

# RESPIRATORY VIRUS DETECTION REPORT

October 23 to October 29, 2022  
(Surveillance Week 2022-43)



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.

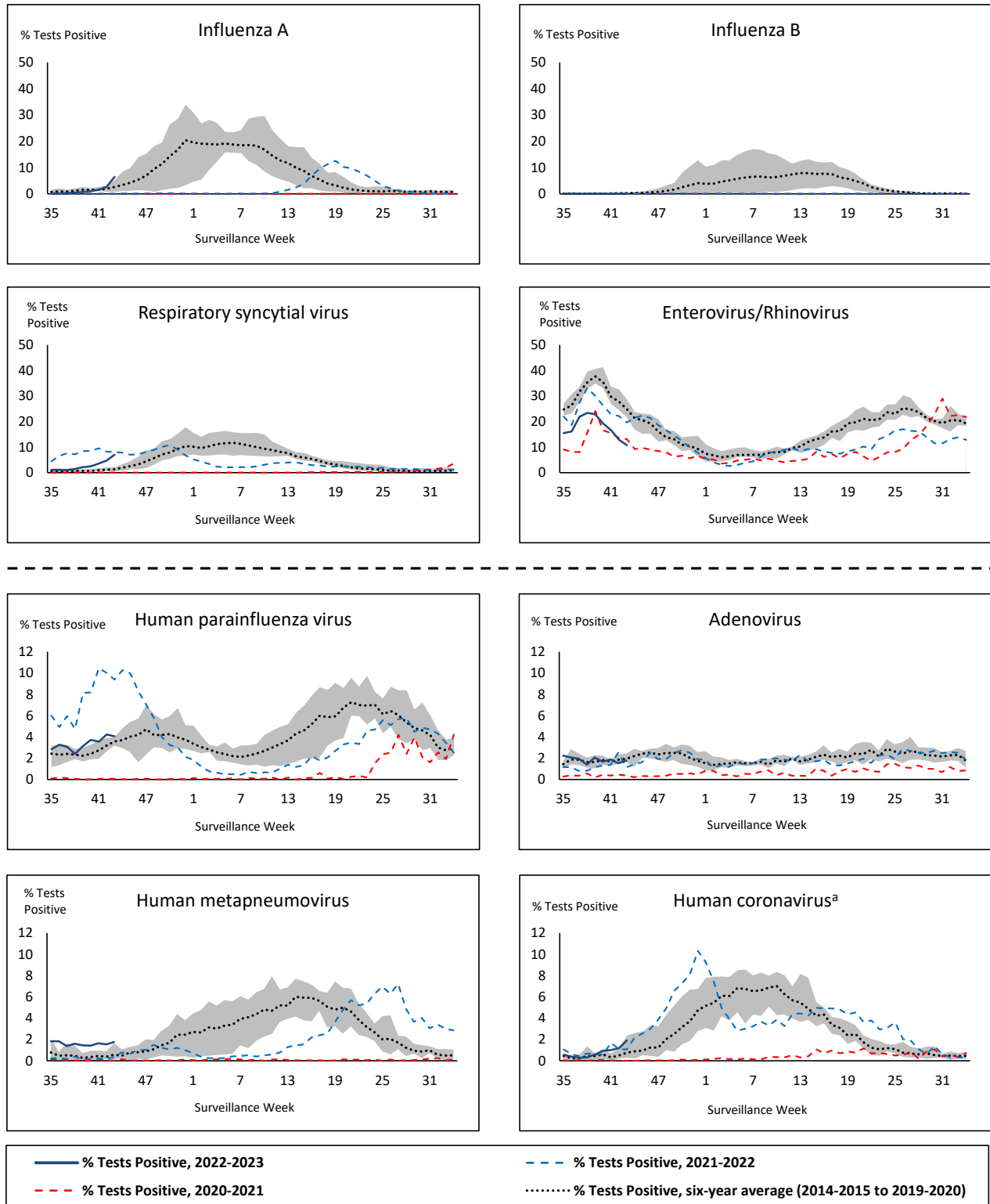
- Activity of influenza A is increasing and is now above expected levels for this time of year (1,077 detections; 6.4% positive). Minimal influenza B activity has been reported this season.
- Respiratory syncytial virus activity is increasing and is above expected levels for this time of year (1,045 detections; 7.0% positive).
- Activity of other respiratory viruses is relatively stable and near expected levels for this time of year.
  - With the exception of enterovirus/rhinovirus, where activity remains far below expected levels (754 detections; 10.8% positive).
- 32/34 sentinel laboratories reported surveillance data.

## Abbreviations

Flu: Influenza	Atl: Atlantic Canada
Flu A(H1N1)pdm09: Influenza A(H1N1)pdm09	BC: British Columbia
Flu A(H3): Influenza A(H3N2)	Can: Canada
Flu A (UnS): Influenza A(Unsubtyped)	EORLA: Eastern Ontario Regional Laboratory Association
RSV: Respiratory syncytial virus	HSC: Health Sciences Centre
HPIV: Human parainfluenza virus	N.C.: Data not collected
HMPV: Human metapneumovirus	N.R.: Data not reported for current week
ADV: Adenovirus	ON: Ontario
EV/RV: Enterovirus/Rhinovirus	PR: Prairies
HCoV: Human coronavirus	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 29, 2022 (surveillance week 2022-43)**

