

RESPIRATORY VIRUS DETECTION REPORT

November 7 to November 13, 2021
(Surveillance Week 2021-45)



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 45 (November 7 to November 13, 2021):

- Respiratory syncytial virus (1,139 detections; 7.7% positive), enterovirus/rhinovirus (775 detections; 22.5% positive), and human parainfluenza virus (349 detections; 9.3% positive) are the most common seasonal respiratory viruses detected in Canada.
 - Activity of respiratory syncytial virus remains above expected levels. Activity has decreased in Quebec in recent weeks, while activity has been either stable or slowly increasing in other parts of Canada.
 - 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.
- 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

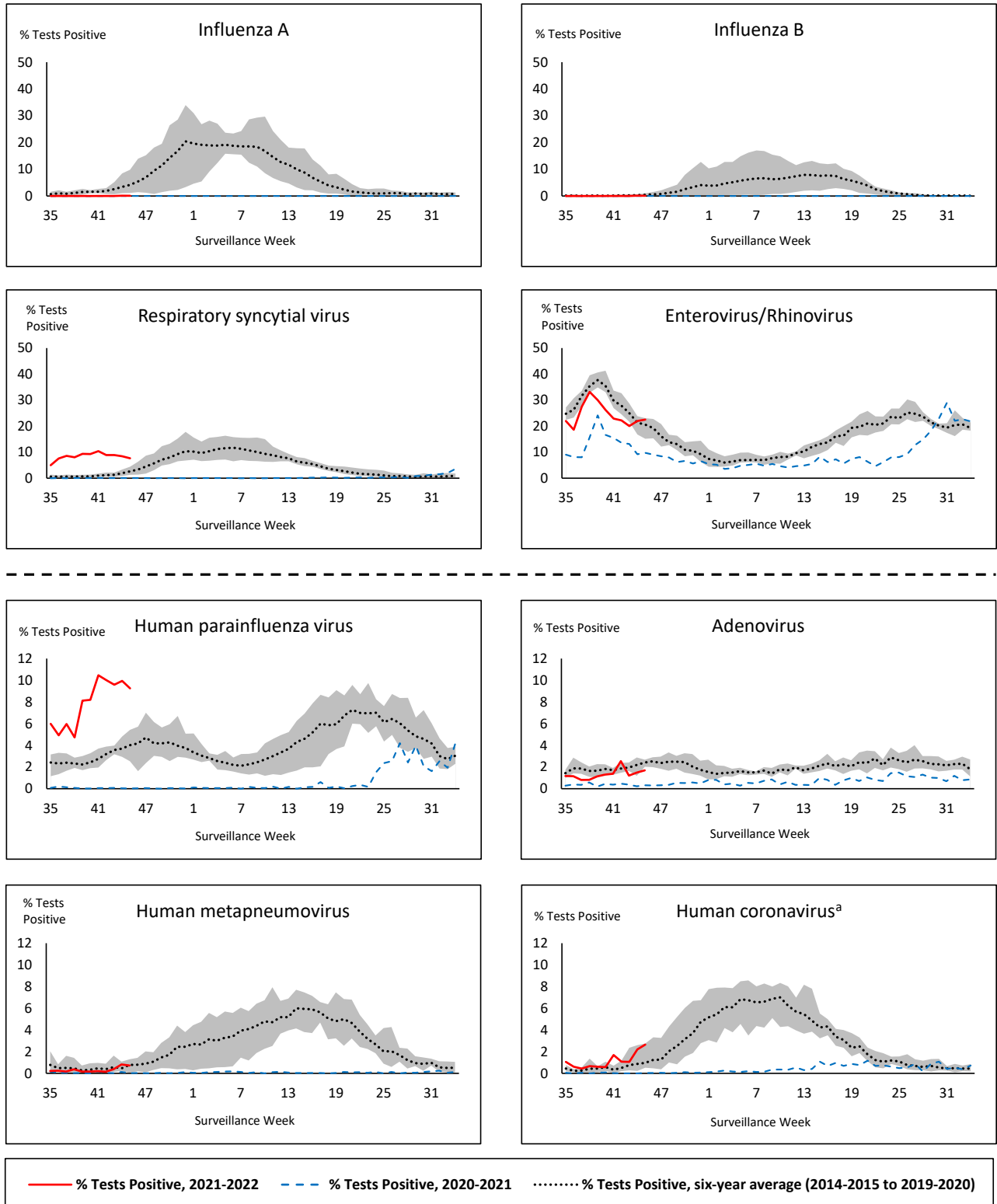
QC: Quebec

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

^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 13, 2021 (surveillance week 2021-45)

