

RESPIRATORY VIRUS DETECTION REPORT

February 13 to February 19, 2022
(Surveillance Week 2022-07)



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

Detections of seasonal respiratory viruses have dropped sharply since the end of December 2021. In recent weeks, activity of all seasonal respiratory viruses has stabilized and is within or below expected levels for this time of year.

- Respiratory syncytial virus (264 detections; 2.5% positive) is the most common seasonal respiratory viruses detected in Canada, but activity is below expected levels for this time of year.
- Detections of other respiratory viruses are low.
- The number of tests performed for each virus is within expected levels.
 - Due to the current COVID-19 pandemic, changes in laboratory testing practices for the past week may affect the comparability of data to previous weeks.
- 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

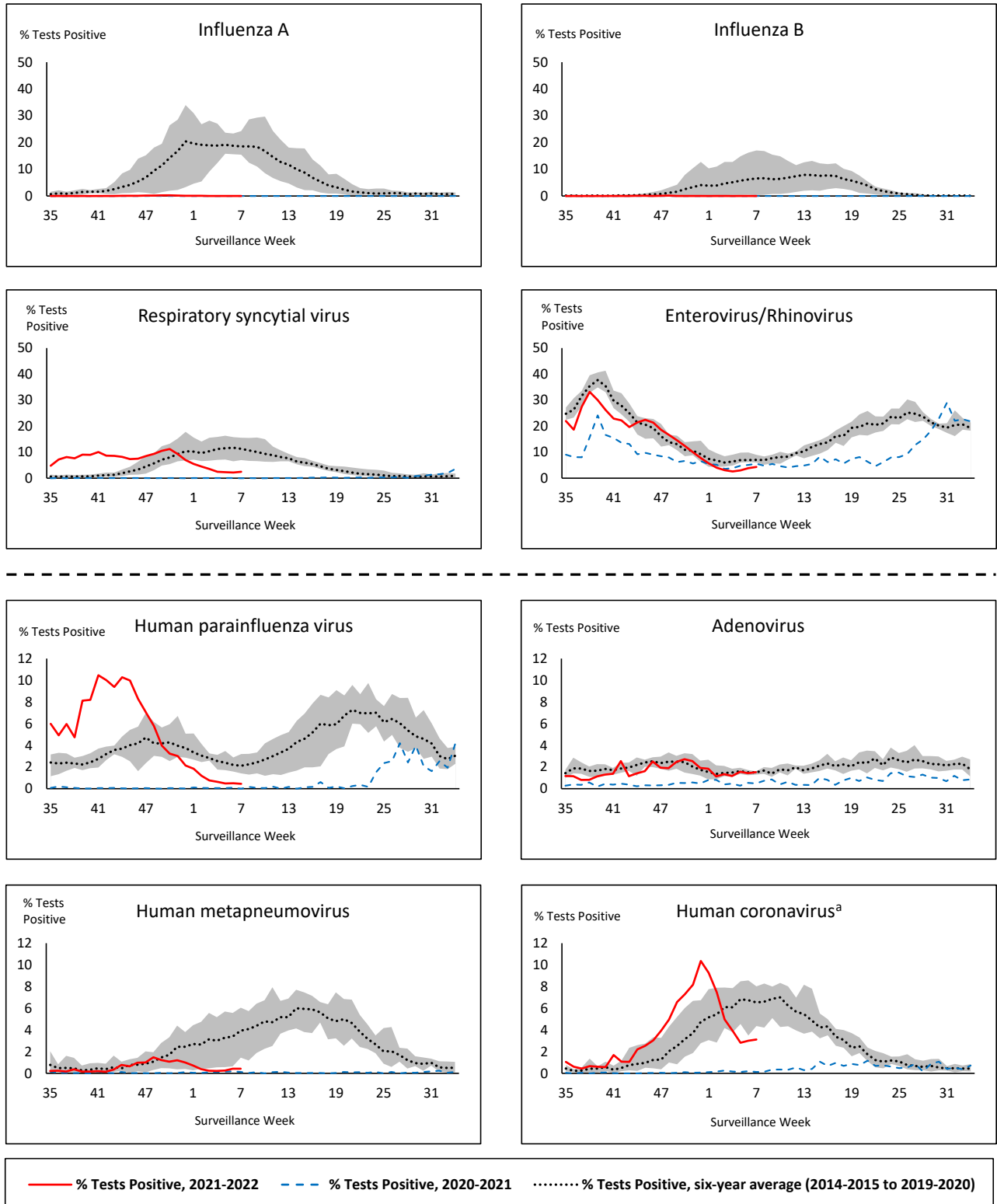
QC: Quebec

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 February 19, 2022 (surveillance week 2022-07)

