

RESPIRATORY VIRUS DETECTION REPORT

October 31 to November 6, 2021
(Surveillance Week 2021-44)



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 44 (October 31 to November 6, 2021):

- Respiratory syncytial virus (1,107 detections; 8.3% positive), enterovirus/rhinovirus (679 detections; 21.6% positive), and human parainfluenza virus (323 detections; 9.4% positive) are the most common seasonal respiratory viruses detected in Canada.
 - Activity of respiratory syncytial virus remains above expected levels. Detections have been high in Quebec and Eastern Ontario, but are starting to increase in other parts of the country such as British Columbia.
 - Activity of enterovirus/rhinovirus is within 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.
- 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

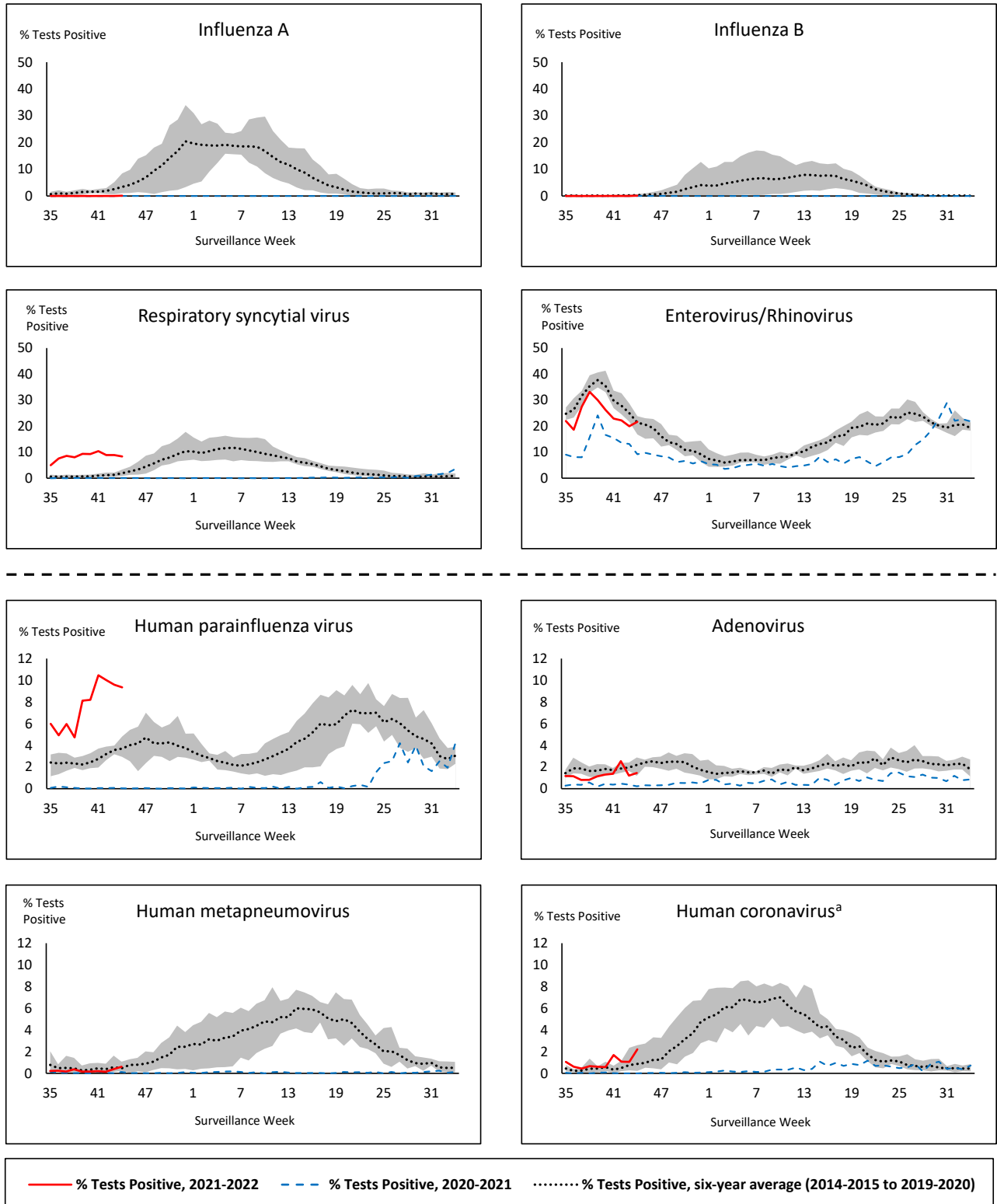
QC: Quebec

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

^a 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 November 6, 2021 (surveillance week 2021-44)