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	79	0	0	0	0	0	79	0	79	0	0	5	0	0	79	2	79	0	79	17	79	3
Nova Scotia	81	0	0	0	0	0	81	7	61	0	0	2	0	0	61	2	61	0	61	7	61	0
New Brunswick	656	0	0	0	0	0	298	0	186	0	0	1	0	0	186	0	186	0	186	1	186	0
Atlantic	816	0	0	0	0	0	458	7	326	0	0	8	0	0	326	4	326	0	326	25	326	3
Région Nord-Est	591	0	0	0	0	0	392	86	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Québec-Chaudière-Appalaches	468	0	0	0	0	0	498	90	52	0	0	1	0	0	52	2	52	0	N.C.	N.C.	52	0
Centre-du-Québec	294	0	0	0	0	0	262	93	6	0	0	0	0	0	6	0	14	1	N.C.	N.C.	6	0
Montréal-Laval	713	0	0	1	1	0	712	66	254	1	1	0	0	0	254	19	254	15	N.C.	N.C.	254	1
Ouest du Québec	220	0	0	0	0	0	220	62	5	0	0	0	0	0	5	0	5	0	N.C.	N.C.	5	0
Montérégie	155	0	0	0	0	0	155	17	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	2441	0	0	1	1	0	2239	414	317	1	1	1	0	0	317	21	325	16	N.C.	N.C.	317	1
P.H.O.L. - Ottawa	414	0	0	0	0	0	414	102	414	0	0	0	0	63	414	12	414	1	414	139	414	16
EORLA	294	0	0	0	0	0	294	45	30	0	0	2	0	0	30	0	0	0	30	8	0	0
P.H.O.L. - Kingston	56	0	0	0	0	0	56	4	56	0	0	0	0	3	56	1	56	1	56	21	56	2
UHN / Mount Sinai Hospital	444	0	0	0	0	0	444	3	4	0	0	0	0	0	4	0	4	0	4	1	4	0
P.H.O.L. - Toronto	346	0	0	0	0	0	346	13	346	0	0	0	0	16	346	4	346	0	346	72	346	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	15	0	0	0	0	0	15	0	15	0	0	0	0	1	15	0	15	0	15	8	15	0
P.H.O.L. - Timmins	5	0	0	0	0	0	5	0	5	0	0	0	0	1	5	0	5	0	5	1	5	0
St. Joseph's - London	387	0	0	0	0	0	387	17	28	0	0	0	0	4	28	0	28	0	22	10	22	0
P.H.O.L. - London	96	0	0	0	0	0	96	7	96	0	0	0	0	12	96	4	96	0	96	22	96	3
P.H.O.L. - Orillia	33	0	1	0	1	0	33	6	33	0	0	0	0	6	33	2	33	1	33	14	33	0
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	0	4	1
P.H.O.L. - Sudbury	2	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	0	2	0	2	0
P.H.O.L. - Hamilton	44	0	1	0	1	0	43	3	43	0	0	0	0	3	43	1	43	0	43	13	43	0
P.H.O.L. - Peterborough	38	0	0	0	0	0	38	1	38	0	0	0	0	0	38	0	38	0	38	4	38	0
St. Joseph's - Hamilton	594	0	0	0	0	0	594	75	594	1	0	35	0	0	594	1	594	0	594	144	0	0
Province of Ontario	2772	0	2	0	2	0	2771	276	1708	1	0	37	0	109	1708	25	1678	3	1702	457	1078	25
Province of Manitoba	2319	0	1	1	2	0	2319	23	15	0	0	6	0	0	15	0	94	0	15	9	15	0
Province of Saskatchewan	872	0	0	0	0	0	872	2	107	0	0	8	0	0	107	2	107	0	107	26	107	3
Province of Alberta	1842	0	0	0	0	0	680	41	680	0	0	53	12	0	680	6	680	2	680	126	680	50
Prairies	5033	0	1	1	2	0	3871	66	802	0	0	67	12	0	802	8	881	2	802	161	802	53
British Columbia	5053	0	0	0	7	9	5023	376	616	0	0	90	8	14	616	5	616	7	609	130	609	1
Yukon	512	0	0	0	0	1	512	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	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	1	1	1	0
Nunavut	2	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	1	0	1	1	1	0
Territories	515	0	0	0	0	1	514	0	2	0	0	0	0	0	2	1	2	0	2	2	2	0
CANADA	16630	0	3	2	12	10	14876	1139	3771	2	1	203	20	123	3771	64	3828	28	3441	775	3134	83

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: 14 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 13, 2021 (surveillance week 2021-35 to 2021-45)