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	133	0	0	0	0	0	133	2	133	0	0	0	0	0	133	1	133	1	133	0	N.C.	N.C.
Prince Edward Island	40	0	0	0	0	0	40	5	40	0	0	0	0	0	40	3	40	0	40	1	40	0
Nova Scotia	535	0	0	0	0	0	535	8	51	0	0	0	0	0	51	0	51	1	51	0	51	0
New Brunswick	386	0	0	0	0	0	289	1	9	0	0	0	0	0	9	2	9	0	9	0	9	0
Atlantic	1094	0	0	0	0	0	997	16	233	0	0	0	0	0	233	6	233	2	233	1	100	0
Région Nord-Est	330	0	0	0	0	0	78	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	35	1
Québec-Chaudière-Appalaches	21	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Centre-du-Québec	73	0	0	0	0	0	72	1	10	0	0	0	0	0	10	1	10	0	N.C.	N.C.	10	0
Montréal-Laval	327	0	0	0	0	0	295	2	148	0	0	0	0	0	148	10	148	7	N.C.	N.C.	148	1
Ouest du Québec	29	0	0	0	0	0	29	1	8	0	0	0	1	0	8	2	8	0	N.C.	N.C.	8	0
Montérégie	52	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	832	0	0	0	0	0	539	4	166	0	0	0	1	0	166	13	166	7	N.C.	N.C.	201	2
P.H.O.L. - Ottawa	17	0	0	0	0	0	17	0	17	0	0	0	0	0	17	0	17	0	17	0	17	0
EORLA	114	0	0	0	0	0	114	2	26	0	0	0	0	0	26	0	26	0	26	2	26	0
P.H.O.L. - Kingston	18	0	0	0	0	0	18	1	18	0	0	0	0	0	18	1	18	0	18	1	18	0
UHN / Mount Sinai Hospital	469	0	0	1	1	0	469	1	14	0	0	0	0	0	14	0	14	0	14	0	14	0
P.H.O.L. - Toronto	159	0	0	0	0	0	158	3	158	0	0	0	0	0	158	2	158	0	158	9	158	1
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	1	15	0	0	0	0	0	15	0	15	0	15	0	15	1
P.H.O.L. - Timmins	11	0	0	0	0	0	11	0	11	0	0	0	0	1	11	0	11	0	11	0	11	7
St. Joseph's - London	521	0	0	0	0	0	521	3	521	0	0	0	0	0	521	3	521	0	521	8	4	0
P.H.O.L. - London	45	0	0	0	0	0	45	2	45	0	0	0	0	0	45	0	45	0	45	2	45	3
P.H.O.L. - Orillia	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. - Thunder Bay	7	0	0	0	0	0	7	0	7	0	0	0	0	2	7	0	7	0	7	0	7	1
P.H.O.L. - Sudbury	4	0	0	0	0	0	4	0	4	0	0	0	0	1	4	0	4	0	4	0	4	0
P.H.O.L. - Hamilton	22	0	0	0	0	0	22	2	22	0	0	0	0	0	22	0	22	0	22	0	22	0
P.H.O.L. - Peterborough	8	0	0	0	0	0	8	0	8	0	0	0	0	0	8	0	8	0	8	0	8	0
St. Joseph's - Hamilton	523	0	0	0	0	0	523	4	523	0	0	0	0	0	523	4	523	0	523	20	0	0
Province of Ontario	1941	0	0	1	1	0	1940	19	1397	0	0	0	0	4	1397	10	1397	0	1397	43	357	13
Province of Manitoba	858	0	0	0	0	0	858	33	52	0	0	0	0	0	52	0	68	0	52	1	68	2
Province of Saskatchewan	469	0	0	0	0	0	469	25	97	0	0	1	1	0	97	1	97	1	97	2	97	6
Province of Alberta	1379	0	1	0	1	0	645	73	645	0	1	1	2	0	645	7	645	3	645	28	645	28
Prairies	2706	0	1	0	1	0	1972	131	794	0	1	2	3	0	794	8	810	4	794	31	810	36
British Columbia	5127	0	0	0	0	0	5042	85	491	1	0	2	0	0	491	10	491	0	487	48	487	10
Yukon	93	0	0	0	0	0	93	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	26	0	0	0	0	0	25	6	3	0	0	0	0	0	3	0	3	0	25	3	3	0
Nunavut	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.
Territories	121	0	0	0	0	0	119	9	4	0	0	0	0	0	4	0	4	0	26	3	4	0
CANADA	11821	0	1	1	2	0	10609	264	3085	1	1	4	4	4	3085	47	3101	13	2937	126	1959	61

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) 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: 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 February 19, 2022 (surveillance week 2021-35 to 2022-07)