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	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.C.	N.C.
Prince Edward Island	75	0	0	0	0	0	75	2	75	0	0	3	0	0	75	2	75	0	75	25	75	6
Nova Scotia	76	0	0	0	0	0	76	3	55	0	0	3	0	0	55	0	55	0	55	2	55	0
New Brunswick	165	0	0	0	0	0	152	2	24	0	0	0	0	0	24	1	24	0	24	3	24	0
Atlantic	316	0	0	0	0	0	303	7	154	0	0	6	0	0	154	3	154	0	154	30	154	6
Région Nord-Est	675	0	0	0	0	0	377	120	83	0	0	1	0	0	83	1	0	0	N.C.	N.C.	0	0
Québec-Chaudière-Appalaches	450	0	0	0	0	0	469	117	44	0	0	0	0	0	44	1	44	0	N.C.	N.C.	44	1
Centre-du-Québec	242	0	0	0	0	0	246	115	25	0	0	0	0	0	25	0	25	0	N.C.	N.C.	25	2
Montréal-Laval	600	0	0	0	0	0	600	81	141	0	0	0	0	0	141	1	141	13	N.C.	N.C.	141	2
Ouest du Québec	219	0	0	0	0	0	219	85	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Montérégie	137	0	0	0	0	0	137	24	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	2323	0	0	0	0	0	2048	542	293	0	0	1	0	0	293	3	210	13	N.C.	N.C.	210	5
P.H.O.L. - Ottawa	414	0	0	0	0	0	414	126	414	0	0	0	0	51	414	18	414	2	414	120	414	12
EORLA	203	0	0	0	0	0	203	30	27	0	0	2	0	0	27	0	0	0	27	4	0	0
P.H.O.L. - Kingston	38	0	0	0	0	0	38	4	38	0	0	0	0	8	38	0	38	0	38	13	38	0
UHN / Mount Sinai Hospital	429	0	0	0	0	0	429	4	10	0	0	0	0	0	10	0	10	0	10	0	10	0
P.H.O.L. - Toronto	268	0	0	0	0	0	267	7	267	0	0	0	0	14	267	1	267	0	267	48	267	2
Sick Kids Hospital - Toronto	51	0	0	0	0	0	0	0	51	0	0	6	0	0	51	1	51	0	51	13	51	1
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	7	0	0	0	0	0	7	0	7	0	0	0	0	2	7	0	7	0	7	0	7	0
P.H.O.L. - Timmins	5	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	0	5	0	5	0
St. Joseph's - London	250	0	0	0	0	0	250	2	63	0	0	0	0	6	63	1	63	0	48	9	48	0
P.H.O.L. - London	90	0	0	0	0	0	90	6	90	0	0	0	0	10	90	2	90	1	90	32	90	0
P.H.O.L. - Orillia	38	0	0	0	0	0	38	2	38	0	0	0	0	7	38	0	38	0	38	22	38	2
P.H.O.L. - Thunder Bay	4	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	0	4	1	4	0
P.H.O.L. - Sudbury	6	0	0	0	0	0	6	0	6	0	0	0	0	0	6	0	6	0	6	2	6	0
P.H.O.L. - Hamilton	52	0	0	0	0	0	52	7	52	0	0	0	0	2	52	0	52	0	52	4	52	1
P.H.O.L. - Peterborough	39	0	0	0	0	0	39	0	39	0	0	0	0	2	39	0	39	0	39	8	39	2
St. Joseph's - Hamilton	579	0	0	0	0	0	579	65	579	0	0	59	0	0	579	4	579	1	579	114	0	0
Province of Ontario	2473	0	0	0	0	0	2421	253	1690	0	0	67	0	102	1690	27	1663	4	1675	390	1069	20
Province of Manitoba	1946	0	0	0	0	0	1946	33	28	0	0	6	0	0	28	1	99	0	28	11	99	0
Province of Saskatchewan	1029	0	0	0	0	0	1029	1	79	0	0	7	1	0	79	1	79	0	79	15	79	0
Province of Alberta	1853	0	0	0	0	0	669	28	669	0	0	48	0	0	669	8	669	3	669	107	669	31
Prairies	4828	0	0	0	0	0	3644	62	776	0	0	61	1	0	776	10	847	3	776	133	847	31
British Columbia	4624	0	1	1	17	16	4611	242	541	0	0	73	4	8	541	7	541	1	522	125	522	0
Yukon	234	0	0	0	1	3	234	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	12	0	0	0	0	0	10	0	1	0	0	0	0	0	1	0	1	0	9	1	1	0
Nunavut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Territories	246	0	0	0	1	3	244	1	1	0	0	0	0	0	1	0	1	0	9	1	1	0
CANADA	14810	0	1	1	18	19	13271	1107	3455	0	0	208	5	110	3455	50	3416	21	3136	679	2803	62

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.