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	875	0	0	0	0	0	875	2	875	0	0	140	0	0	875	14	875	0	875	262	875	19
Nova Scotia	743	0	0	0	0	0	743	14	556	0	2	31	0	0	570	5	570	0	570	57	570	1
New Brunswick	2481	0	0	0	0	0	1889	5	1459	0	0	19	0	0	1452	2	1459	0	1459	18	1368	0
Atlantic	8532	0	0	0	0	0	7940	29	7323	0	5	244	0	47	7333	33	7337	1	7337	1739	2813	20
Région Nord-Est	5720	0	0	0	0	0	3109	1100	478	0	0	6	0	0	478	11	11	0	N.C.	N.C.	294	2
Québec-Chaudière-Appalaches	1788	0	0	0	0	2	2330	795	335	0	0	5	0	0	336	11	255	0	N.C.	N.C.	257	2
Centre-du-Québec	1426	0	0	0	0	0	1763	852	212	0	0	9	0	0	212	4	220	1	N.C.	N.C.	205	2
Montréal-Laval	7058	0	0	3	3	3	7062	2154	1973	2	1	13	0	0	1973	114	1973	57	N.C.	N.C.	1973	7
Ouest du Québec	1755	0	0	0	0	0	1723	728	9	0	0	0	0	0	5	0	8	0	N.C.	N.C.	8	0
Montérégie	1057	0	0	0	0	0	1057	329	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	18804	0	0	3	3	5	17044	5958	3007	2	1	33	0	0	3004	140	2467	58	N.C.	N.C.	2737	13
P.H.O.L. - Ottawa	4269	1	1	0	2	0	4269	974	4269	0	0	0	0	555	4269	152	4268	17	4269	1647	4268	86
EORLA	1677	0	0	0	0	0	1652	207	289	0	0	13	0	0	289	1	1	0	289	63	25	1
P.H.O.L. - Kingston	499	0	0	0	0	0	499	20	498	0	0	0	0	116	498	7	497	2	498	198	497	9
UHN / Mount Sinai Hospital	4585	0	0	1	1	0	4585	13	152	0	0	0	0	0	152	0	152	0	152	8	152	0
P.H.O.L. - Toronto	2777	0	1	0	1	0	2775	70	2775	0	0	0	0	180	2776	18	2775	2	2775	537	2776	26
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	57	0	0	0	0	0	57	0	57	0	0	0	0	4	57	0	57	0	57	20	57	0
P.H.O.L. - Timmins	68	0	0	0	0	0	68	2	68	0	0	0	0	5	68	0	68	0	68	11	68	0
St. Joseph's - London	988	0	0	0	0	0	988	36	392	0	0	7	0	51	392	9	392	1	374	92	373	0
P.H.O.L. - London	736	0	0	0	0	0	736	21	736	0	0	0	0	102	736	13	736	1	736	219	736	5
P.H.O.L. - Orillia	213	0	1	0	1	0	213	13	213	0	0	0	0	31	213	5	211	2	213	87	211	2
P.H.O.L. - Thunder Bay	72	0	0	0	0	0	72	0	72	0	0	0	0	0	72	0	72	0	72	31	72	1
P.H.O.L. - Sudbury	132	0	0	0	0	0	132	0	132	0	0	0	0	2	132	0	132	1	132	24	132	0
P.H.O.L. - Hamilton	392	0	2	0	2	0	388	15	388	0	0	0	0	32	388	4	388	4	388	105	388	1
P.H.O.L. - Peterborough	217	0	0	0	0	0	217	7	216	0	0	0	0	7	216	1	215	0	216	41	215	2
St. Joseph's - Hamilton	4221	0	0	0	0	0	4215	253	4215	1	0	534	0	0	4215	21	4215	4	4215	866	0	0
Province of Ontario	21340	1	5	1	7	0	20866	1631	14909	1	0	605	0	1085	14910	235	14616	35	14891	4077	10407	134
Manitoba	18588	1	2	3	6	0	18588	106	278	1	1	23	0	0	278	6	926	2	278	121	732	2
Province of Saskatchewan	5153	0	0	0	0	0	5124	17	884	0	0	31	4	0	884	12	884	0	884	196	883	3
Province of Alberta	19784	0	1	2	3	0	7638	153	7638	0	3	384	40	0	7638	61	7638	8	7638	1501	7638	177
Prairies	43525	1	3	5	9	0	31350	276	8800	1	4	438	44	0	8800	79	9448	10	8800	1818	9253	182
British Columbia	24508	0	2	3	28	28	24465	959	5540	0	0	589	37	60	5540	47	5536	28	5381	1309	5431	17
Yukon	2712	0	0	0	3	6	2782	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	176	0	0	0	0	0	162	0	32	0	0	0	0	0	32	2	32	0	160	24	32	0
Nunavut	13	0	0	0	0	0	10	0	10	0	0	0	0	0	10	1	10	0	10	5	7	0
Territories	2901	0	0	0	3	6	2954	4	42	0	0	0	0	0	42	3	42	0	170	29	39	0
CANADA	119610	2	10	12	50	39	104619	8857	39621	4	10	1909	81	1192	39629	537	39446	132	36579	8972	30680	366

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: 16 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 2: Number of positive respiratory virus tests reported by participating laboratories in Canada by surveillance week