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	7478	0	0	0	0	0	7477	82	7480	1	3	116	0	154	7485	24	7474	33	7481	1728	N.C.	N.C.
Prince Edward Island	1748	0	0	0	0	0	1748	129	1703	0	0	152	0	0	1748	47	1748	4	1748	435	1748	100
Nova Scotia	12226	0	1	12	13	4	12225	302	1231	0	2	38	7	0	1245	11	1245	3	1245	93	1245	29
New Brunswick	10438	0	0	6	6	0	6644	257	2516	0	0	23	1	0	2509	9	2516	5	2516	35	2425	5
Atlantic	31890	0	1	18	19	4	28094	770	12930	1	5	329	8	154	12987	91	12983	45	12990	2291	5418	134
Région Nord-Est	13962	0	0	2	2	2	6656	1431	589	0	0	6	1	0	684	14	90	1	N.C.	N.C.	875	13
Québec-Chaudière-Appalaches	4370	0	0	5	5	4	4931	994	1212	0	3	7	5	0	1135	42	1046	50	N.C.	N.C.	957	43
Centre-du-Québec	5234	0	0	3	3	4	5369	1080	455	0	0	19	0	0	455	20	463	16	N.C.	N.C.	448	9
Montréal-Laval	16007	0	0	33	33	4	15877	2433	5172	5	2	21	5	0	5171	306	5168	319	N.C.	N.C.	5168	63
Ouest du Québec	3977	0	1	7	8	0	3934	928	58	0	0	2	1	0	51	5	47	1	N.C.	N.C.	47	1
Montérégie	2487	0	0	2	2	0	2472	386	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	46037	0	1	52	53	14	39239	7252	7486	5	5	55	12	0	7496	387	6814	387	N.C.	N.C.	7495	129
P.H.O.L. - Ottawa	6376	2	1	0	3	0	6376	1437	6376	0	0	0	0	727	6376	310	6375	38	6376	2205	6375	257
EORLA	4765	0	0	0	0	0	4740	596	625	0	2	19	0	0	625	11	306	3	625	115	283	15
P.H.O.L. - Kingston	1084	0	0	0	0	0	1083	113	1082	0	0	0	0	129	1082	19	1079	2	1082	280	1079	75
UHN / Mount Sinai Hospital	11842	0	0	9	9	2	11842	86	372	0	0	0	0	0	372	0	372	0	372	11	372	2
P.H.O.L. - Toronto	6583	0	13	0	13	0	6566	263	6566	0	0	0	0	263	6568	78	6565	11	6566	854	6566	200
Sick Kids Hospital - Toronto	839	0	0	0	0	0	0	0	839	0	2	68	1	0	839	12	839	1	839	233	839	10
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	231	0	1	0	1	0	229	5	229	0	0	0	0	7	229	3	229	1	229	47	229	9
P.H.O.L. - Timmins	296	0	0	0	0	0	296	12	296	0	0	0	0	18	296	1	296	0	296	29	296	22
St. Joseph's - London	9673	0	0	14	14	0	9676	735	8119	0	0	7	0	83	8119	101	8119	9	8073	398	497	2
P.H.O.L. - London	2754	0	6	0	6	0	2747	450	2747	0	0	0	0	152	2747	62	2747	9	2747	399	2747	208
P.H.O.L. - Orillia	652	0	1	0	1	0	652	101	652	0	0	0	0	41	652	22	650	6	652	161	650	46
P.H.O.L. - Thunder Bay	217	0	0	0	0	0	217	17	217	0	0	0	0	21	217	0	217	0	217	49	217	21
P.H.O.L. - Sudbury	250	0	0	0	0	0	250	10	250	0	0	0	0	9	250	1	250	2	250	29	250	5
P.H.O.L. - Hamilton	1282	0	7	0	7	0	1274	68	1274	0	0	0	0	43	1275	9	1274	6	1274	198	1274	74
P.H.O.L. - Peterborough	505	0	0	0	0	0	505	44	504	0	0	0	0	11	504	1	502	0	504	84	502	35
St. Joseph's - Hamilton	15313	0	4	7	11	1	15307	1583	15307	2	0	648	0	0	15307	163	15307	25	15307	1575	0	0
Province of Ontario	62662	2	33	30	65	3	61760	5520	45455	2	4	742	1	1504	45458	793	45127	113	45409	6667	22176	981
Manitoba	42328	1	15	8	24	0	42328	662	1381	1	4	69	0	0	1381	19	2453	6	1381	194	2259	48
Province of Saskatchewan	19418	2	7	14	23	0	19392	330	2887	0	1	190	28	0	2886	49	2886	3	2886	400	2884	186
Province of Alberta	52308	0	9	30	39	2	20774	2157	20774	0	19	651	133	0	20774	182	20774	46	20774	2723	20774	1203
Prairies	114054	3	31	52	86	2	82494	3149	25042	1	24	910	161	0	25041	250	26113	55	25041	3317	25917	1437
British Columbia	134072	3	37	3	167	84	131755	8290	15447	6	7	1043	152	143	15447	277	15443	62	15108	2617	15157	308
Yukon	4588	0	1	0	4	7	4657	278	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	671	0	0	0	0	0	627	18	66	0	0	1	0	0	66	2	66	0	626	93	66	0
Nunavut	12248	0	0	0	0	0	12236	7	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	17507	0	1	0	4	7	17520	303	83	0	0	1	0	0	83	3	83	0	643	101	80	0
CANADA	406222	8	104	155	394	114	360862	25284	106443	15	45	3080	334	1801	106512	1801	106563	662	99191	14993	76243	2989

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 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) 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: 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

