

RESPIRATORY VIRUS DETECTION REPORT

November 28 to December 4, 2021
(Surveillance Week 2021-48)



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 48 (November 28 to December 4, 2021), activity of almost all respiratory viruses are within expected levels for this time of year.

- Respiratory syncytial virus (1,450 detections; 9.2% positive) and enterovirus/rhinovirus (704 detections; 16.7% positive) are the most common seasonal respiratory viruses detected in Canada.
 - Activity of respiratory syncytial virus is now within 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.
- Detections of other respiratory viruses are low, but activity of human coronavirus has been increasing in recent weeks.
- 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

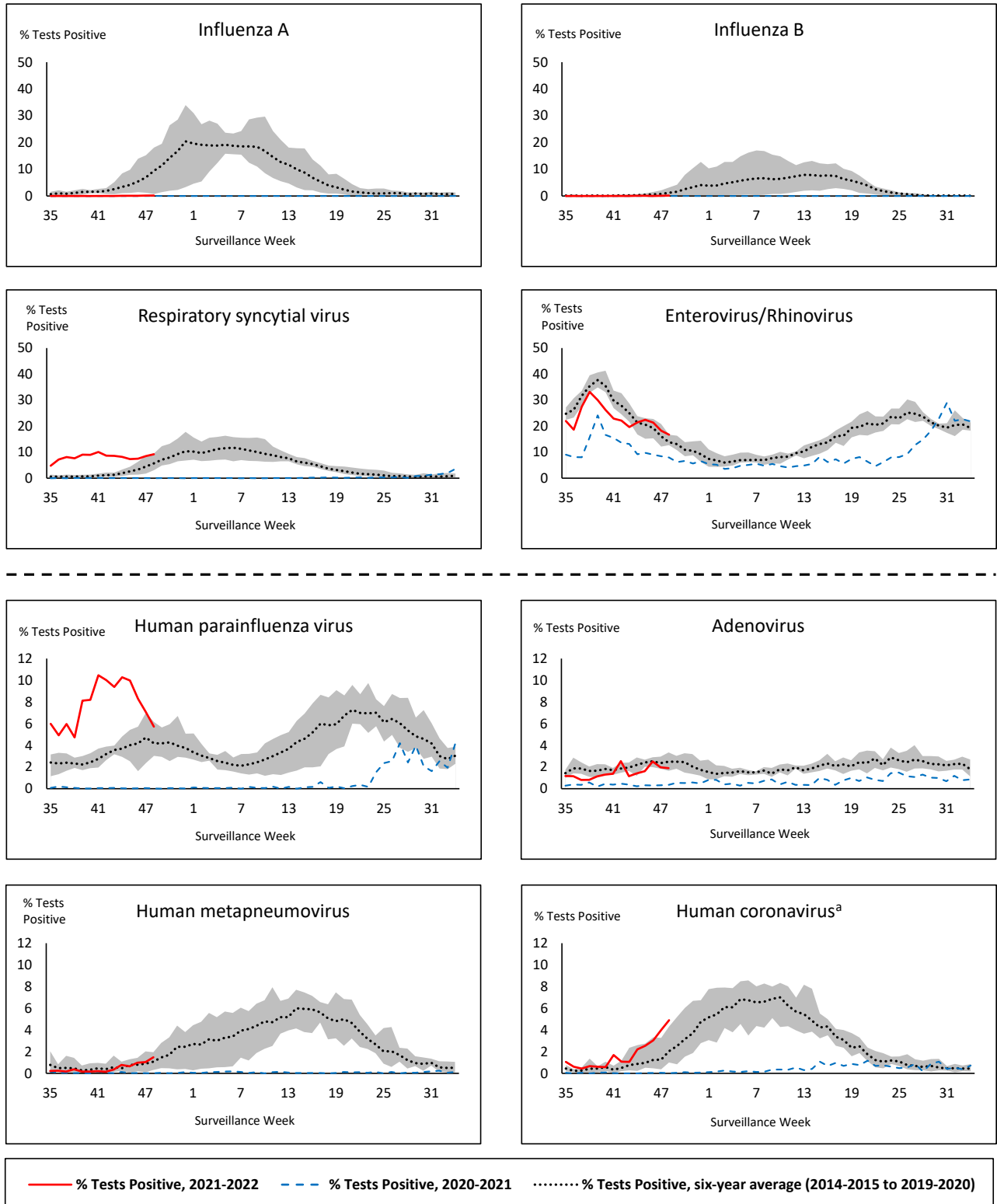
QC: Quebec

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 December 4, 2021 (surveillance week 2021-48)