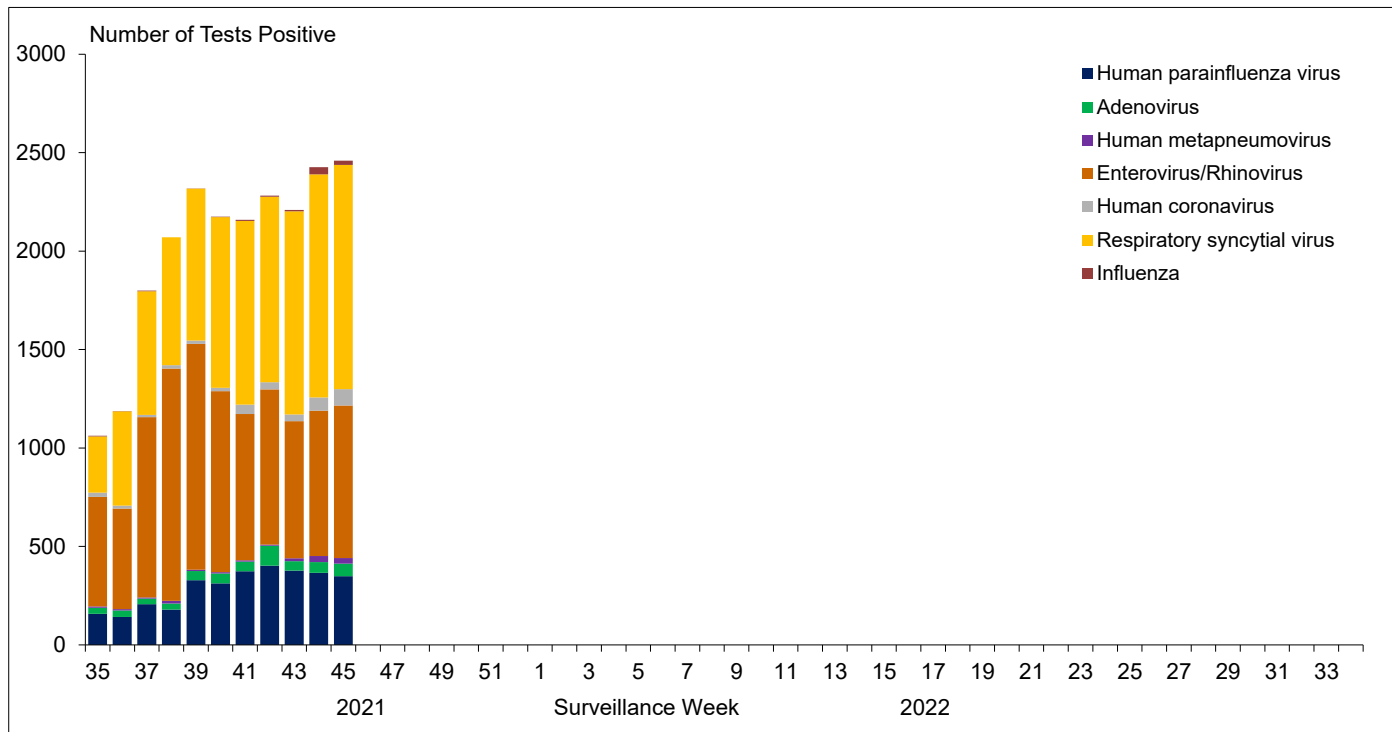


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