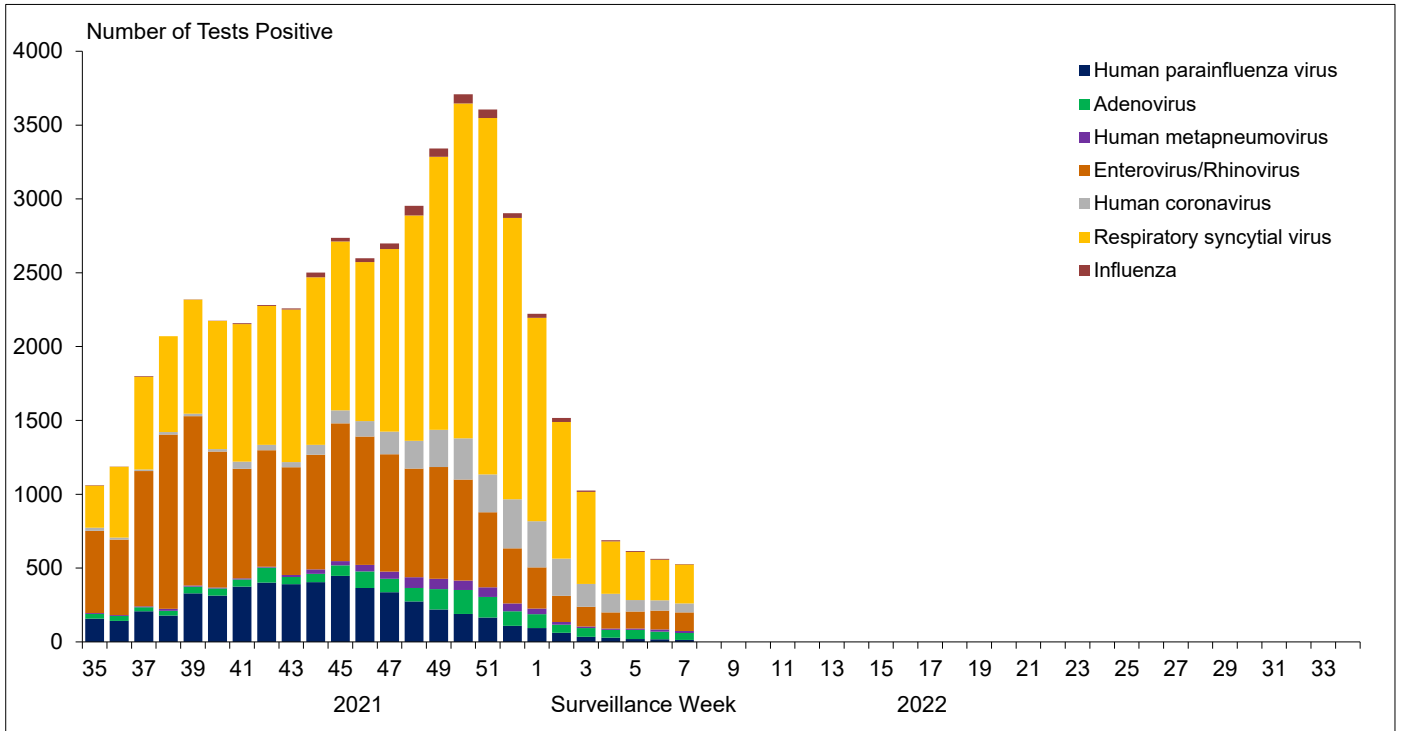


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

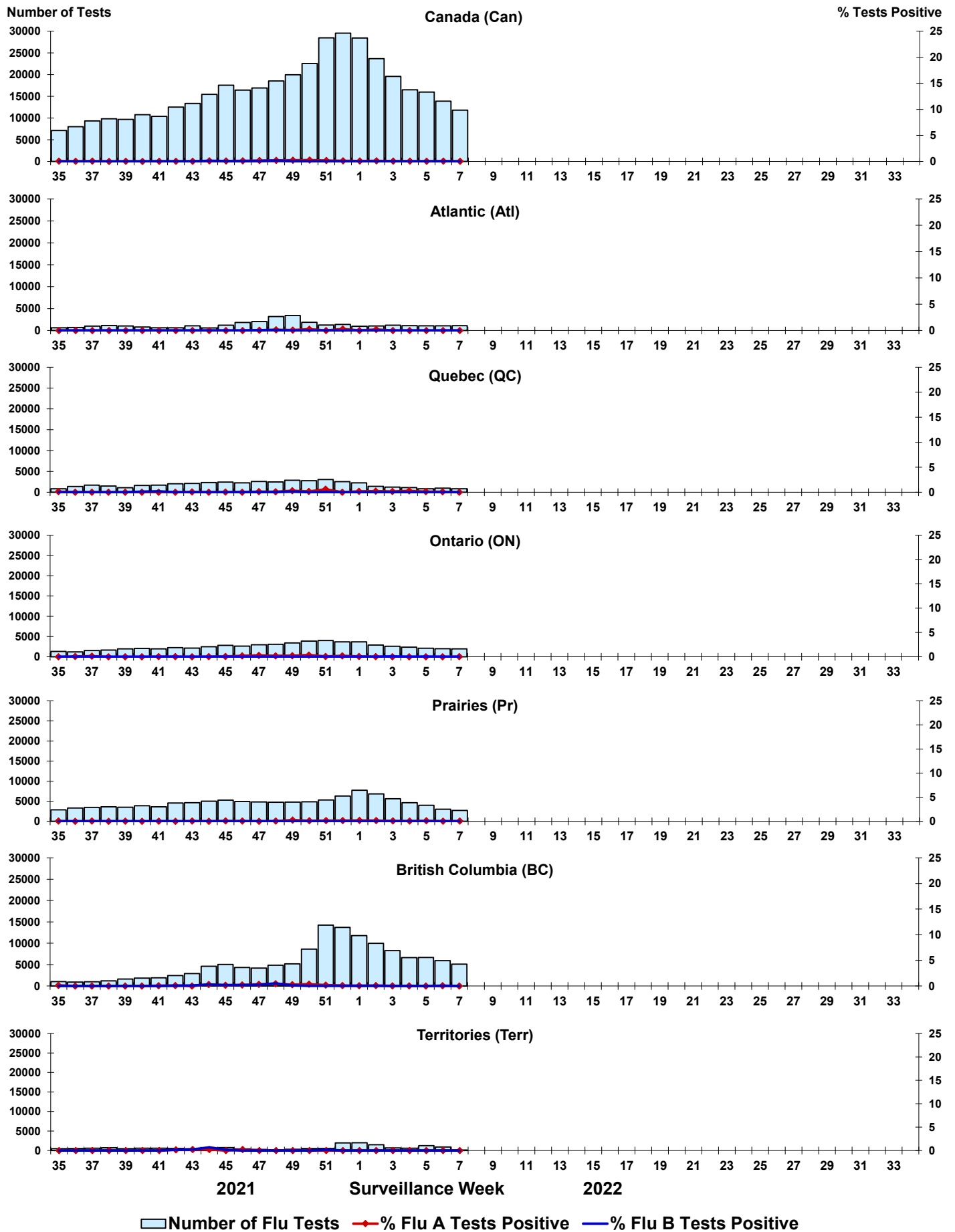