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	300	0	0	0	0	0	300	7	300	0	0	4	0	16	300	0	300	1	300	29	N.C.	N.C.
Prince Edward Island	110	0	0	0	0	0	110	15	110	0	0	0	0	0	110	3	110	0	110	36	110	15
Nova Scotia	2000	0	0	2	2	3	2000	21	75	0	0	0	1	0	75	0	75	0	75	7	75	3
New Brunswick	783	0	0	0	0	0	472	34	183	0	0	1	0	0	183	2	183	2	183	1	183	0
Atlantic	3193	0	0	2	2	3	2882	77	668	0	0	5	1	16	668	5	668	3	668	73	368	18
Région Nord-Est	620	0	0	0	0	1	374	58	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	89	1
Québec-Chaudière-Appalaches	351	0	0	1	1	0	346	34	43	0	1	1	1	0	91	3	91	7	N.C.	N.C.	64	5
Centre-du-Québec	330	0	0	1	1	0	279	10	14	0	0	0	0	0	14	0	14	0	N.C.	N.C.	14	0
Montréal-Laval	811	0	0	0	0	0	806	41	295	0	0	1	0	0	295	15	295	44	N.C.	N.C.	295	2
Ouest du Québec	194	0	0	0	0	0	194	23	3	0	0	0	0	0	3	1	3	1	N.C.	N.C.	3	1
Montérégie	165	0	0	0	0	0	165	13	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	2471	0	0	2	2	1	2164	179	355	0	1	2	1	0	403	19	403	52	N.C.	N.C.	465	9
P.H.O.L. - Ottawa	287	0	0	0	0	0	287	63	287	0	0	0	0	29	287	22	287	8	287	104	287	19
EORLA	271	0	0	0	0	0	271	60	31	0	0	2	0	0	31	2	31	0	31	8	31	4
P.H.O.L. - Kingston	86	0	0	0	0	0	86	14	86	0	0	0	0	5	86	1	86	0	86	20	86	12
UHN / Mount Sinai Hospital	478	0	0	1	1	0	478	6	12	0	0	0	0	0	12	0	12	0	12	0	12	0
P.H.O.L. - Toronto	360	0	1	0	1	0	359	25	359	0	0	0	0	11	359	2	359	0	359	53	359	9
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	21	0	0	0	0	0	21	0	21	0	0	0	0	0	21	0	21	0	21	9	21	0
P.H.O.L. - Timmins	11	0	0	0	0	0	11	1	11	0	0	0	0	5	11	0	11	0	11	2	11	0
St. Joseph's - London	342	0	0	1	1	0	342	37	36	0	0	0	0	1	36	1	36	0	34	12	8	0
P.H.O.L. - London	183	0	0	0	0	0	183	67	183	0	0	0	0	5	183	4	183	0	183	27	183	7
P.H.O.L. - Orillia	55	0	0	0	0	0	55	8	55	0	0	0	0	2	55	2	55	0	55	11	55	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	0	4	0
P.H.O.L. - Sudbury	15	0	0	0	0	0	15	0	15	0	0	0	0	2	15	0	15	0	15	0	15	0
P.H.O.L. - Hamilton	61	0	1	0	1	0	61	7	61	0	0	0	0	1	61	0	61	0	61	12	61	3
P.H.O.L. - Peterborough	31	0	0	0	0	0	31	5	31	0	0	0	0	1	31	0	31	0	31	6	31	2
St. Joseph's - Hamilton	802	0	0	2	2	0	802	148	802	0	0	14	0	0	802	5	802	1	802	102	0	0
Province of Ontario	3007	0	2	4	6	0	3006	441	1994	0	0	16	0	62	1994	39	1994	9	1992	366	1164	58
Province of Manitoba	1763	0	0	0	0	0	1763	31	28	0	1	4	0	0	28	0	87	0	28	6	87	0
Province of Saskatchewan	666	0	0	0	0	0	665	3	145	0	0	18	1	0	145	4	145	0	145	20	145	5
Province of Alberta	2145	0	1	0	1	0	734	115	734	0	6	30	9	0	734	9	734	2	734	117	734	77
Prairies	4574	0	1	0	1	0	3162	149	907	0	7	52	10	0	907	13	966	2	907	143	966	82
British Columbia	4325	0	4	0	22	24	4285	592	618	0	0	55	18	14	618	11	618	3	603	109	603	8
Yukon	24	0	0	0	0	0	24	12	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	43	0	0	0	0	0	40	0	5	0	0	0	0	0	5	0	5	0	40	12	5	0
Nunavut	148	0	0	0	0	0	148	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.
Territories	215	0	0	0	0	0	212	12	7	0	0	0	0	0	7	0	7	0	42	13	7	0
CANADA	17785	0	7	8	33	28	15711	1450	4549	0	8	130	30	92	4597	87	4656	69	4212	704	3573	175

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) and Northwest Territories (NT) are sent to reference laboratories in other provinces and reported results reflect specimens identified as originating from YT or NT.

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 December 4, 2021 (surveillance week 2021-35 to 2021-48)