Note: Two reported influenza detections this week were known to be associated with recent live attenuated influenza vaccine (LAIV) receipt and were excluded from the data 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), 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 November 6, 2021 (surveillance week 2021-35 to 2021-44)

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	796	0	0	0	0	0	796	2	796	0	0	135	0	0	796	12	796	0	796	245	796	16
Nova Scotia	662	0	0	0	0	0	662	7	495	0	2	29	0	0	509	3	509	0	509	50	509	1
New Brunswick	1825	0	0	0	0	0	1591	5	1273	0	0	18	0	0	1266	2	1273	0	1273	17	1182	0
Atlantic	7716	0	0	0	0	0	7482	22	6997	0	5	236	0	47	7007	29	7011	1	7011	1714	2487	17
Région Nord-Est	5129	0	0	0	0	0	2717	1014	478	0	0	6	0	0	478	11	11	0	N.C.	N.C.	294	2
Québec-Chaudière-Appalaches	1320	0	0	0	0	2	1832	705	283	0	0	4	0	0	284	9	203	0	N.C.	N.C.	205	2
Centre-du-Québec	1132	0	0	0	0	0	1501	759	206	0	0	9	0	0	206	4	206	0	N.C.	N.C.	199	2
Montréal-Laval	6345	0	0	2	2	3	6350	2088	1719	1	0	13	0	0	1719	95	1719	42	N.C.	N.C.	1719	6
Ouest du Québec	1535	0	0	0	0	0	1503	666	4	0	0	0	0	0	0	0	3	0	N.C.	N.C.	3	0
Montérégie	902	0	0	0	0	0	902	312	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	16363	0	0	2	2	5	14805	5544	2690	1	0	32	0	0	2687	119	2142	42	N.C.	N.C.	2420	12
P.H.O.L. - Ottawa	3855	1	1	0	2	0	3855	872	3855	0	0	0	0	492	3855	140	3854	16	3855	1508	3854	70
EORLA	1383	0	0	0	0	0	1358	162	259	0	0	11	0	0	259	1	1	0	259	55	25	1
P.H.O.L. - Kingston	443	0	0	0	0	0	443	16	442	0	0	0	0	113	442	6	441	1	442	177	441	7
UHN / Mount Sinai Hospital	4141	0	0	1	1	0	4141	10	148	0	0	0	0	0	148	0	148	0	148	7	148	0
P.H.O.L. - Toronto	2431	0	1	0	1	0	2429	57	2429	0	0	0	0	164	2430	14	2429	2	2429	465	2430	23
Sick Kids Hospital - Toronto	437	0	0	0	0	0	0	0	437	0	0	51	0	0	437	4	437	1	437	128	437	1
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	42	0	0	0	0	0	42	0	42	0	0	0	0	3	42	0	42	0	42	12	42	0
P.H.O.L. - Timmins	63	0	0	0	0	0	63	2	63	0	0	0	0	4	63	0	63	0	63	10	63	0
St. Joseph's - London	601	0	0	0	0	0	601	19	364	0	0	7	0	47	364	9	364	1	352	82	351	0
P.H.O.L. - London	640	0	0	0	0	0	640	14	640	0	0	0	0	90	640	9	640	1	640	197	640	2
P.H.O.L. - Orillia	180	0	0	0	0	0	180	7	180	0	0	0	0	25	180	3	178	1	180	73	178	2
P.H.O.L. - Thunder Bay	68	0	0	0	0	0	68	0	68	0	0	0	0	0	68	0	68	0	68	31	68	0
P.H.O.L. - Sudbury	130	0	0	0	0	0	130	0	130	0	0	0	0	2	130	0	130	1	130	24	130	0
P.H.O.L. - Hamilton	347	0	1	0	1	0	344	12	344	0	0	0	0	29	344	3	344	4	344	90	344	1
P.H.O.L. - Peterborough	179	0	0	0	0	0	179	6	178	0	0	0	0	7	178	1	177	0	178	37	177	2
St. Joseph's - Hamilton	3627	0	0	0	0	0	3621	178	3621	0	0	499	0	0	3621	20	3621	4	3621	722	0	0
Province of Ontario	18567	1	3	1	5	0	18094	1355	13200	0	0	568	0	976	13201	210	12937	32	13188	3618	9328	109
Manitoba	16269	1	1	2	4	0	16269	83	263	1	1	17	0	0	263	6	832	2	263	112	717	2
Province of Saskatchewan	4196	0	0	0	0	0	4167	15	777	0	0	23	4	0	777	10	777	0	777	170	776	0
Province of Alberta	17824	0	1	2	3	0	6899	110	6899	0	3	327	25	0	6899	53	6899	6	6899	1358	6899	125
Prairies	38289	1	2	4	7	0	27335	208	7939	1	4	367	29	0	7939	69	8508	8	7939	1640	8392	127
British Columbia	19454	0	2	3	21	19	19441	559	4757	0	0	463	29	46	4757	39	4753	12	4605	1136	4655	13
Yukon	2198	0	0	0	3	5	2270	4	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	175	0	0	0	0	0	161	0	31	0	0	0	0	0	31	2	31	0	159	23	31	0
Nunavut	11	0	0	0	0	0	9	0	9	0	0	0	0	0	9	0	9	0	9	4	6	0
Territories	2384	0	0	0	3	5	2440	4	40	0	0	0	0	0	40	2	40	0	168	27	37	0
CANADA	102773	2	7	10	38	29	89597	7692	35623	2	9	1666	58	1069	35631	468	35391	95	32911	8135	27319	278