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

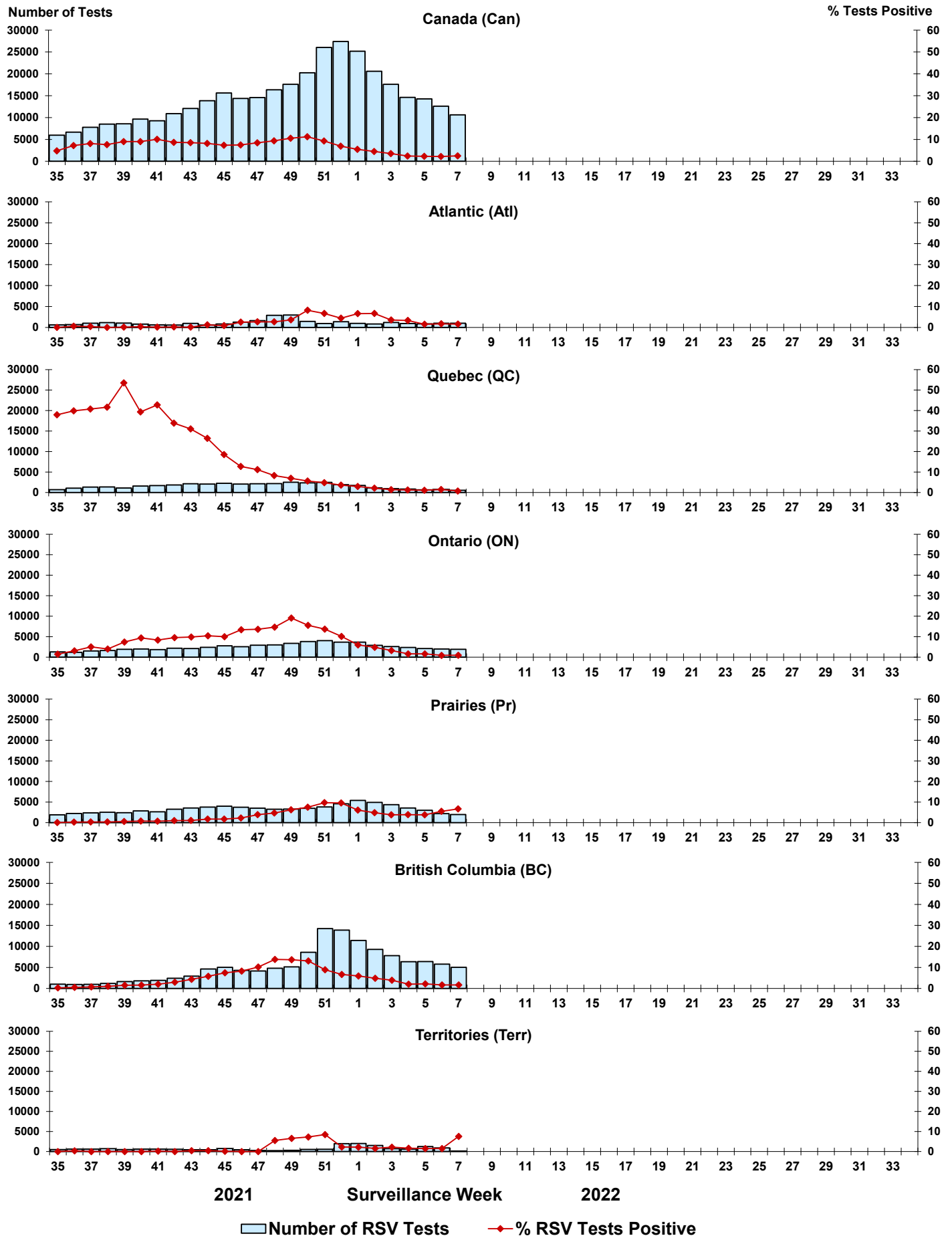


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