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	6166	0	0	0	0	0	6165	18	6168	1	3	113	0	135	6170	14	6165	6	6169	1644	N.C.	N.C.
Prince Edward Island	1152	0	0	0	0	0	1152	24	1152	0	0	147	0	0	1152	23	1152	0	1152	348	1152	52
Nova Scotia	4147	0	1	2	3	4	4147	67	814	0	2	37	1	0	828	5	828	0	828	80	828	6
New Brunswick	5003	0	0	0	0	0	3099	72	1907	0	0	21	0	0	1900	5	1907	3	1907	26	1816	0
Atlantic	16468	0	1	2	3	4	14563	181	10041	1	5	318	1	135	10050	47	10052	9	10056	2098	3796	58
Région Nord-Est	7502	0	0	0	0	1	4011	1260	579	0	0	6	1	0	484	11	17	0	N.C.	N.C.	484	4
Québec-Chaudière-Appalaches	2825	0	0	1	1	3	3393	927	475	0	1	6	2	0	531	19	443	9	N.C.	N.C.	418	10
Centre-du-Québec	2441	0	0	2	2	1	2682	980	276	0	0	9	0	0	276	6	284	4	N.C.	N.C.	269	3
Montréal-Laval	9502	0	0	5	5	3	9500	2287	2844	2	1	17	1	0	2844	162	2844	157	N.C.	N.C.	2844	14
Ouest du Québec	2404	0	0	0	0	0	2372	830	12	0	0	0	0	0	8	1	11	1	N.C.	N.C.	11	1
Montérégie	1446	0	0	0	0	0	1446	354	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	26120	0	0	8	8	8	23404	6638	4186	2	2	38	4	0	4143	199	3599	171	N.C.	N.C.	4026	32
P.H.O.L. - Ottawa	5305	1	1	0	2	0	5305	1236	5305	0	0	0	0	673	5305	223	5304	29	5305	1992	5304	141
EORLA	2498	0	0	0	0	0	2473	378	379	0	0	15	0	0	379	4	60	0	379	84	56	5
P.H.O.L. - Kingston	736	0	0	0	0	0	736	54	735	0	0	0	0	129	735	13	734	2	735	255	734	32
UHN / Mount Sinai Hospital	5910	0	0	4	4	0	5910	30	190	0	0	0	0	0	190	0	190	0	190	8	190	0
P.H.O.L. - Toronto	3814	0	7	0	7	0	3808	126	3808	0	0	0	0	230	3809	32	3808	4	3808	685	3809	54
Sick Kids Hospital - Toronto	567	0	0	0	0	0	0	0	567	0	0	61	0	0	567	7	567	1	567	170	567	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	117	0	1	0	1	0	115	0	115	0	0	0	0	5	115	0	115	0	115	39	115	0
P.H.O.L. - Timmins	104	0	0	0	0	0	104	3	104	0	0	0	0	12	104	1	104	0	104	16	104	0
St. Joseph's - London	1984	0	0	1	1	0	1983	119	501	0	0	7	0	57	501	12	501	1	464	120	437	1
P.H.O.L. - London	1167	0	0	0	0	0	1167	136	1167	0	0	0	0	123	1167	19	1167	1	1167	310	1167	15
P.H.O.L. - Orillia	341	0	1	0	1	0	341	29	341	0	0	0	0	36	341	10	339	3	341	122	339	4
P.H.O.L. - Thunder Bay	89	0	0	0	0	0	89	0	89	0	0	0	0	6	89	0	89	0	89	33	89	1
P.H.O.L. - Sudbury	166	0	0	0	0	0	166	3	166	0	0	0	0	4	166	0	166	2	166	25	166	3
P.H.O.L. - Hamilton	541	0	6	0	6	0	534	26	534	0	0	0	0	35	534	4	534	4	534	147	534	6
P.H.O.L. - Peterborough	320	0	0	0	0	0	320	26	319	0	0	0	0	9	319	1	318	0	319	62	318	6
St. Joseph's - Hamilton	6286	0	4	2	6	0	6280	644	6280	2	0	599	0	0	6280	41	6280	12	6280	1204	0	0
Province of Ontario	29945	1	20	7	28	0	29331	2810	20600	2	0	682	0	1319	20601	367	20276	59	20563	5272	13929	269
Manitoba	24113	1	3	3	7	0	24113	176	365	1	2	39	0	0	365	6	1172	3	365	151	931	2
Province of Saskatchewan	7625	0	0	0	0	0	7605	30	1300	0	0	72	8	0	1300	23	1300	1	1300	259	1299	12
Province of Alberta	26326	0	3	4	7	0	10136	442	10136	0	11	528	74	0	10136	92	10136	13	10136	1955	10136	382
Prairies	58064	1	6	7	14	0	41854	648	11801	1	13	639	82	0	11801	121	12608	17	11801	2365	12366	396
British Columbia	37373	0	15	3	70	67	37223	2329	7826	0	0	886	76	100	7826	98	7822	38	7624	1759	7674	48
Yukon	3003	0	1	0	4	6	3068	16	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	40	2	40	0	237	43	40	0
Northwest Territories	257	0	0	0	0	0	238	0	40	0	0	0	0	0	40	1	10	0	10	6	10	0
Nunavut	3790	0	0	0	0	0	3786	4	10	0	0	0	0	0	10	1	10	0	10	6	10	0
Territories	7050	0	1	0	4	6	7092	20	50	0	0	0	0	0	50	3	50	0	247	49	50	0
CANADA	175020	2	43	27	127	85	153467	12626	54504	6	20	2563	163	1554	54471	835	54407	294	50291	11543	41841	803

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: Included in the cumulative detections this season are 11 co-infections of influenza A and B (total of 22 detections) that are suspected to be associated with recent live attenuated influenza vaccine (LAIV) receipt. Co-infections known or reported to be associated with recent LAIV are removed by the submitting laboratory or by PHAC beginning in week 44.

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) and Northwest Territories (NT) are sent to reference laboratories in other provinces and reported results reflect specimens identified as originating from YT or NT.