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: Two influenza detections reported to date this season are known to be associated with recent live attenuated influenza vaccine (LAIV) receipt and were excluded from the data 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), 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 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

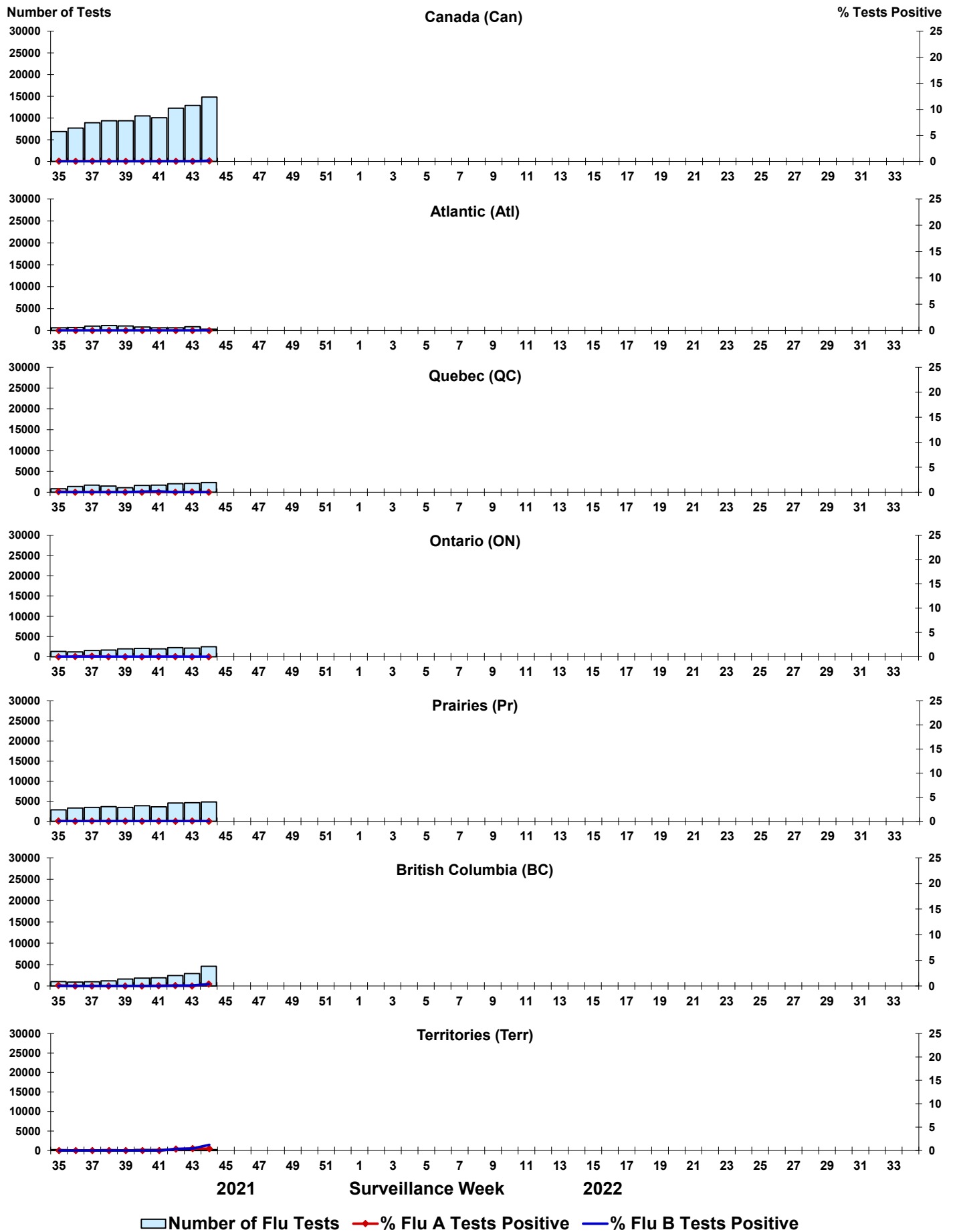
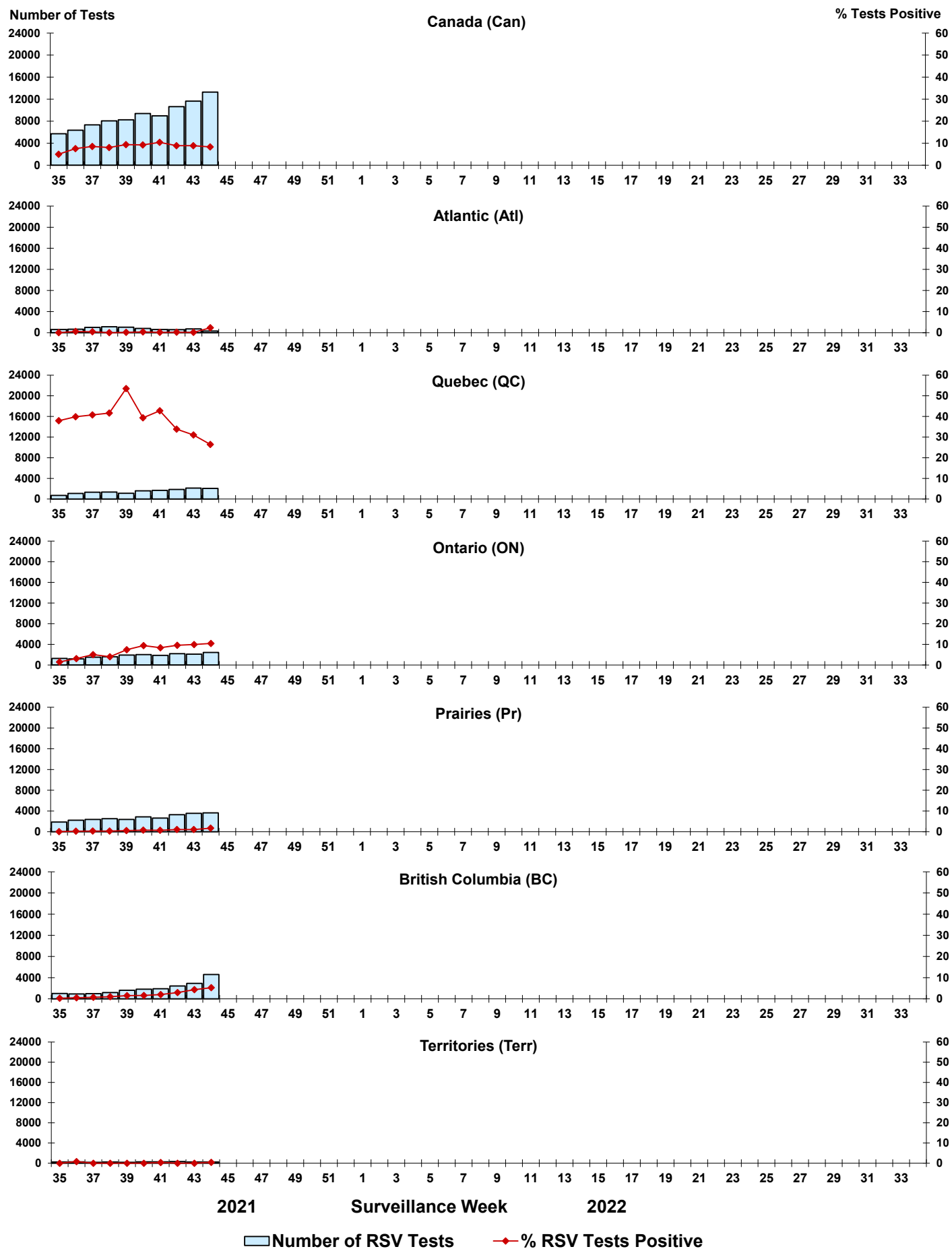