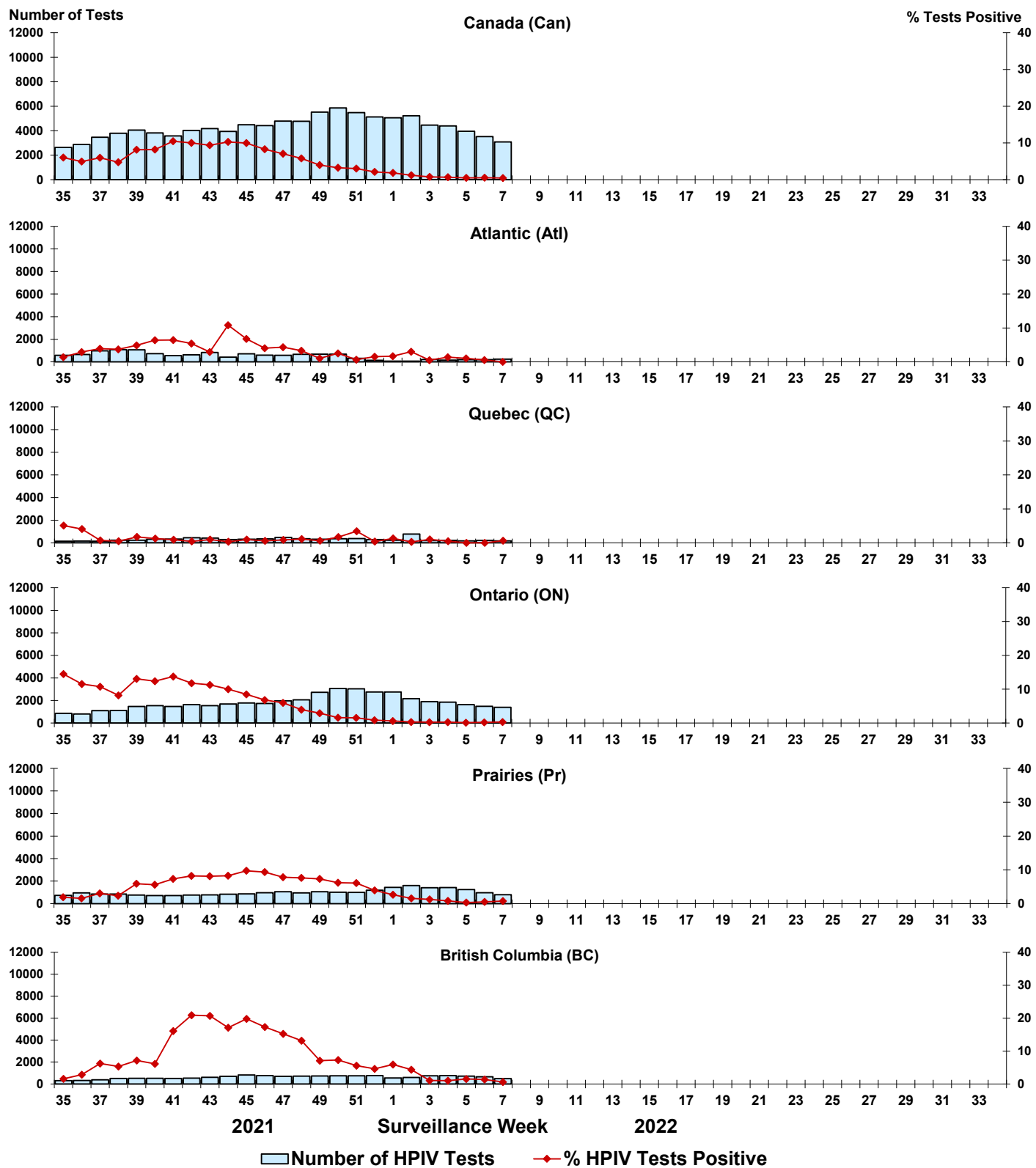


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