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

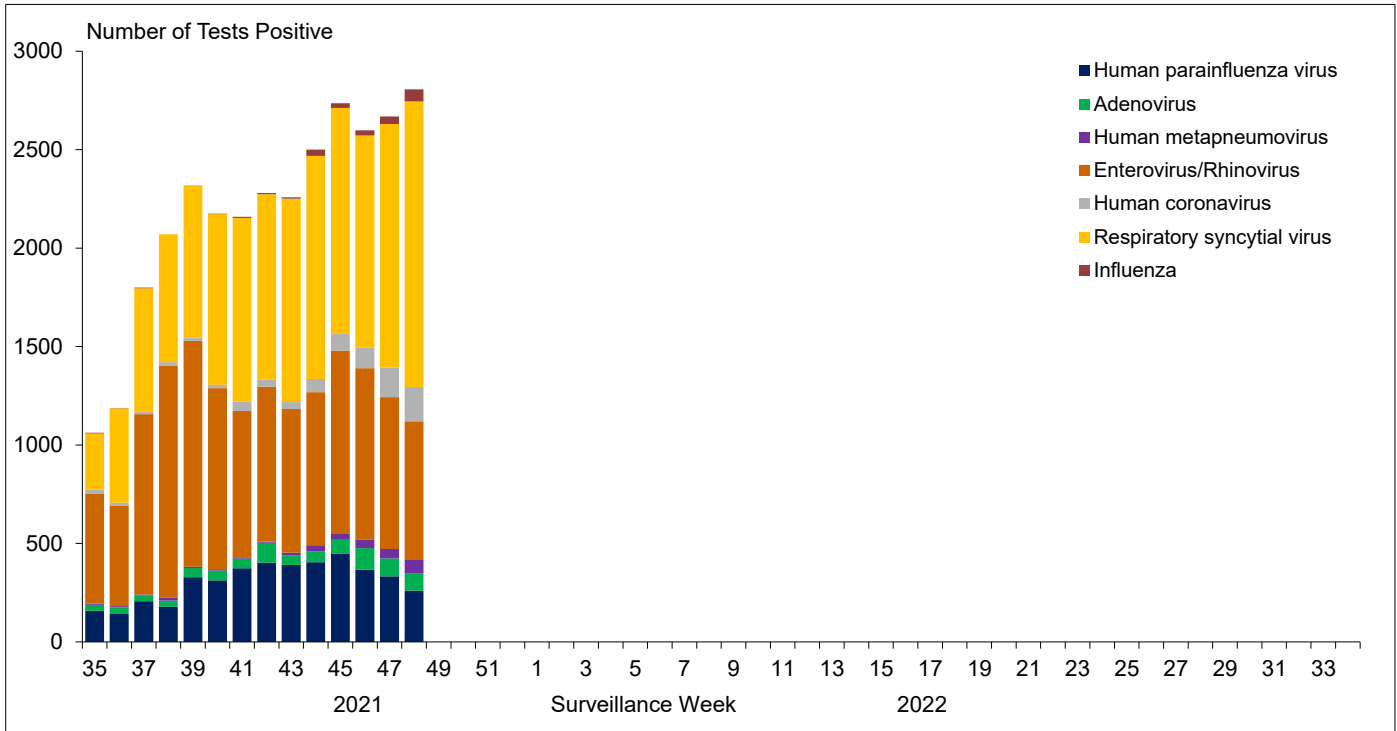


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