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	264	0	0	0	0	0	264	13	264	0	3	0	0	0	264	3	264	5	264	31	264	1
Prince Edward Island	56	0	0	0	0	0	56	1	56	0	1	3	1	0	56	3	56	3	56	29	56	0
Nova Scotia	264	0	0	8	8	0	264	17	66	2	0	0	0	0	66	3	66	0	66	11	66	2
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>584</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>8</b>	<b>0</b>	<b>584</b>	<b>31</b>	<b>386</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>386</b>	<b>9</b>	<b>386</b>	<b>8</b>	<b>386</b>	<b>71</b>	<b>386</b>	<b>3</b>
Région Nord-Est	1050	0	0	2	2	1	195	20	22	0	0	3	0	0	22	3	22	1	N.C.	N.C.	22	0
Québec-Chaudière-Appalaches	415	0	0	2	2	0	418	91	181	2	0	5	0	0	191	12	181	14	N.C.	N.C.	181	3
Centre-du-Québec	330	0	0	3	3	0	325	56	35	1	0	4	0	0	35	3	35	4	N.C.	N.C.	35	0
Montréal-Laval	1361	0	0	35	35	1	1191	173	636	9	0	11	0	0	636	29	652	38	N.C.	N.C.	614	2
Ouest du Québec	279	0	0	1	1	0	234	63	51	1	0	6	0	0	51	8	51	4	N.C.	N.C.	51	1
Montérégie	372	0	0	11	11	1	372	74	3	0	0	0	0	0	3	0	3	0	N.C.	N.C.	3	0
<b>Province of Québec</b>	<b>3807</b>	<b>0</b>	<b>0</b>	<b>54</b>	<b>54</b>	<b>3</b>	<b>2735</b>	<b>477</b>	<b>928</b>	<b>13</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>938</b>	<b>55</b>	<b>944</b>	<b>61</b>	<b>N.C.</b>	<b>N.C.</b>	<b>906</b>	<b>6</b>
P.H.O.L. - Ottawa	104	0	3	0	3	0	104	2	104	0	0	0	0	3	104	0	104	7	104	6	104	1
EORLA	384	0	0	20	20	0	384	62	43	0	2	1	0	0	43	4	43	3	43	17	43	3
P.H.O.L. - Kingston	93	0	15	0	15	0	93	8	89	0	0	0	0	6	89	3	89	2	89	6	89	1
UHN / Mount Sinai Hospital	554	0	0	17	17	1	554	7	45	0	0	1	0	0	45	0	45	0	45	2	45	4
P.H.O.L. - Toronto	617	0	63	1	49	0	616	13	616	0	0	0	0	30	616	10	616	9	616	63	616	4
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	2072	1	114	129	244	0	2072	97	1750	1	0	2	0	37	1751	10	1751	7	1751	59	1749	18
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	0	6	0
P.H.O.L. - Timmins	47	0	5	0	5	0	47	0	47	0	0	0	0	6	47	1	47	6	47	6	47	7
St. Joseph's - London	171	0	0	9	9	0	171	19	42	0	0	0	0	2	42	1	42	0	42	6	42	1
P.H.O.L. - London	240	0	38	1	33	0	240	15	240	0	0	0	0	12	240	5	240	1	240	16	240	4
P.H.O.L. - Orillia	119	0	28	0	28	0	119	10	119	0	0	0	0	4	119	3	119	0	119	18	119	2
P.H.O.L. - Thunder Bay	16	0	8	0	8	0	16	0	16	0	0	0	0	0	16	0	16	0	16	1	16	0
P.H.O.L. - Sudbury	7	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	0	7	1	7	0
P.H.O.L. - Hamilton	194	0	12	0	12	0	191	23	191	0	0	0	0	9	191	1	191	0	191	23	191	4
P.H.O.L. - Peterborough	55	0	9	0	9	0	55	4	55	0	0	0	0	3	55	2	55	0	55	9	55	0
St. Joseph's - Hamilton	1179	0	0	151	151	0	1179	105	1179	0	0	41	0	0	1179	1	1179	2	1179	101	0	0
<b>Province of Ontario</b>	<b>5858</b>	<b>1</b>	<b>295</b>	<b>328</b>	<b>603</b>	<b>1</b>	<b>5854</b>	<b>365</b>	<b>4549</b>	<b>1</b>	<b>2</b>	<b>45</b>	<b>0</b>	<b>112</b>	<b>4550</b>	<b>41</b>	<b>4550</b>	<b>37</b>	<b>4550</b>	<b>334</b>	<b>3369</b>	<b>49</b>
Manitoba	731	1	3	10	14	0	731	21	158	0	0	6	3	0	158	6	185	6	158	38	185	2
Saskatchewan	707	0	0	57	57	0	512	9	271	1	2	17	1	0	271	9	271	17	271	44	272	13
Alberta	2535	9	164	38	211	0	2171	57	1065	11	2	18	0	0	1065	14	1062	2	1051	120	1065	53
<b>Prairies</b>	<b>3973</b>	<b>10</b>	<b>167</b>	<b>105</b>	<b>282</b>	<b>0</b>	<b>3414</b>	<b>87</b>	<b>1494</b>	<b>12</b>	<b>4</b>	<b>41</b>	<b>4</b>	<b>0</b>	<b>1494</b>	<b>29</b>	<b>1518</b>	<b>25</b>	<b>1480</b>	<b>202</b>	<b>1522</b>	<b>68</b>
<b>British Columbia</b>	<b>2344</b>	<b>4</b>	<b>29</b>	<b>0</b>	<b>97</b>	<b>2</b>	<b>2192</b>	<b>80</b>	<b>567</b>	<b>9</b>	<b>5</b>	<b>34</b>	<b>1</b>	<b>0</b>	<b>567</b>	<b>8</b>	<b>567</b>	<b>8</b>	<b>542</b>	<b>130</b>	<b>542</b>	<b>2</b>
Yukon	9	0	0	0	0	0	9	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	53	0	0	0	0	0	53	4	0	0	0	0	0	0	0	0	0	0	53	17	0	0
Nunavut	97	0	33	0	33	0	97	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.
<b>Territories</b>	<b>159</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>159</b>	<b>5</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>53</b>	<b>17</b>	<b>0</b>	<b>0</b>
<b>CANADA</b>	<b>16725</b>	<b>15</b>	<b>524</b>	<b>495</b>	<b>1077</b>	<b>6</b>	<b>14938</b>	<b>1045</b>	<b>7924</b>	<b>37</b>	<b>15</b>	<b>152</b>	<b>6</b>	<b>112</b>	<b>7935</b>	<b>142</b>	<b>7965</b>	<b>139</b>	<b>7011</b>	<b>754</b>	<b>6725</b>	<b>128</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 October 29, 2022 (surveillance weeks 2022-35 to 2022-43)**