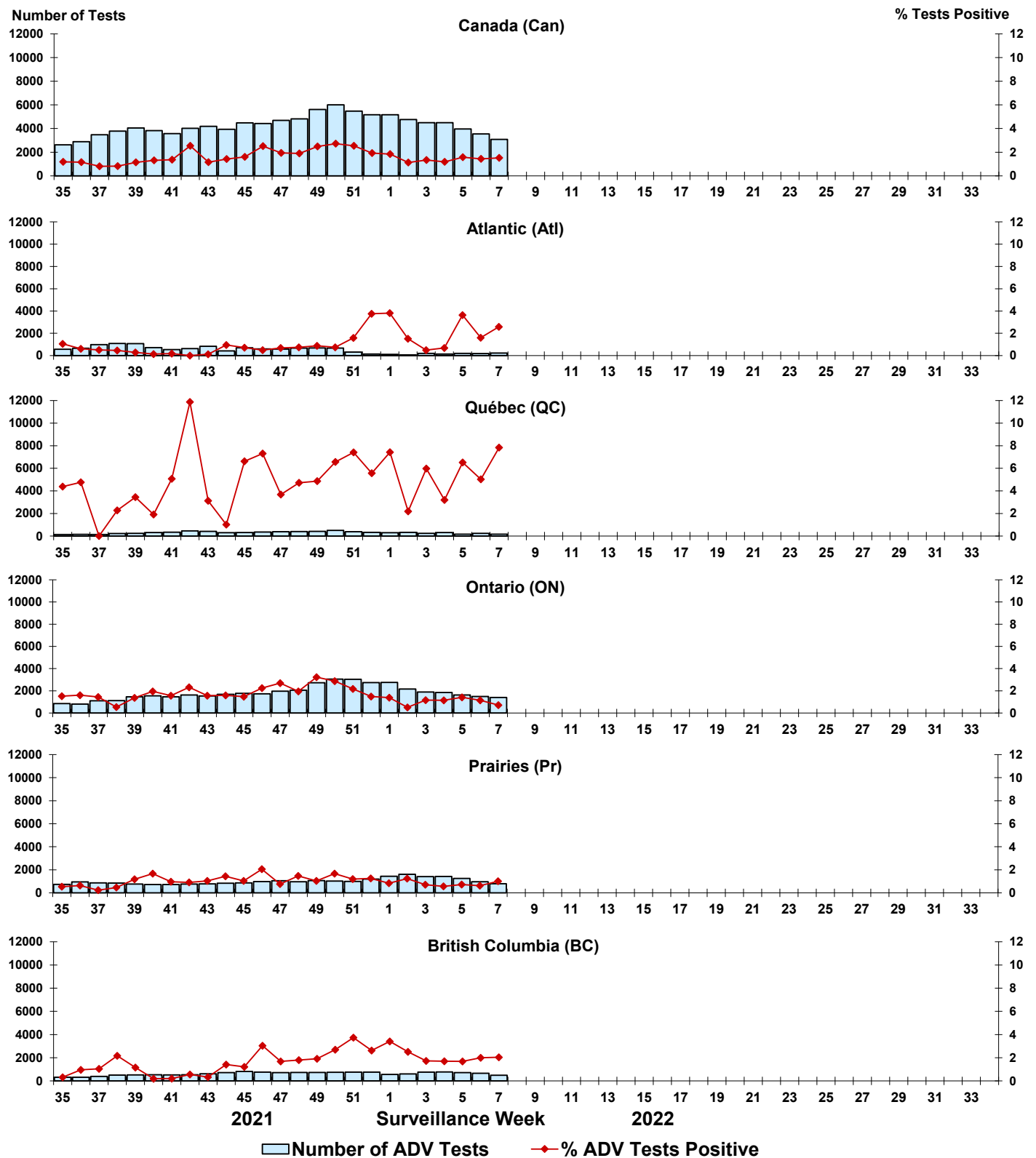


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

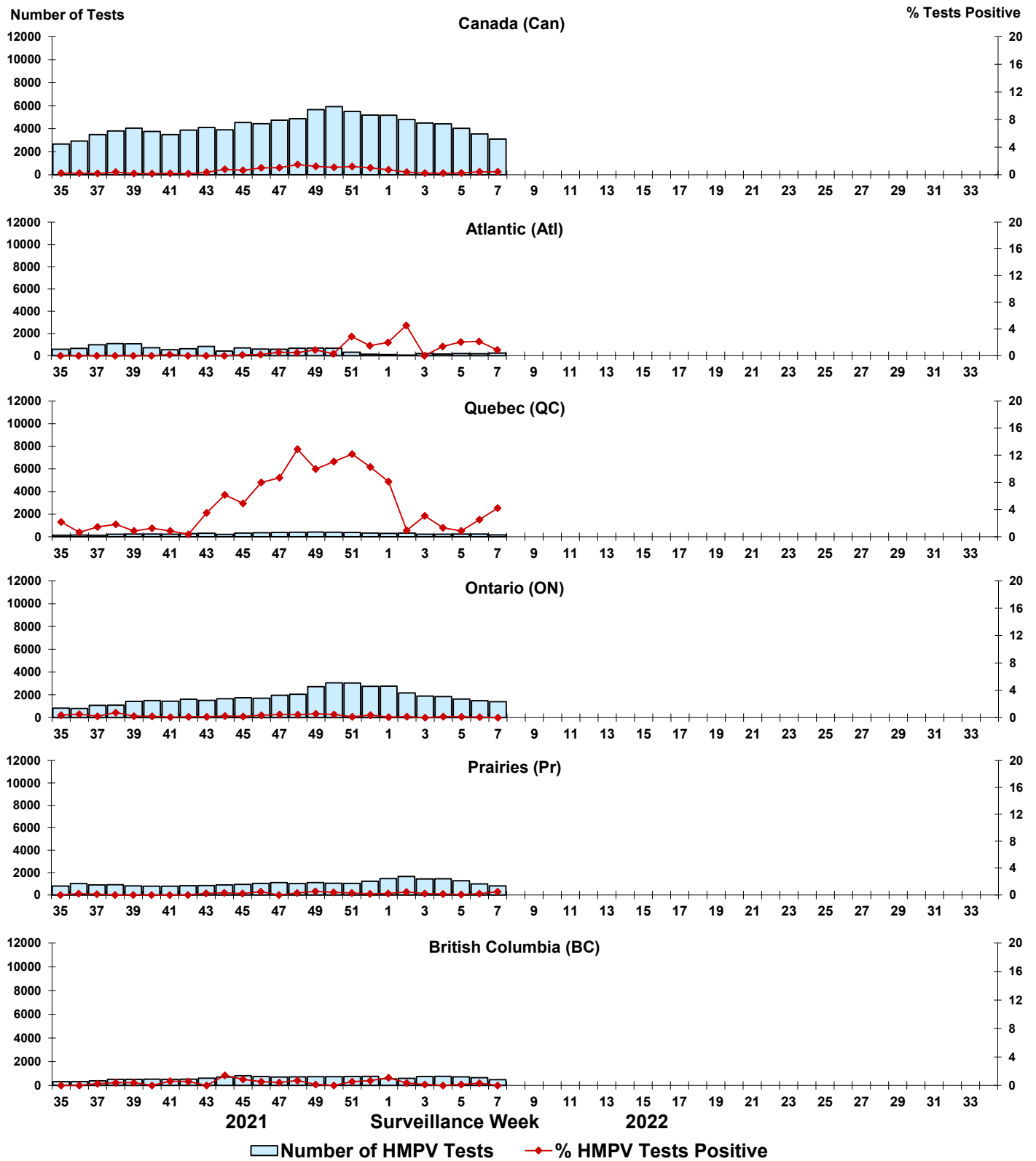