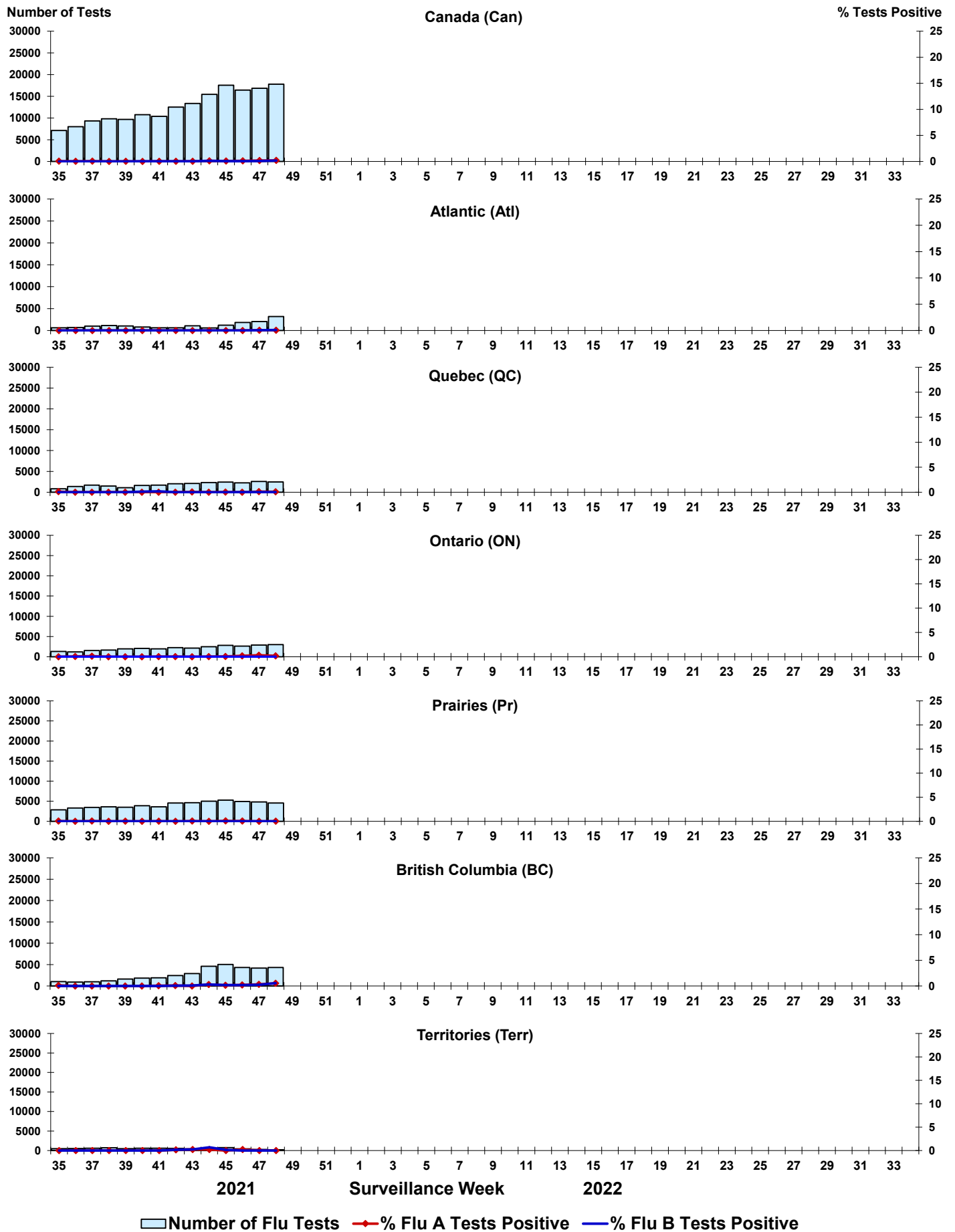


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

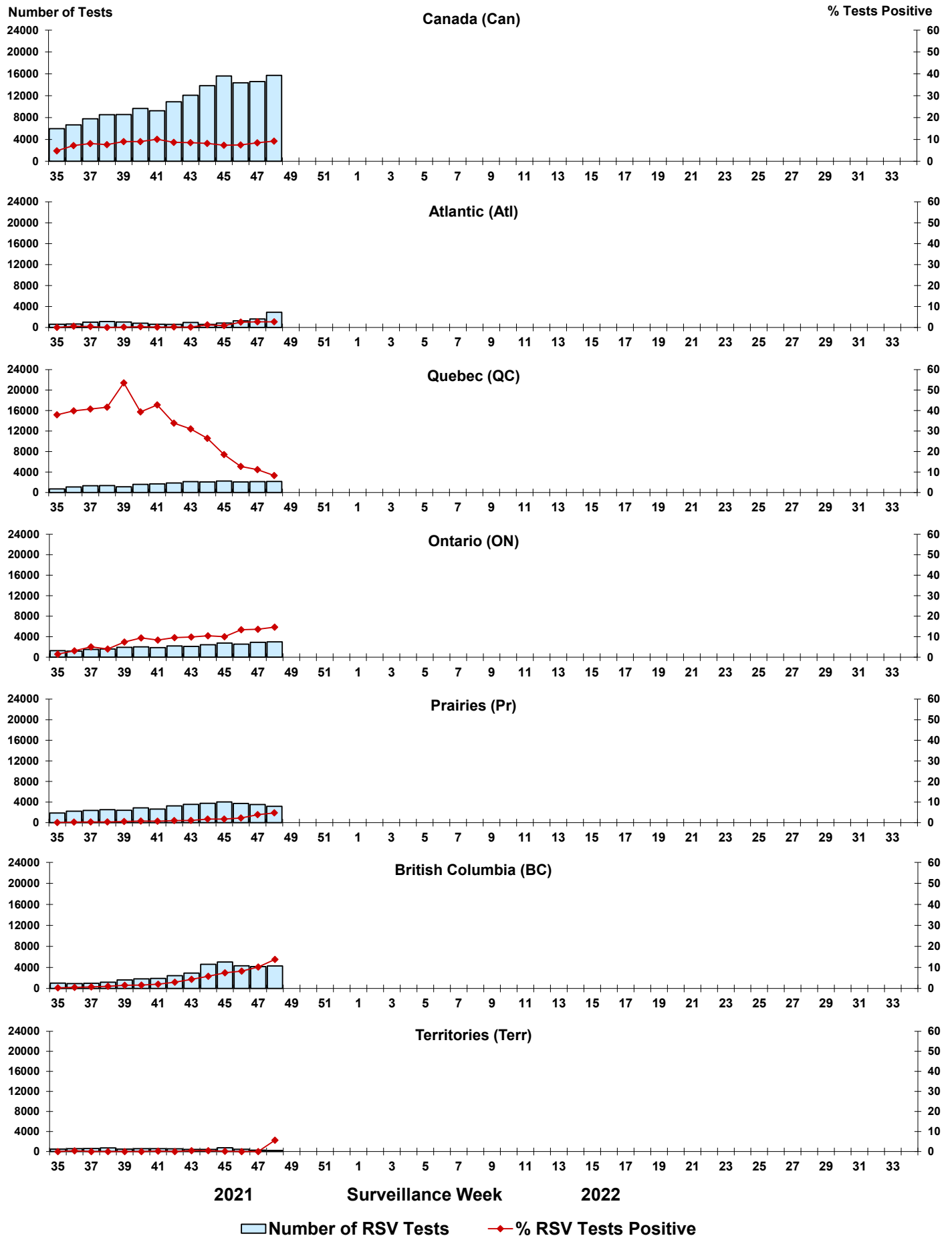