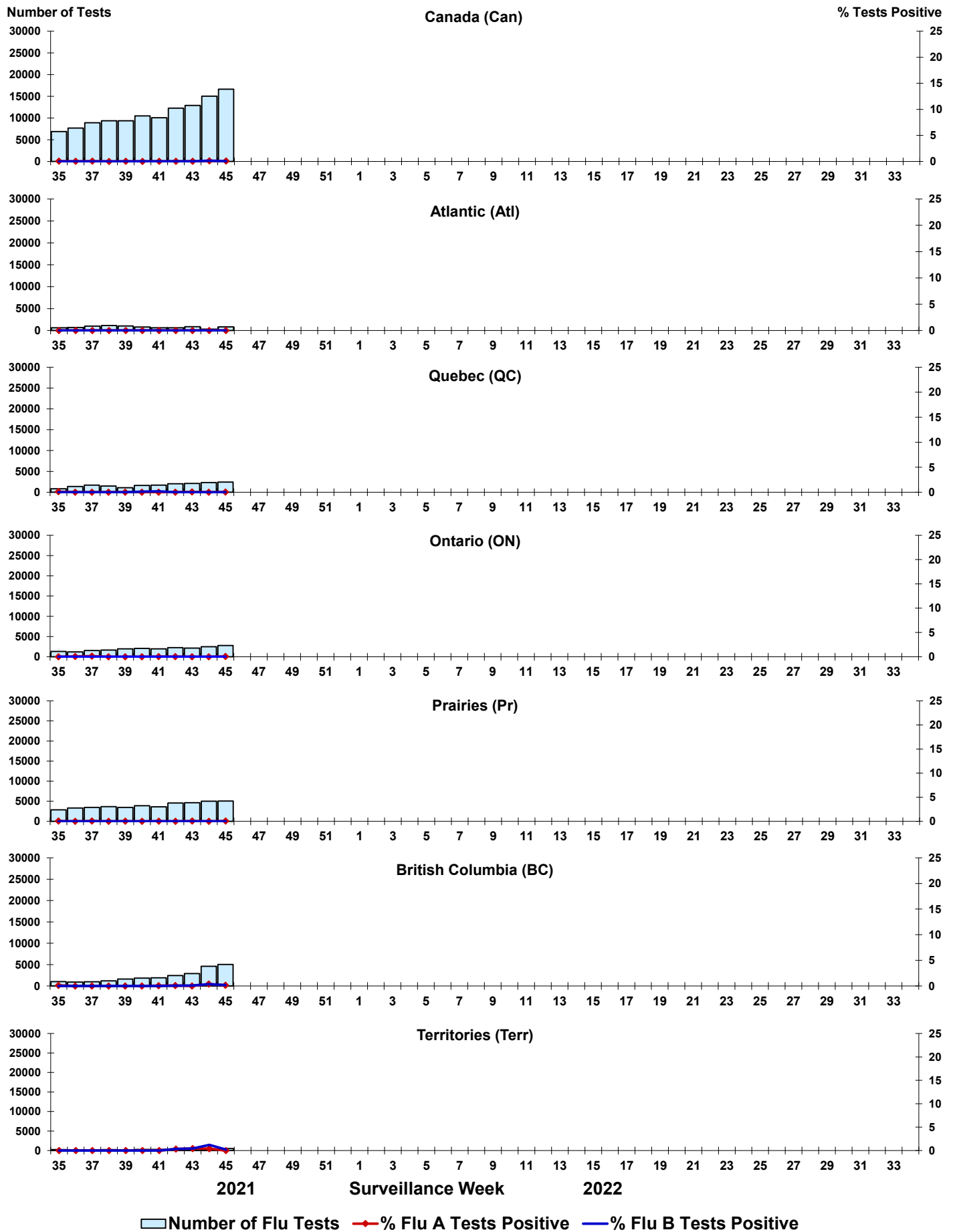
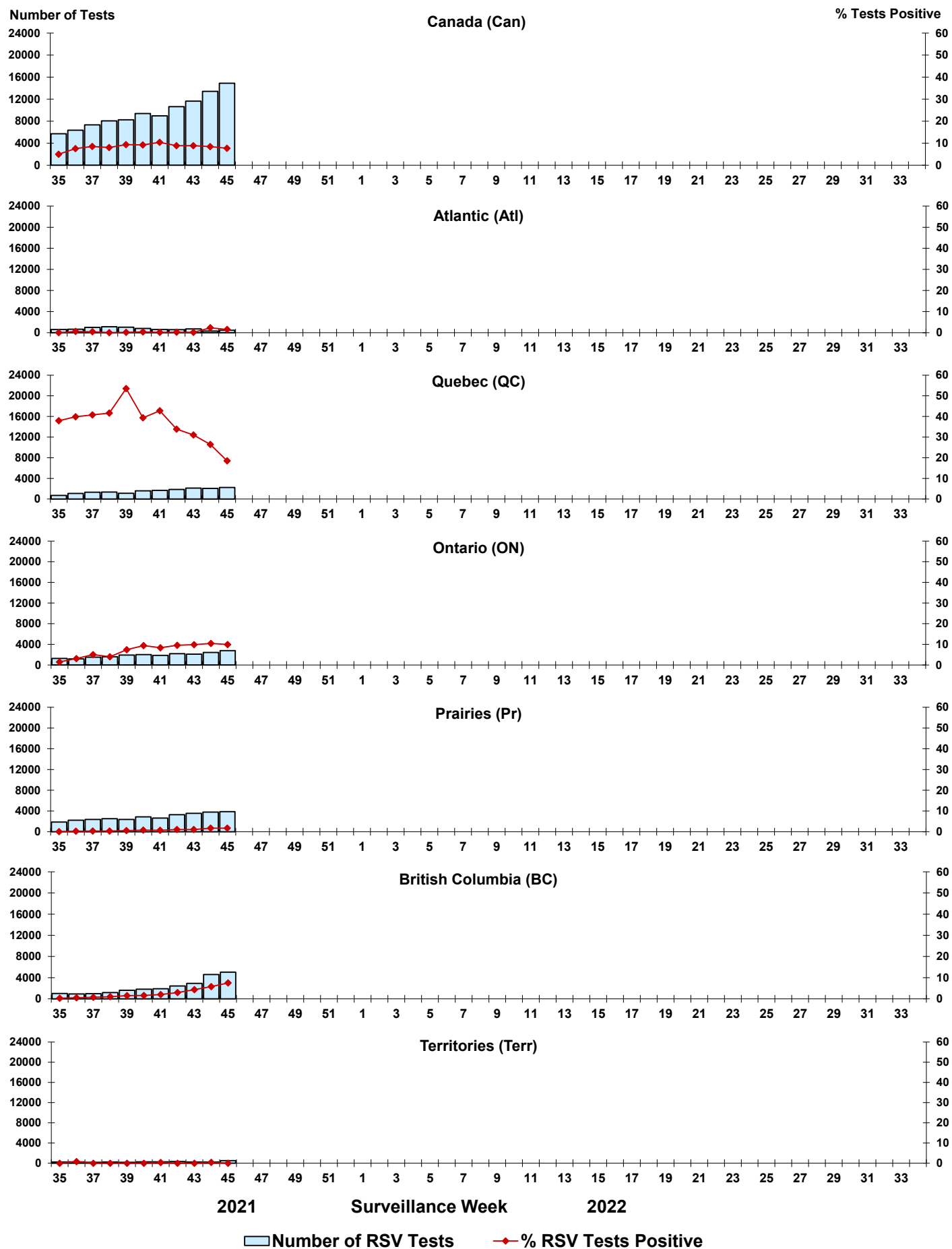


