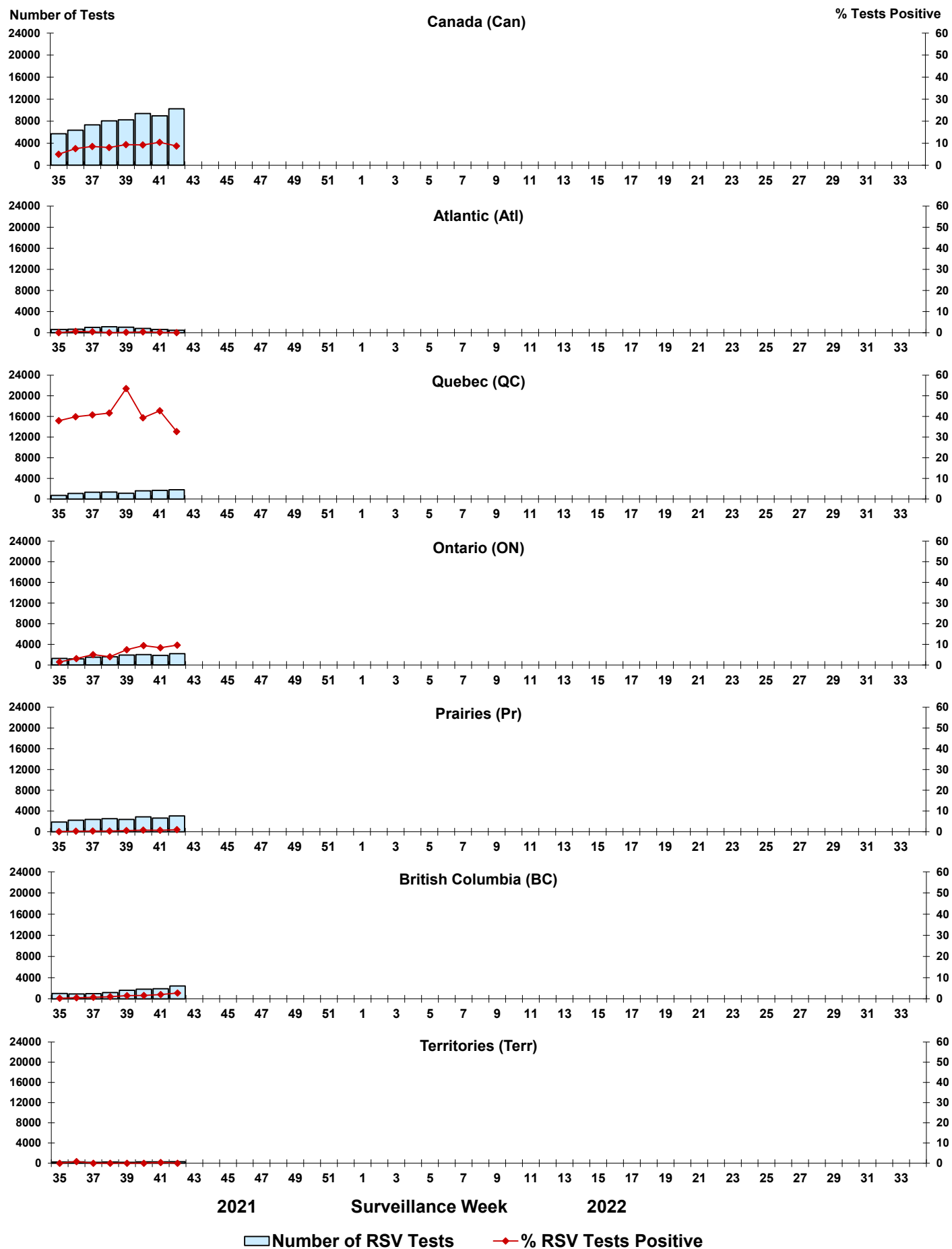


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



Legend: █ Number of