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	1626	0	1	0	1	0	1626	57	1626	2	7	8	3	0	1626	15	1626	40	1626	223	1626	1
Prince Edward Island	360	0	1	0	1	0	360	7	360	0	5	19	1	0	360	24	360	6	360	193	360	1
Nova Scotia	2230	0	3	21	24	1	2229	68	422	3	4	4	1	0	422	15	422	0	422	103	422	3
New Brunswick	3131	0	5	23	28	1	2141	19	390	0	5	24	1	0	390	38	390	1	390	129	390	7
<b>Atlantic</b>	<b>7347</b>	<b>0</b>	<b>10</b>	<b>44</b>	<b>54</b>	<b>2</b>	<b>6356</b>	<b>151</b>	<b>2798</b>	<b>5</b>	<b>21</b>	<b>55</b>	<b>6</b>	<b>0</b>	<b>2798</b>	<b>92</b>	<b>2798</b>	<b>47</b>	<b>2798</b>	<b>648</b>	<b>2798</b>	<b>12</b>
Région Nord-Est	7712	0	0	6	6	1	1352	48	213	3	2	14	0	0	213	11	213	2	N.C.	N.C.	213	0
Québec-Chaudière-Appalaches	2443	0	0	5	5	0	2448	268	1243	13	4	16	0	0	1354	69	1243	55	N.C.	N.C.	1243	9
Centre-du-Québec	1788	0	0	6	6	1	1770	157	236	10	0	11	0	0	236	12	236	29	N.C.	N.C.	236	1
Montréal-Laval	9010	0	0	75	75	5	8215	713	4552	66	7	87	4	0	4552	131	4598	236	N.C.	N.C.	4444	26
Ouest du Québec	1802	0	0	9	9	0	1575	204	364	10	0	26	0	0	364	55	364	14	N.C.	N.C.	364	7
Montérégie	3403	0	0	29	29	3	3337	281	24	0	0	1	0	0	24	0	24	0	N.C.	N.C.	24	0
<b>Province of Québec</b>	<b>26158</b>	<b>0</b>	<b>0</b>	<b>130</b>	<b>130</b>	<b>10</b>	<b>18697</b>	<b>1671</b>	<b>6632</b>	<b>102</b>	<b>13</b>	<b>155</b>	<b>4</b>	<b>0</b>	<b>6743</b>	<b>278</b>	<b>6678</b>	<b>336</b>	<b>N.C.</b>	<b>N.C.</b>	<b>6524</b>	<b>43</b>
P.H.O.L. - Ottawa	468	0	4	0	4	0	468	7	468	0	0	0	0	7	468	0	468	10	468	43	468	1
EORLA	2470	0	0	31	31	1	2470	177	361	4	2	6	2	0	361	11	361	8	361	119	361	5
P.H.O.L. - Kingston	491	0	15	0	15	0	491	24	487	0	0	0	0	18	487	12	487	5	487	87	487	2
UHN / Mount Sinai Hospital	4107	0	1	39	40	4	4107	24	175	0	0	1	0	0	175	1	175	0	175	7	175	13
P.H.O.L. - Toronto	3028	18	183	2	84	0	3025	41	3025	0	0	0	0	145	3027	46	3024	30	3025	416	3024	21
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	25206	5	151	292	448	2	25206	323	4875	4	0	15	0	85	4887	28	4894	12	4866	197	4744	22
P.H.O.L. - Sault Ste. Marie	49	0	0	0	0	0	49	0	49	0	0	0	0	0	49	0	49	0	49	6	49	0
P.H.O.L. - Timmins	127	0	6	0	6	0	127	0	127	0	0	0	0	9	127	1	127	6	127	27	127	9
St. Joseph's - London	695	0	0	12	12	0	695	48	478	0	0	0	0	12	512	9	512	0	512	108	101	3
P.H.O.L. - London	1146	1	51	1	46	0	1146	39	1146	0	0	0	0	48	1146	18	1146	3	1146	181	1146	8
P.H.O.L. - Orillia	434	0	38	1	39	0	434	20	434	0	0	0	0	28	434	9	434	6	434	101	434	5
P.H.O.L. - Thunder Bay	87	0	12	0	12	0	87	0	87	0	0	0	0	1	87	1	87	0	87	32	87	1
P.H.O.L. - Sudbury	57	0	0	0	0	0	57	1	57	0	0	0	0	2	57	1	57	0	57	9	57	0
P.H.O.L. - Hamilton	818	0	18	0	18	2	815	49	815	0	0	0	0	38	815	9	815	2	815	127	815	6
P.H.O.L. - Peterborough	286	0	15	0	15	0	286	17	286	0	0	0	0	15	286	5	286	2	286	74	286	3
St. Joseph's - Hamilton	7522	0	0	317	317	3	7522	293	7522	0	0	236	0	0	7522	2	7522	32	7522	981	0	0
<b>Province of Ontario</b>	<b>46991</b>	<b>24</b>	<b>494</b>	<b>695</b>	<b>1087</b>	<b>12</b>	<b>46985</b>	<b>1063</b>	<b>20392</b>	<b>8</b>	<b>2</b>	<b>258</b>	<b>2</b>	<b>408</b>	<b>20440</b>	<b>153</b>	<b>20444</b>	<b>116</b>	<b>20417</b>	<b>2515</b>	<b>12361</b>	<b>99</b>
Manitoba	5123	1	5	18	24	0	5123	62	1234	0	2	23	3	0	1234	43	1426	45	1234	337	1426	5
Saskatchewan	4847	0	0	81	81	1	4206	23	1874	4	12	78	7	0	1876	60	1878	76	1876	359	1874	26
Alberta	18519	33	272	68	373	6	16298	211	8219	53	25	129	8	0	8218	107	8211	40	8053	1429	8219	147
<b>Prairies</b>	<b>28489</b>	<b>34</b>	<b>277</b>	<b>167</b>	<b>478</b>	<b>7</b>	<b>25627</b>	<b>296</b>	<b>11327</b>	<b>57</b>	<b>39</b>	<b>230</b>	<b>18</b>	<b>0</b>	<b>11328</b>	<b>210</b>	<b>11515</b>	<b>161</b>	<b>11163</b>	<b>2125</b>	<b>11519</b>	<b>178</b>
<b>British Columbia</b>	<b>20778</b>	<b>49</b>	<b>154</b>	<b>7</b>	<b>326</b>	<b>7</b>	<b>19390</b>	<b>234</b>	<b>4880</b>	<b>26</b>	<b>47</b>	<b>124</b>	<b>22</b>	<b>6</b>	<b>4880</b>	<b>101</b>	<b>4880</b>	<b>82</b>	<b>4738</b>	<b>1237</b>	<b>4738</b>	<b>23</b>
Yukon	55	0	0	0	0	0	55	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	350	0	1	0	1	0	350	14	0	0	0	0	0	0	0	0	0	0	350	147	0	0
Nunavut	703	3	76	0	79	0	703	19	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>1108</b>	<b>3</b>	<b>77</b>	<b>0</b>	<b>80</b>	<b>0</b>	<b>1108</b>	<b>34</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>350</b>	<b>147</b>	<b>0</b>	<b>0</b>
<b>CANADA</b>	<b>130871</b>	<b>110</b>	<b>1012</b>	<b>1043</b>	<b>2155</b>	<b>38</b>	<b>118163</b>	<b>3449</b>	<b>46029</b>	<b>198</b>	<b>122</b>	<b>822</b>	<b>52</b>	<b>414</b>	<b>46189</b>	<b>834</b>	<b>46315</b>	<b>742</b>	<b>39466</b>	<b>6672</b>	<b>37940</b>	<b>355</b>