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



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

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

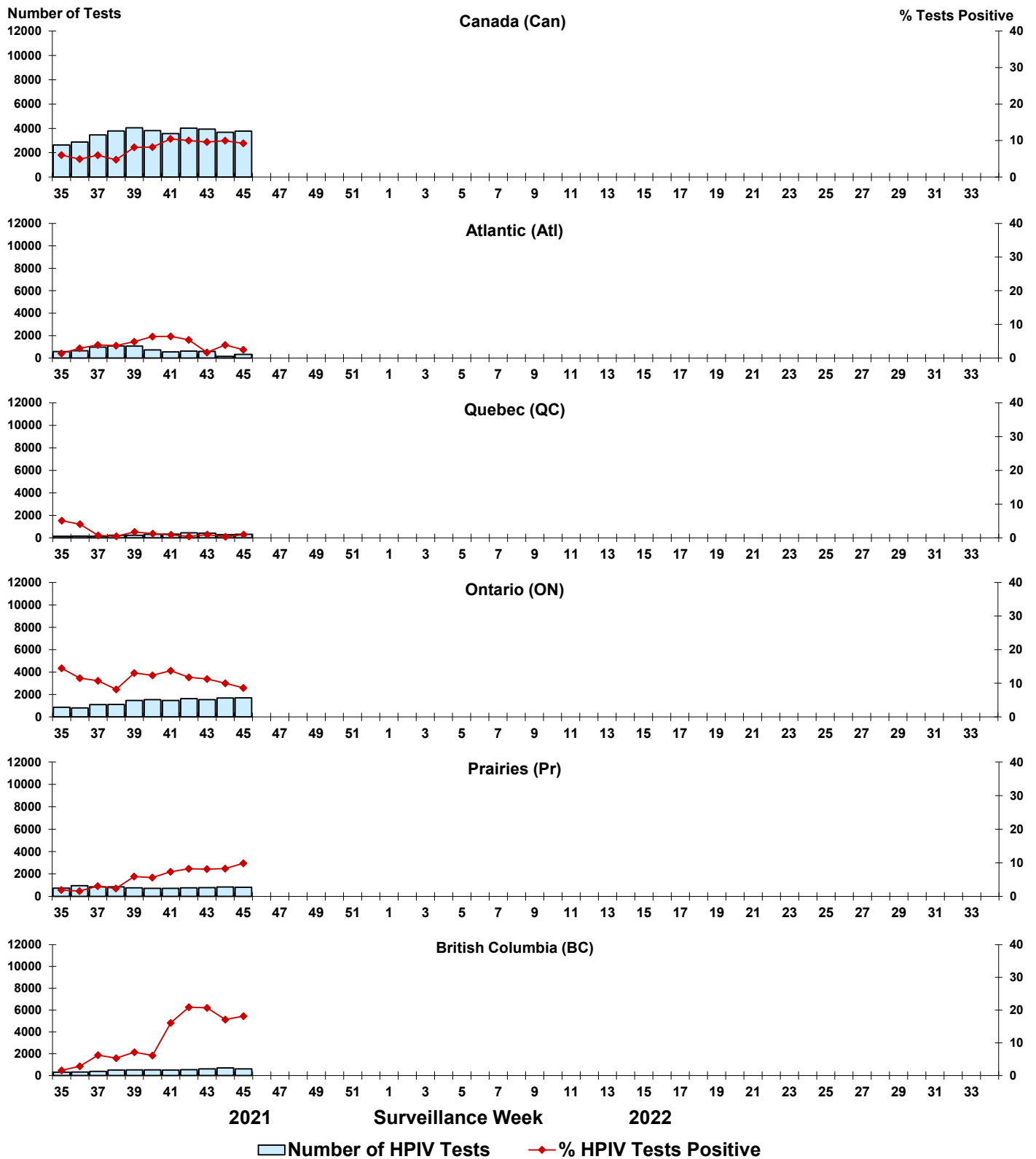


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

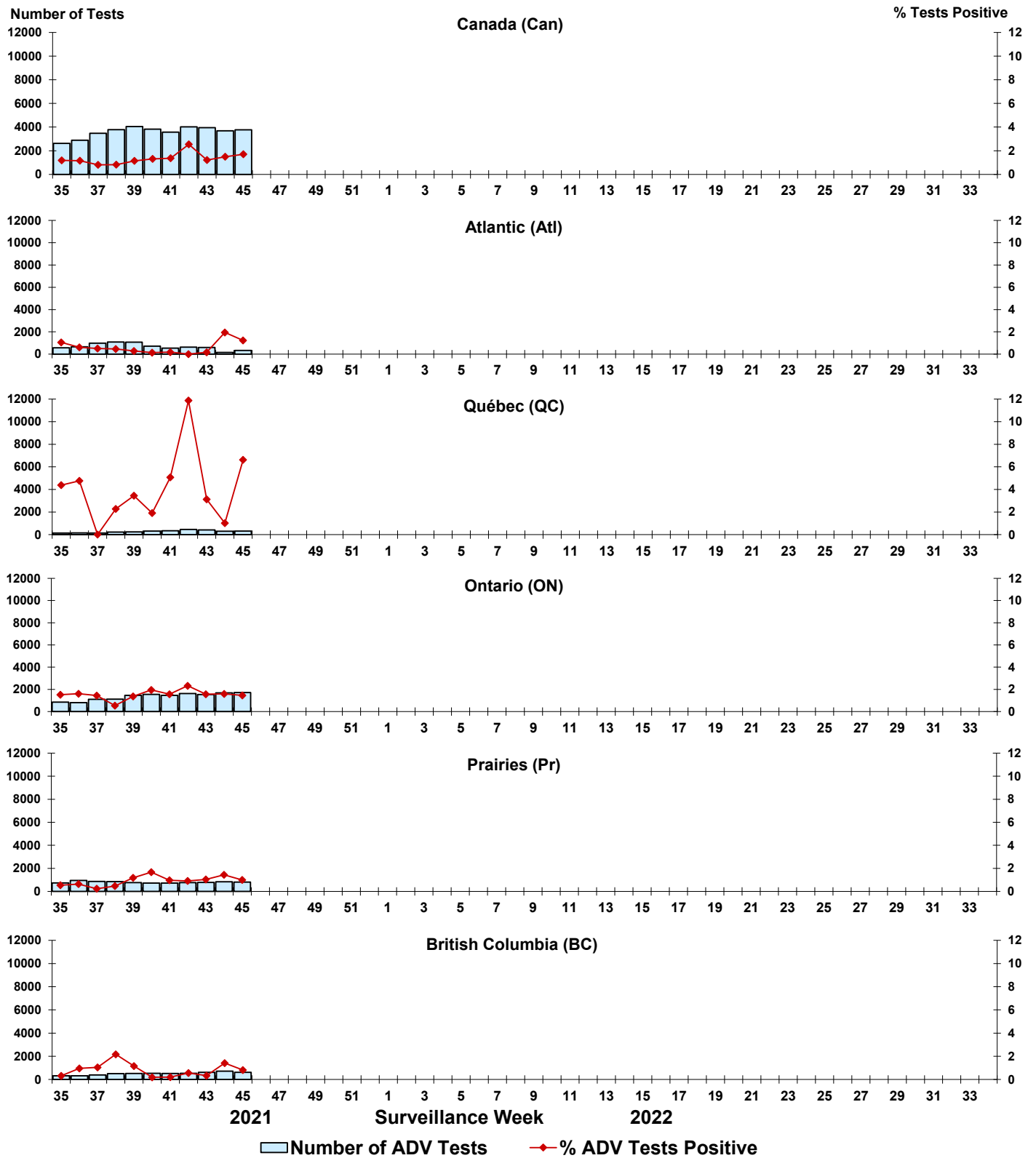


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