RSV Tests    ◆ % RSV Tests Positive

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

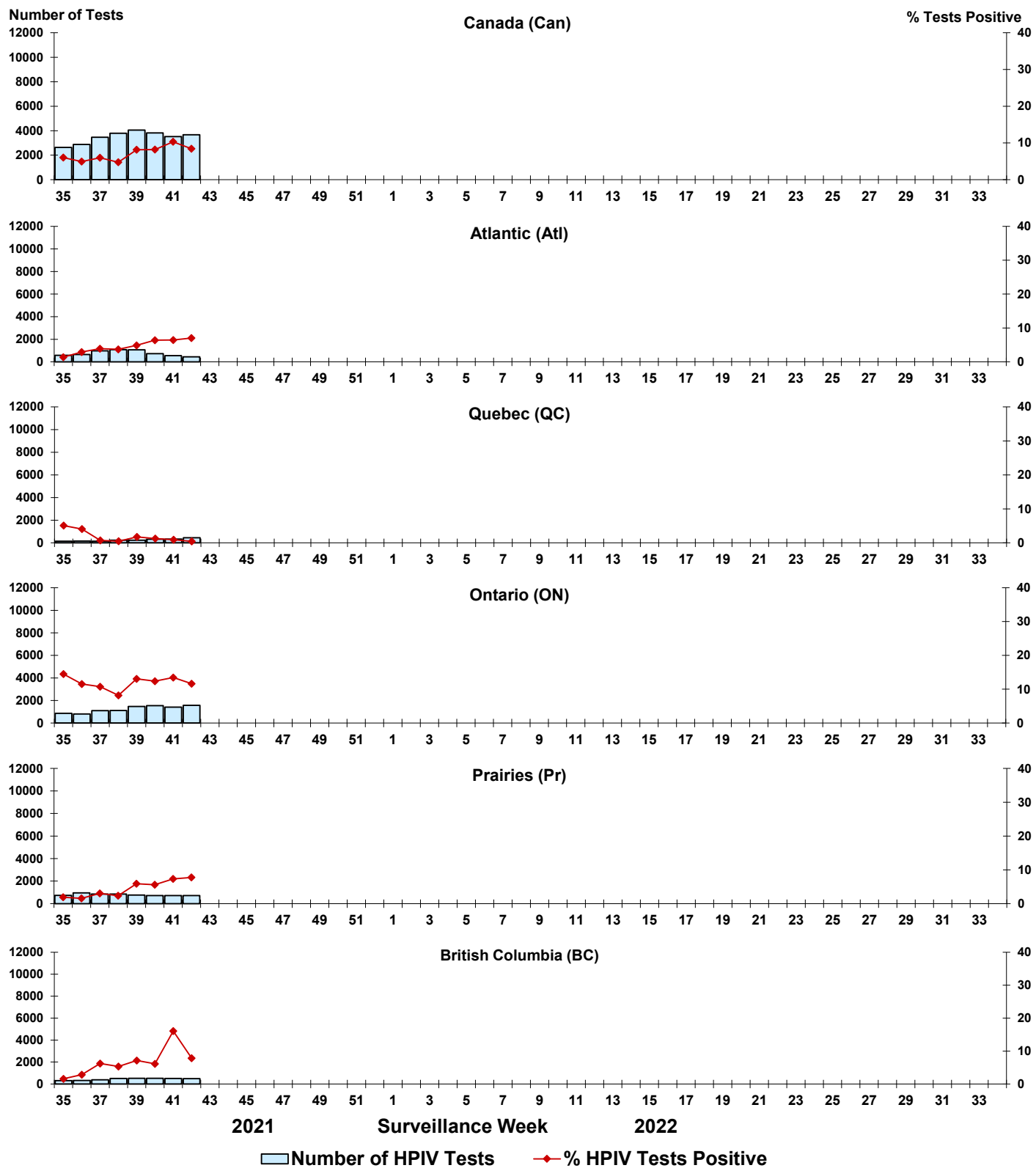




Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

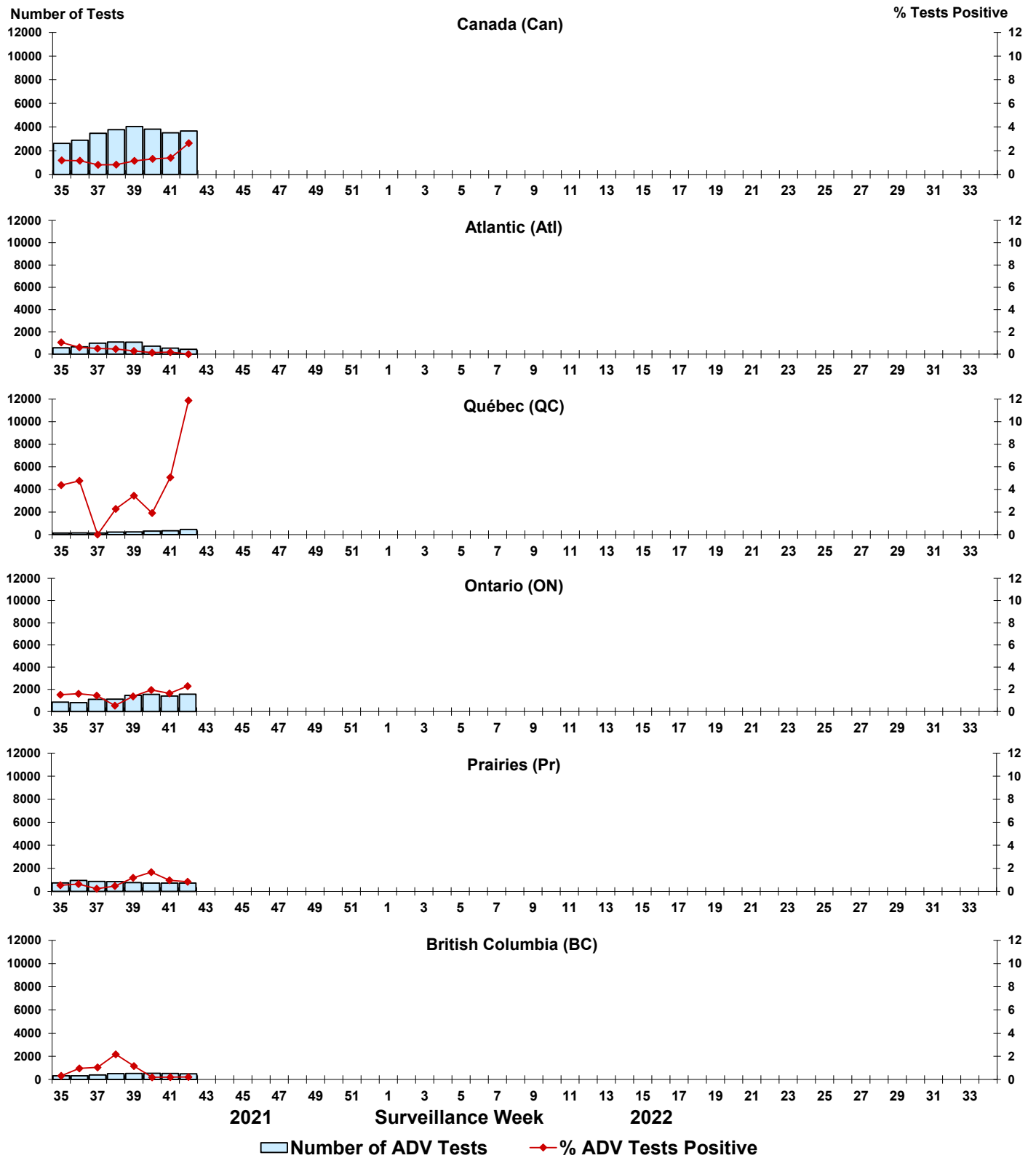