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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. 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**

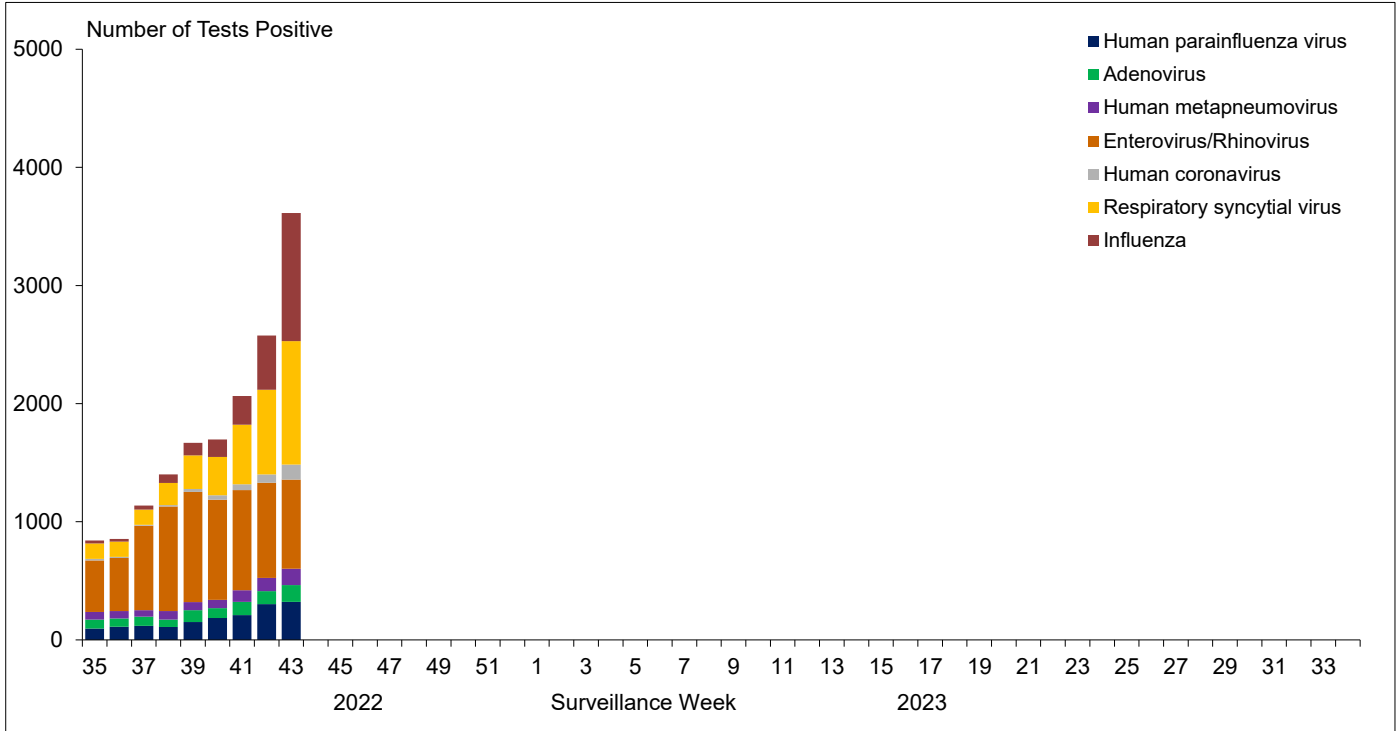


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

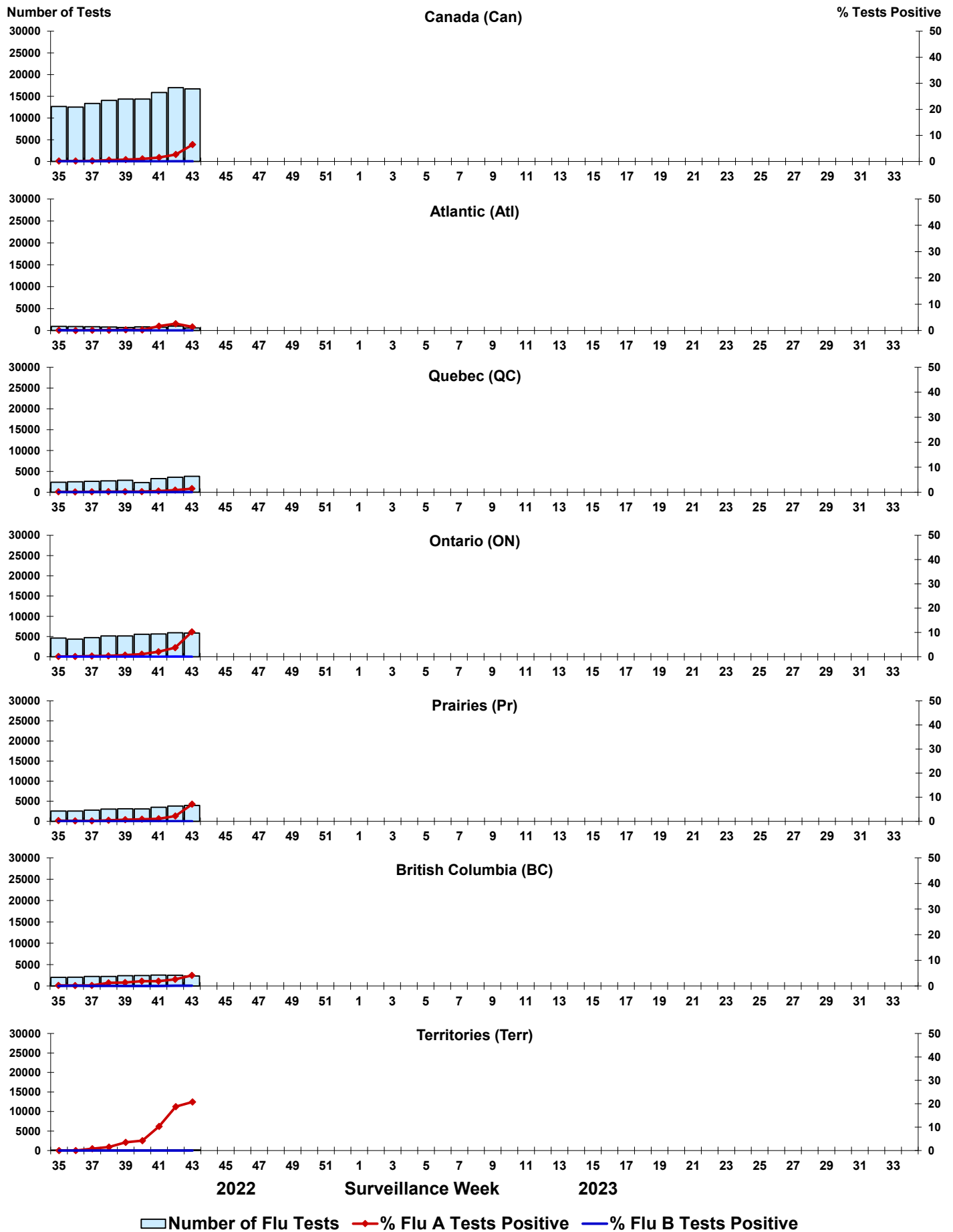
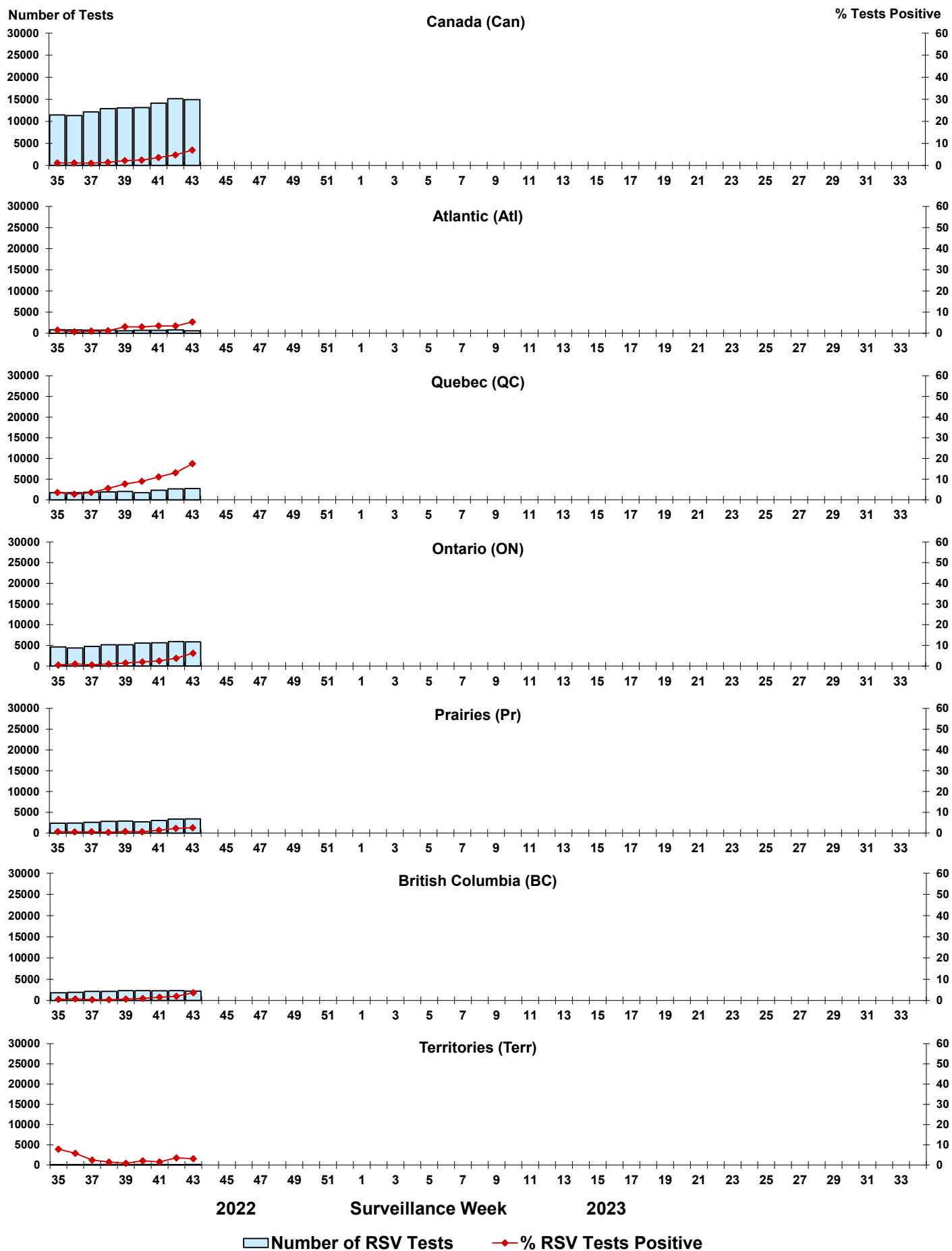