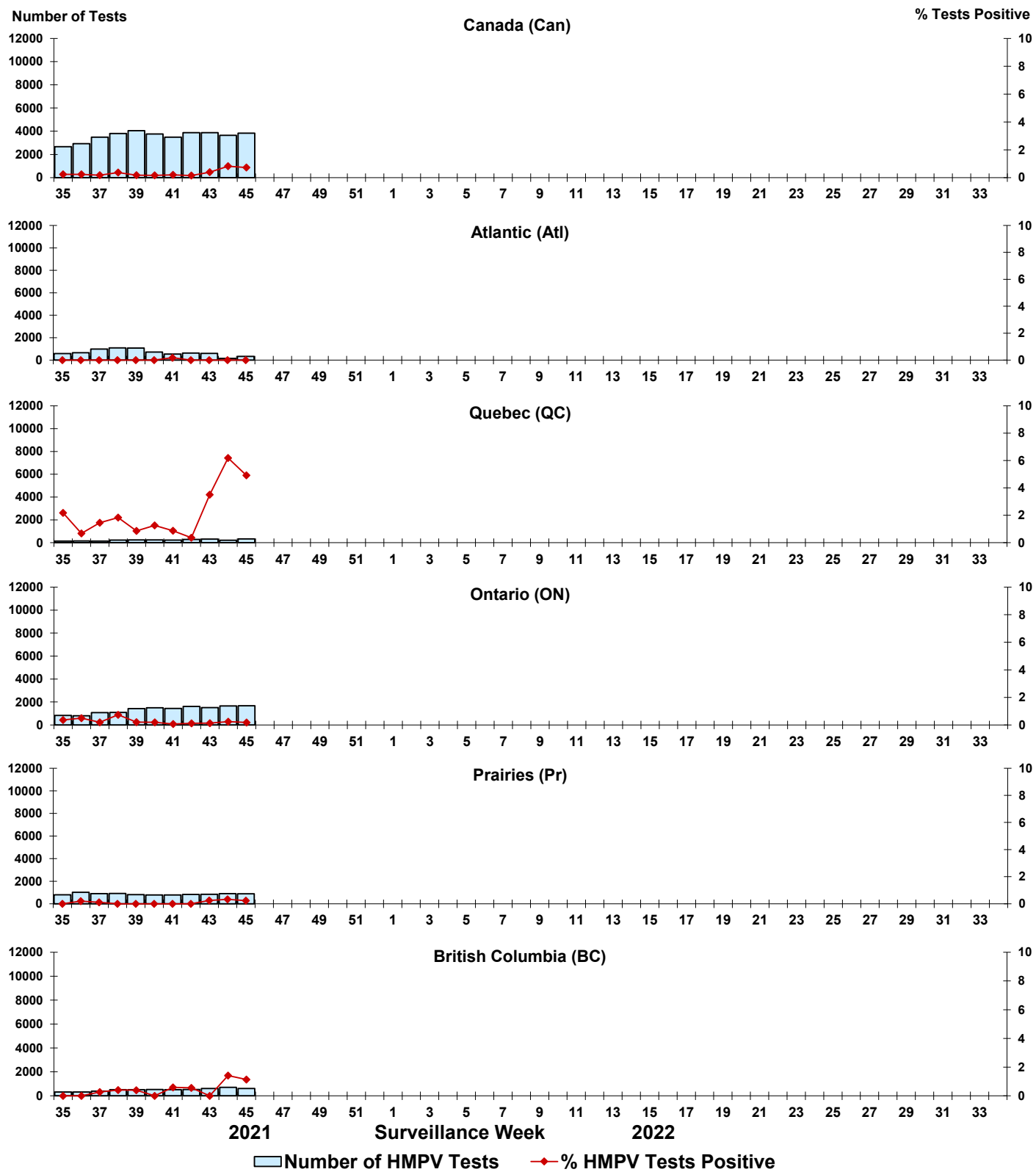


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

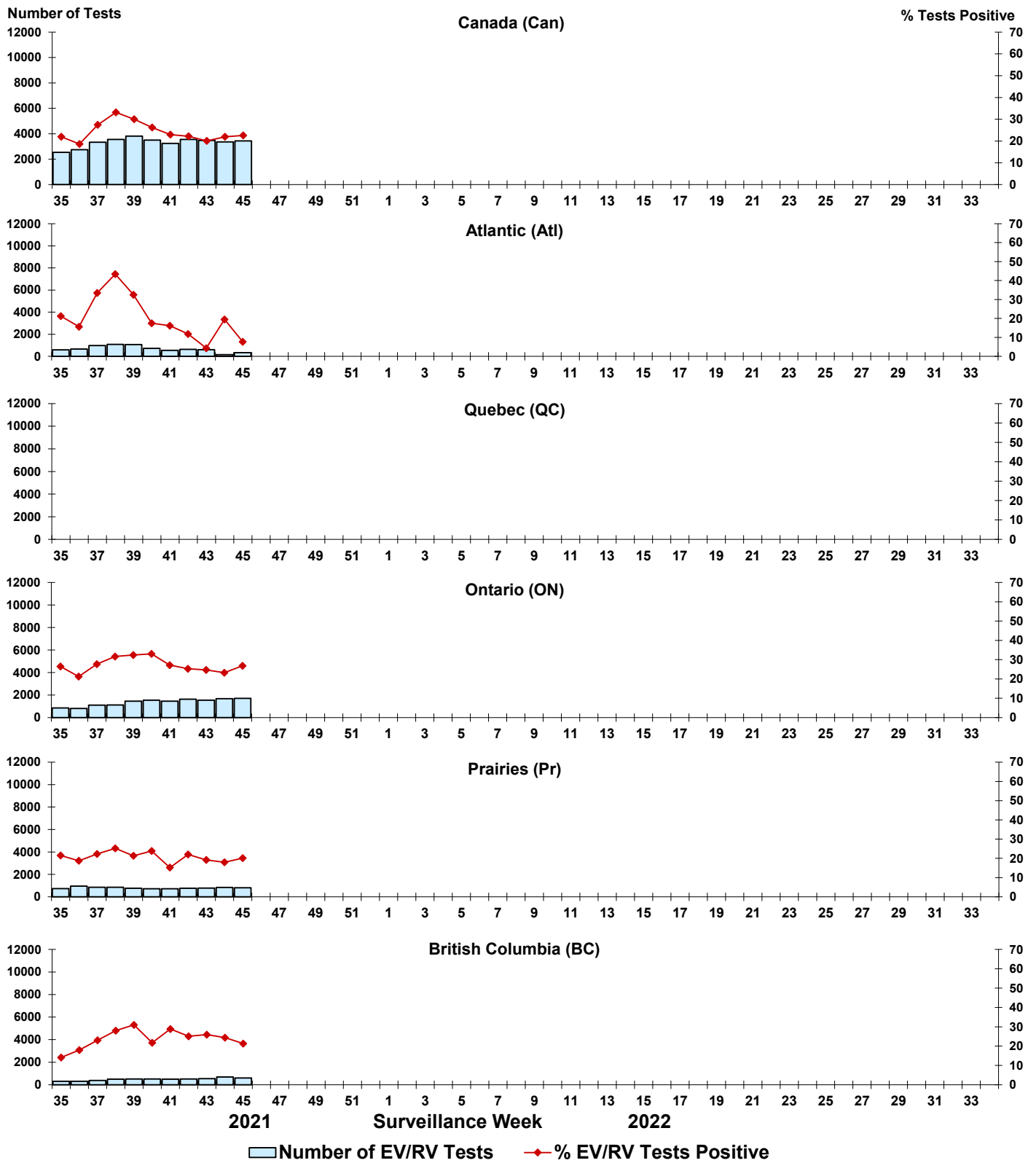


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