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



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

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

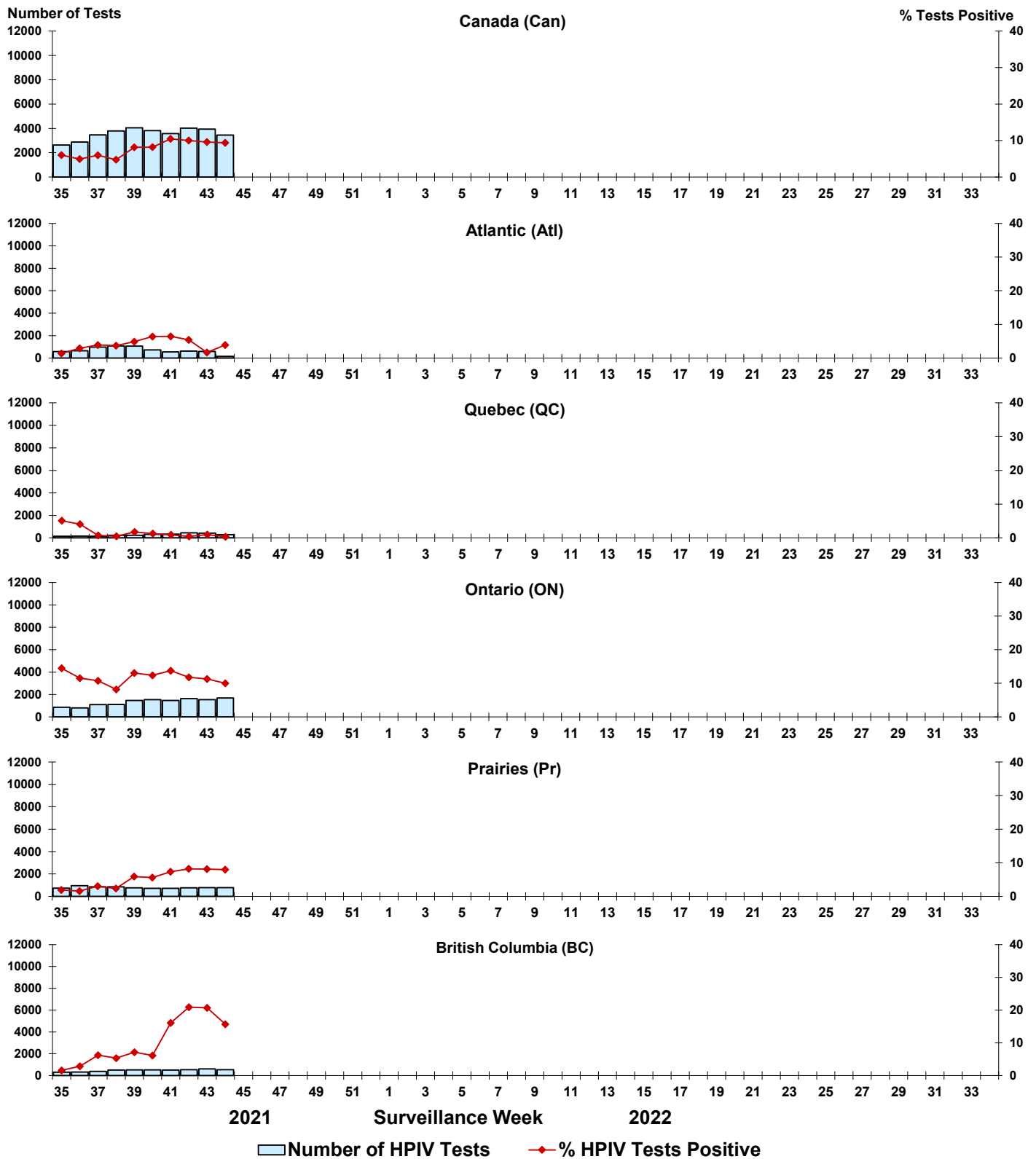


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

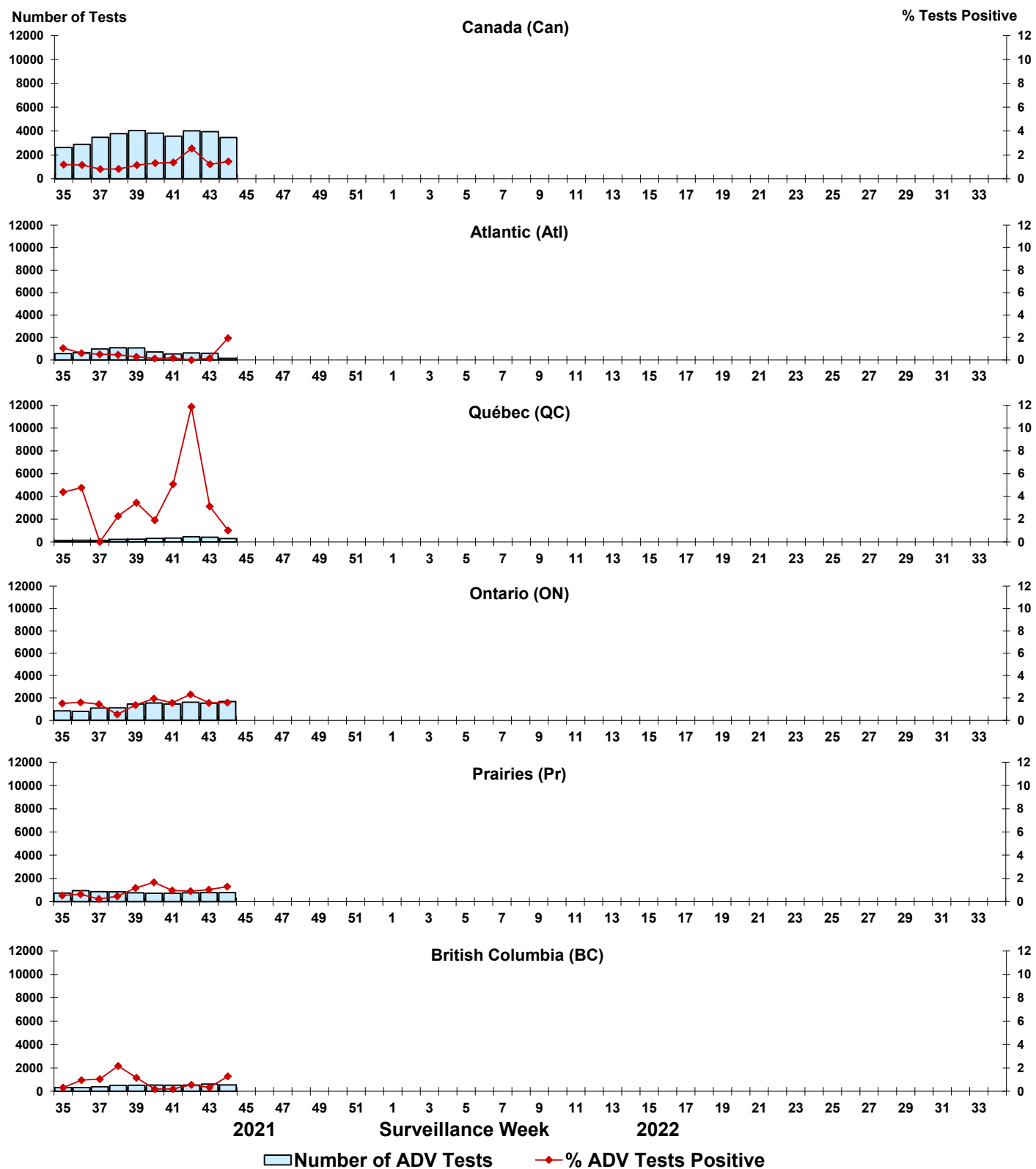


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