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

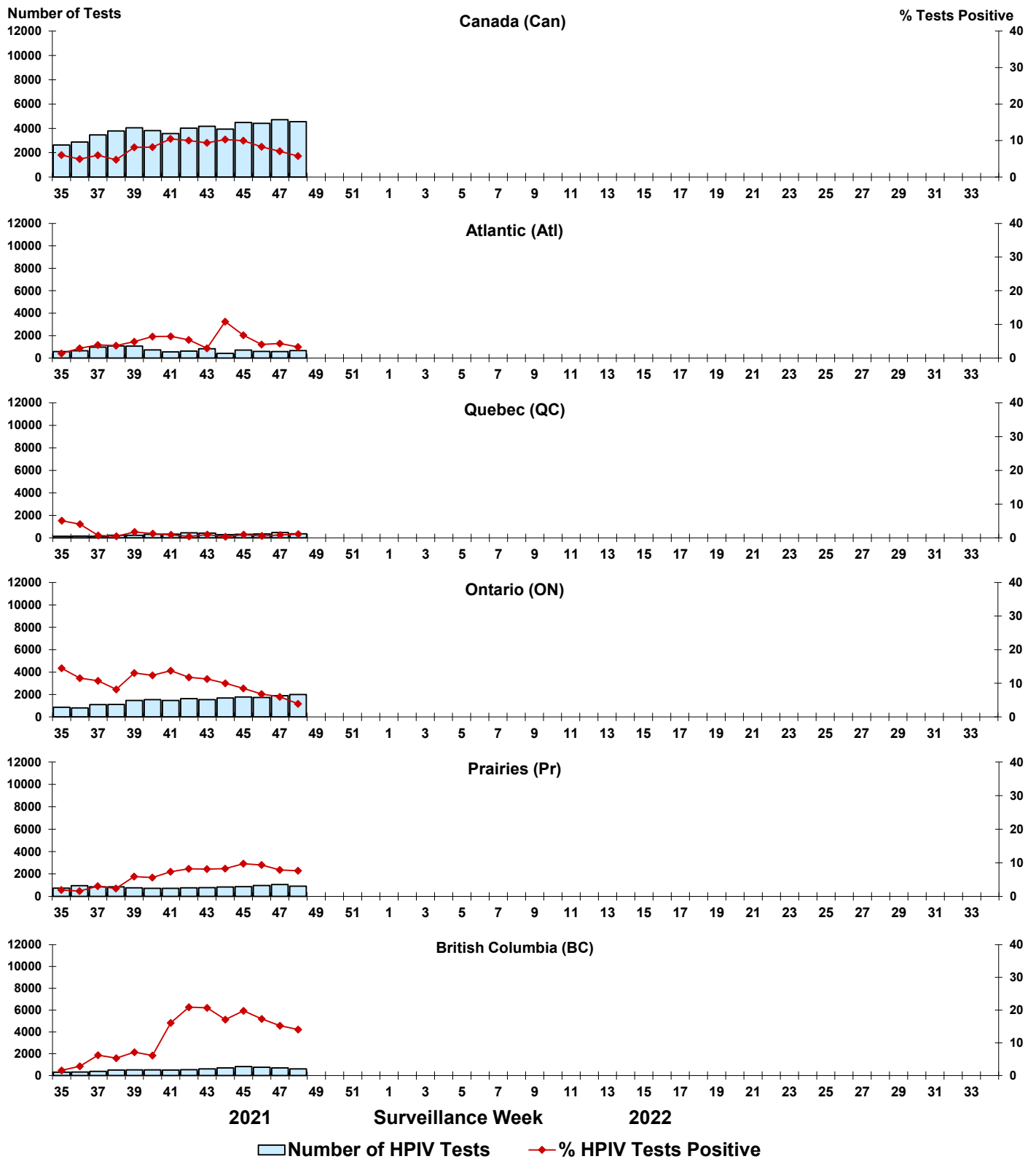


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