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



Legend:  Number of RSV Tests    ◆ % RSV Tests Positive

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

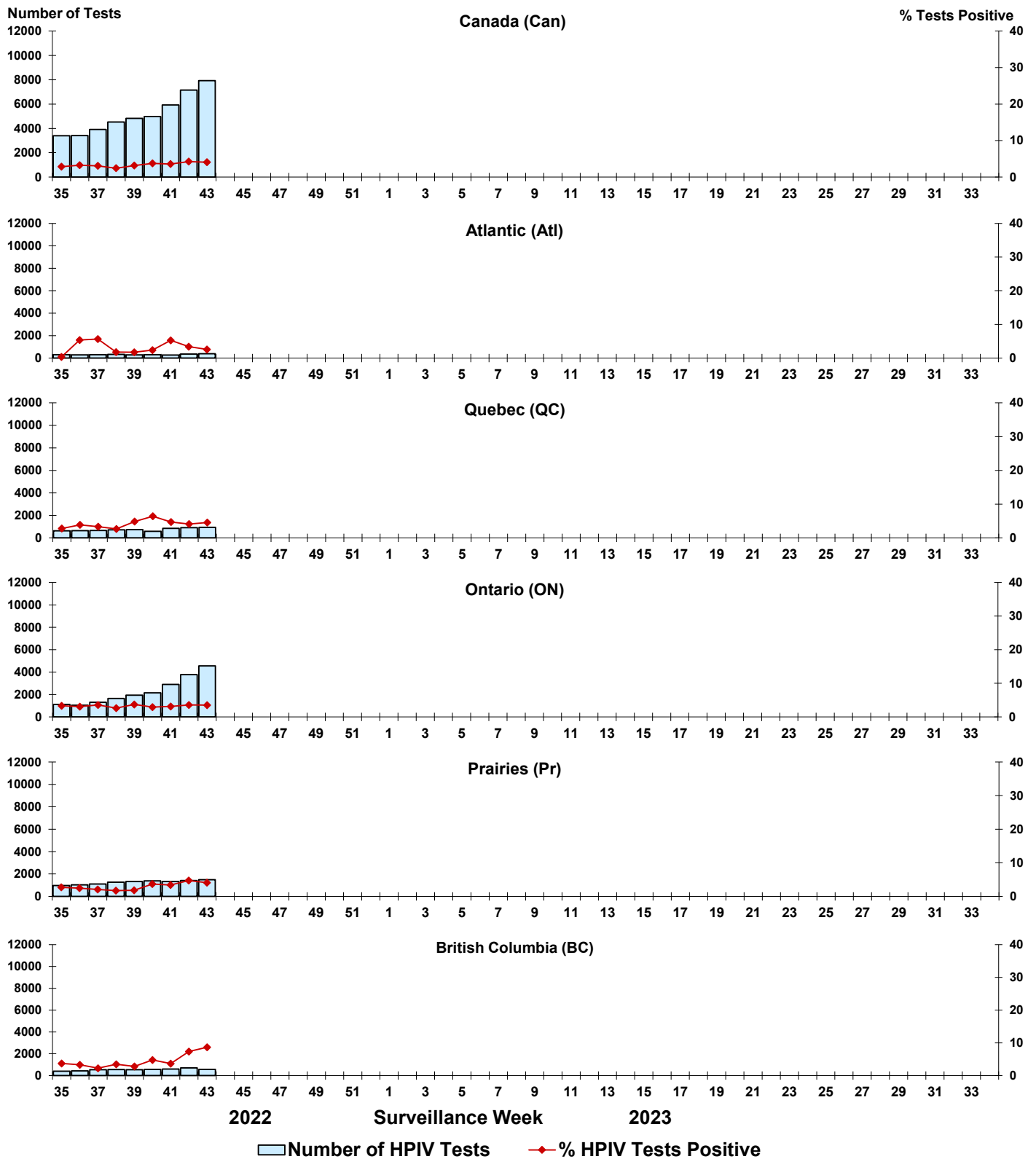




Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

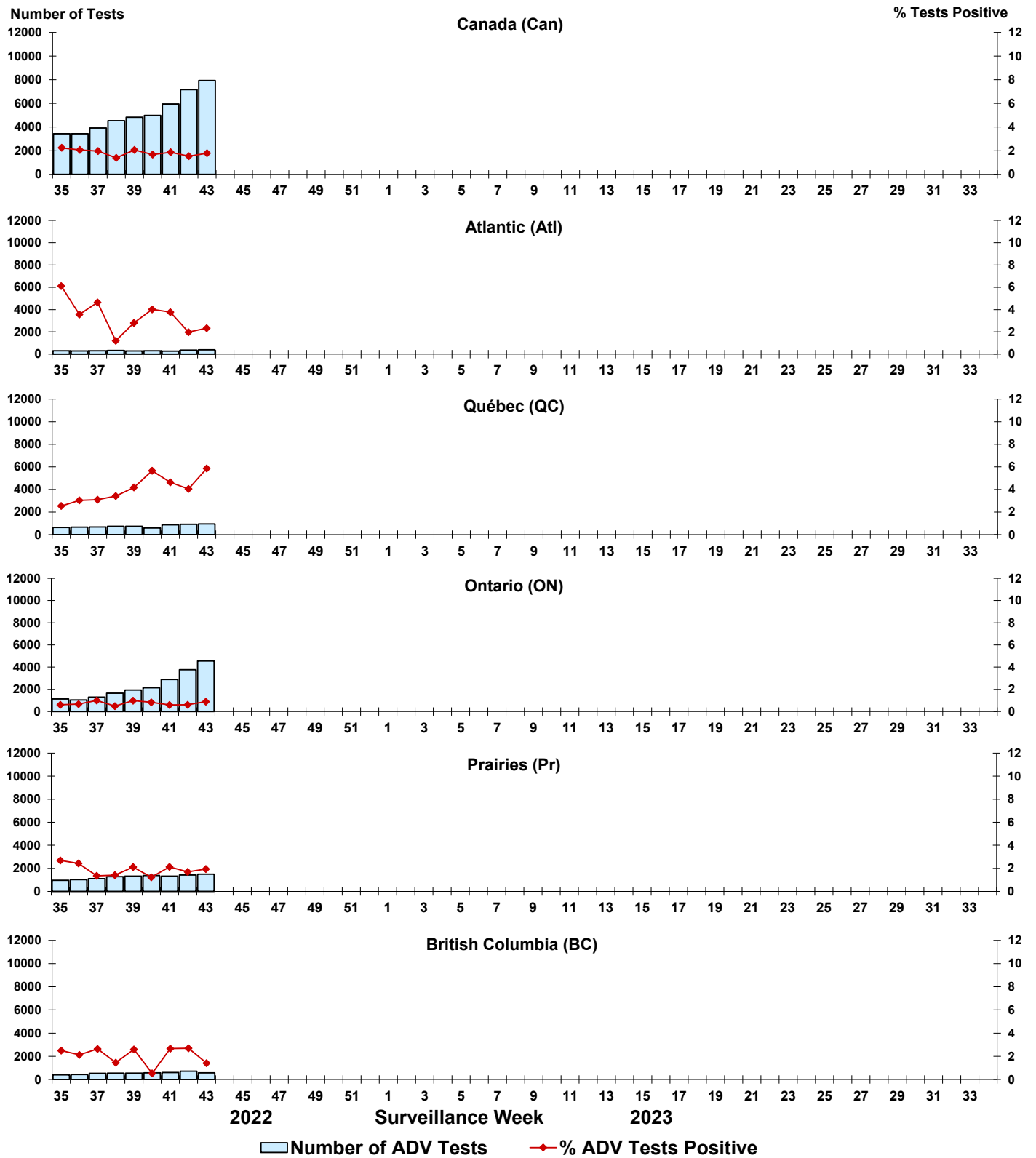


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