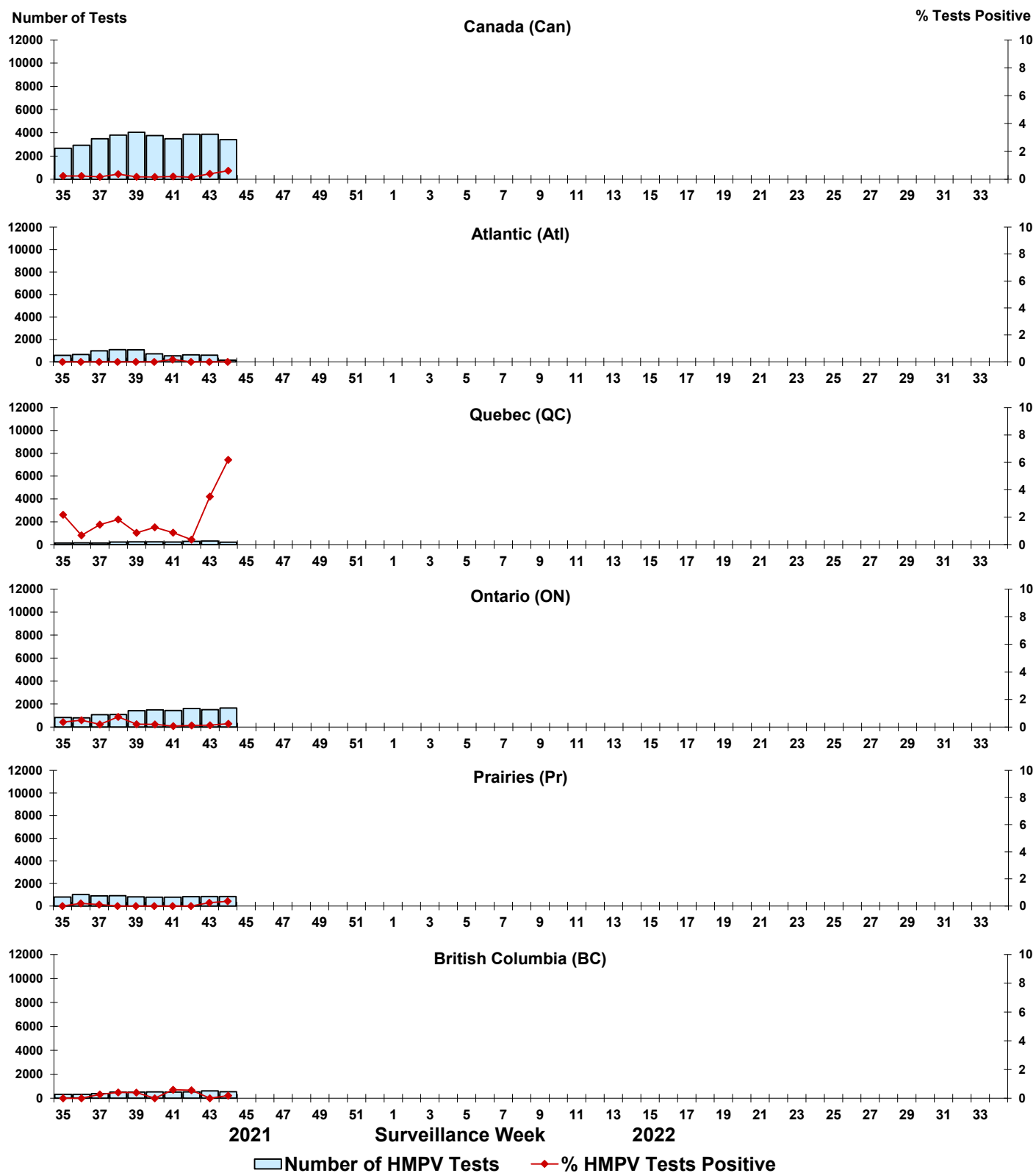


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

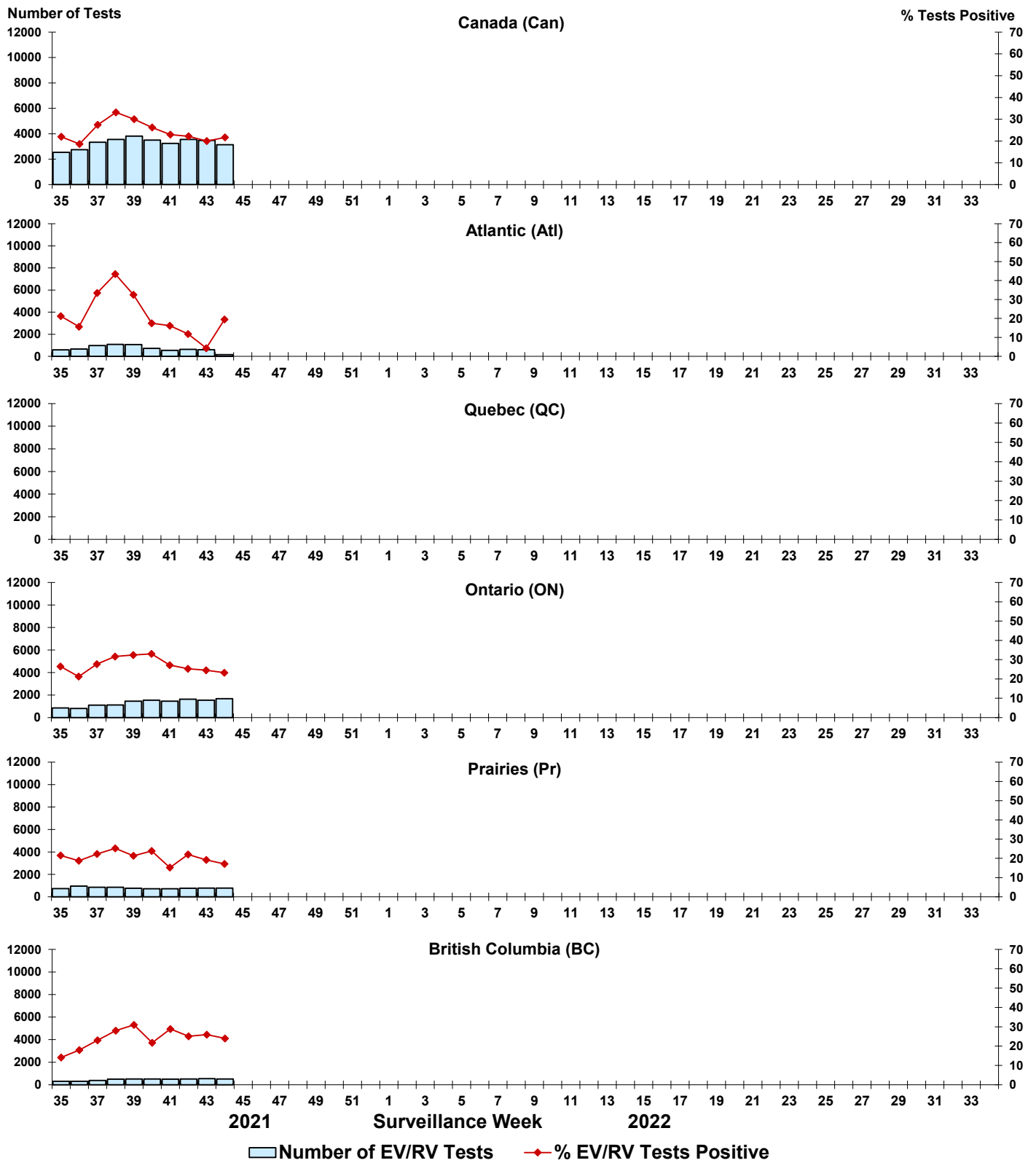


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