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

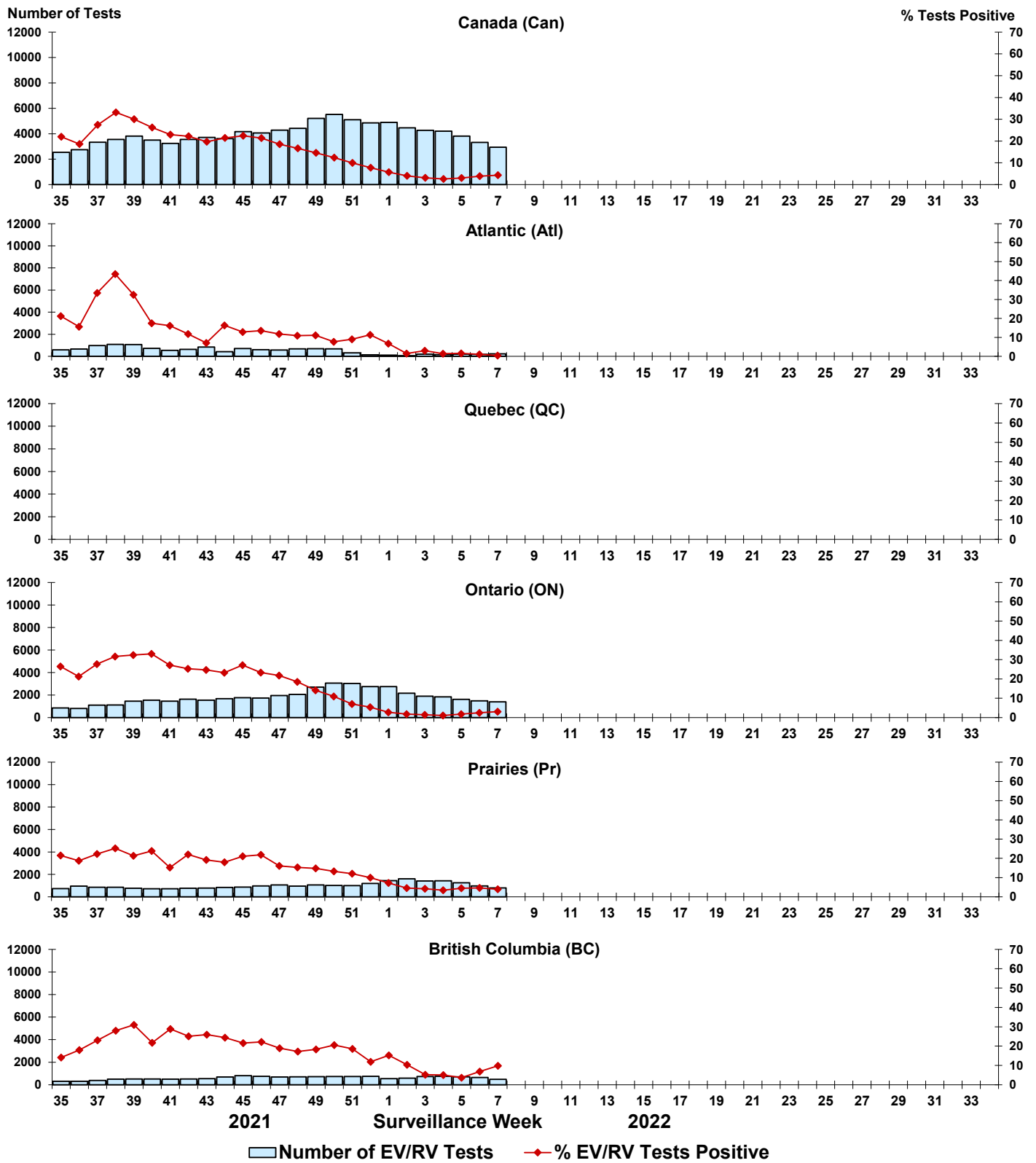


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