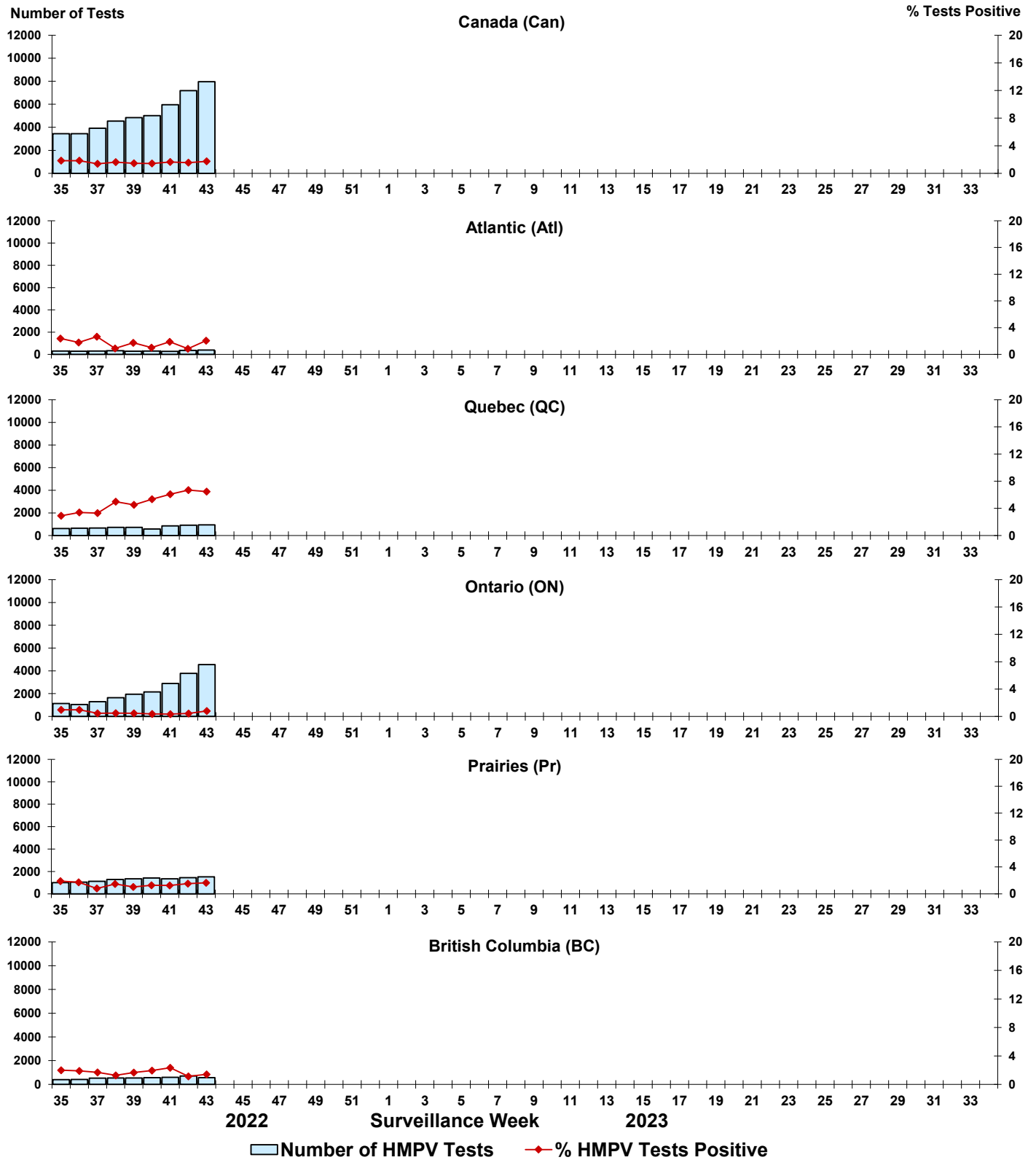


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

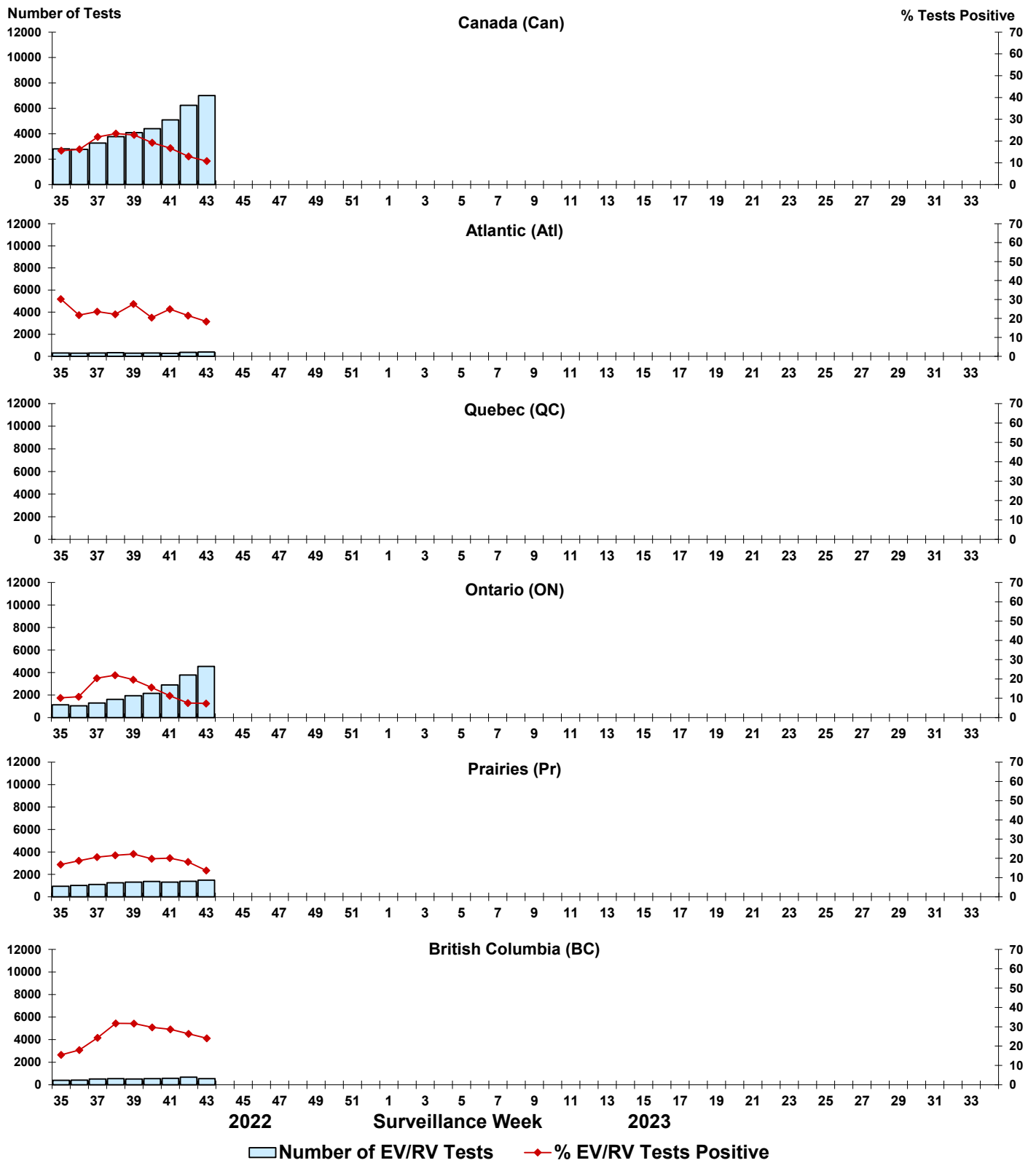


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