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

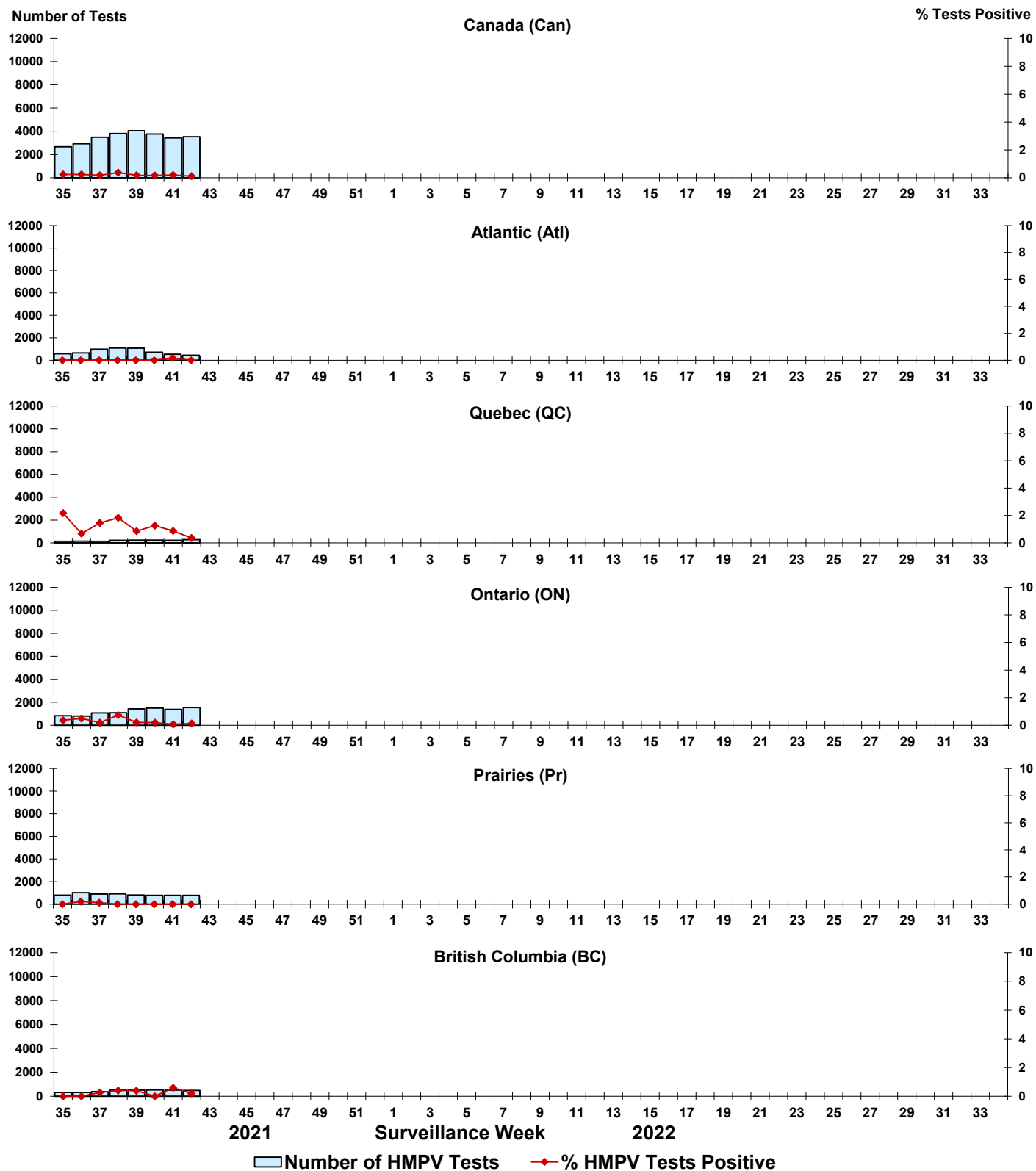


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