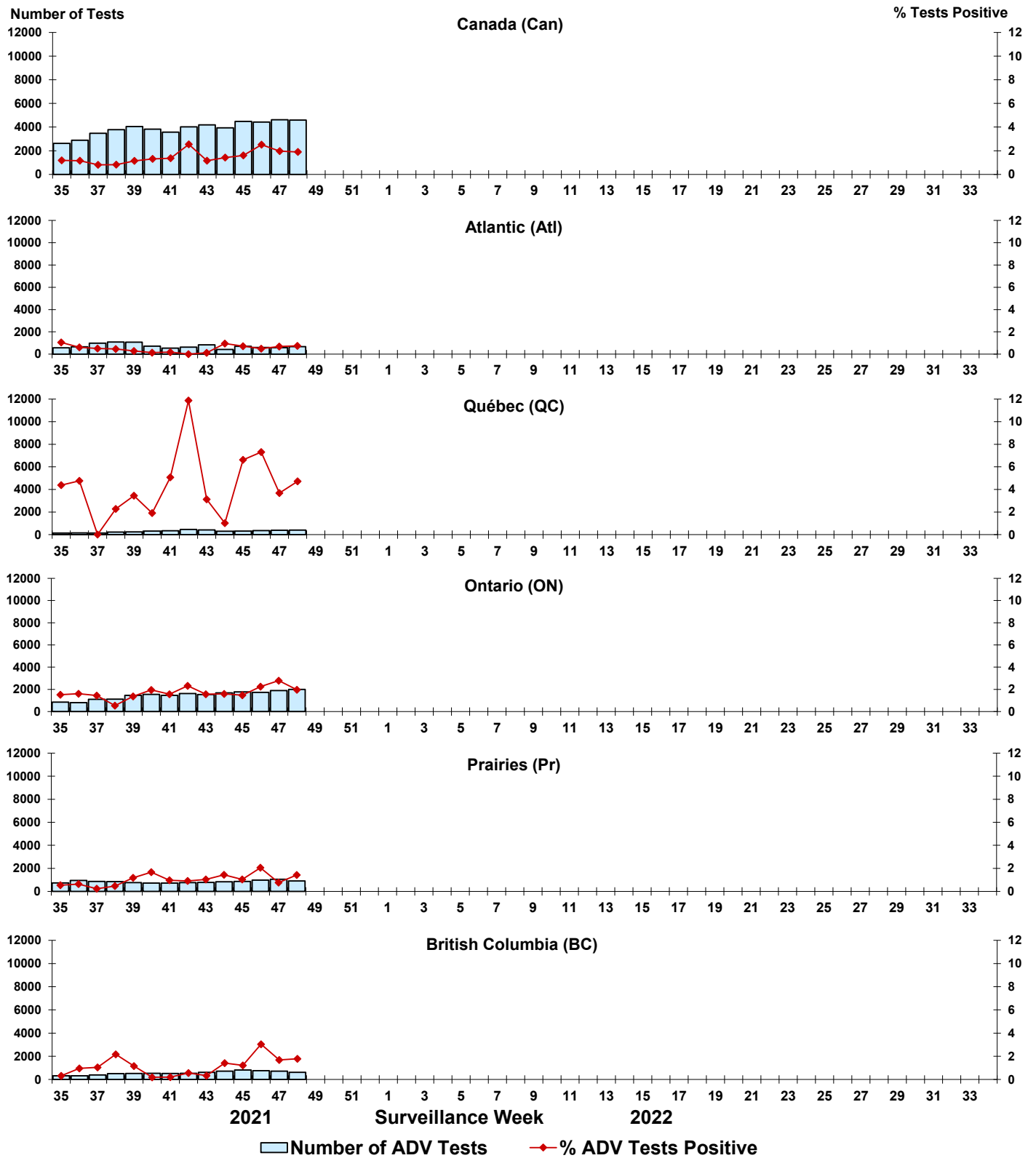


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

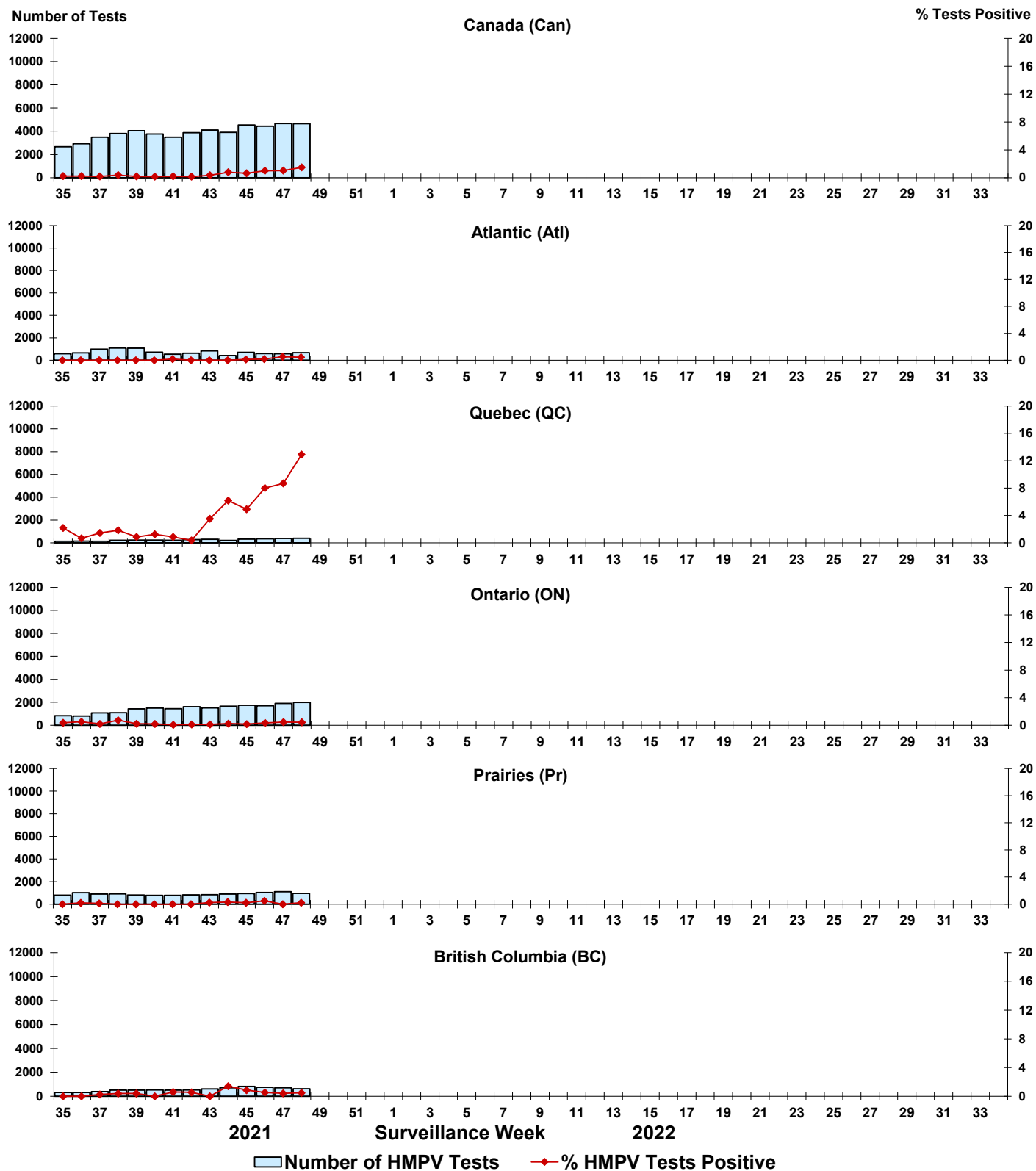