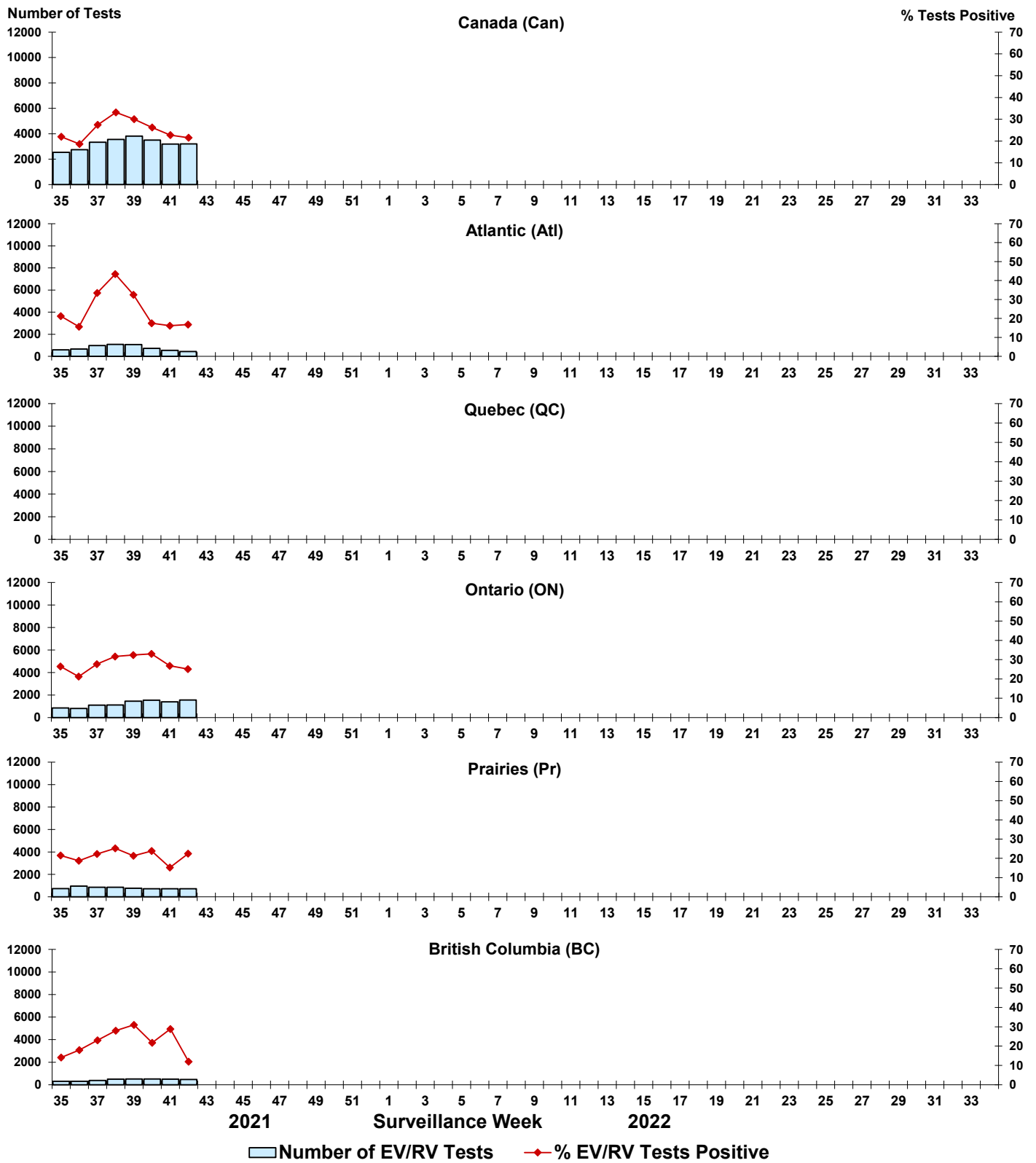


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