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

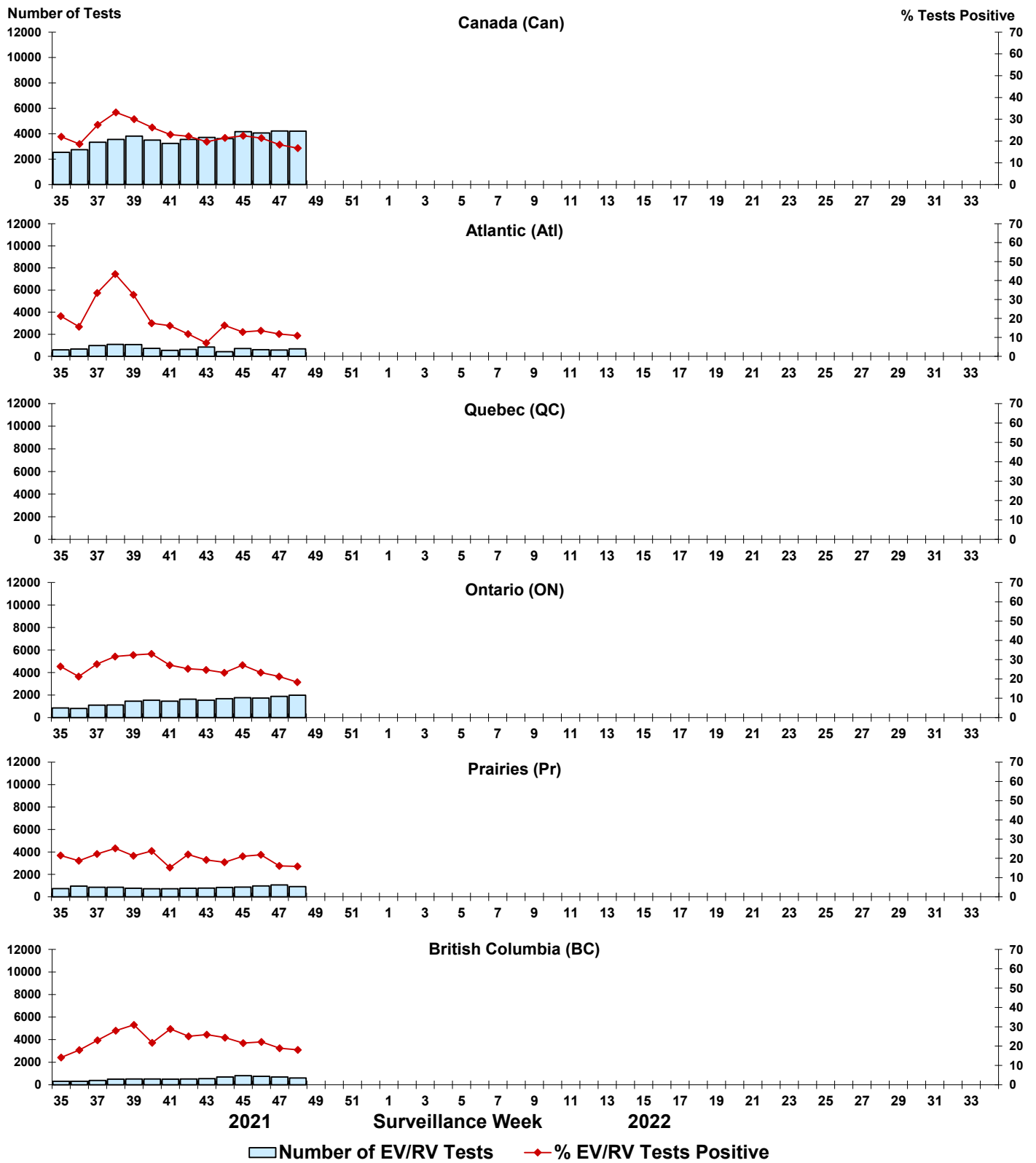


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

