

RESPIRATORY VIRUS DETECTION REPORT

July 3 to July 9, 2022
(Surveillance Week 2022-27)



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

The total number of respiratory virus detections have decreased in recent weeks.

- Influenza activity has continued to decrease, and remains below the epidemic threshold and near expected levels.
 - A total of 140 influenza detections were reported (135 influenza A, 5 influenza B).
- Enterovirus/Rhinovirus remains the most common seasonal respiratory virus detected in Canada (325 detections; 15.2% positive). Activity is fluctuating and below expected levels for this time of year.
- Activity of most other respiratory viruses is near expected levels.
 - With the exception of human metapneumovirus, where activity has increased in recent weeks and is above expected levels for this time of year (187 detections; 6.8% positive).
- The number of tests performed for all viruses was above expected levels.
- 30/34 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

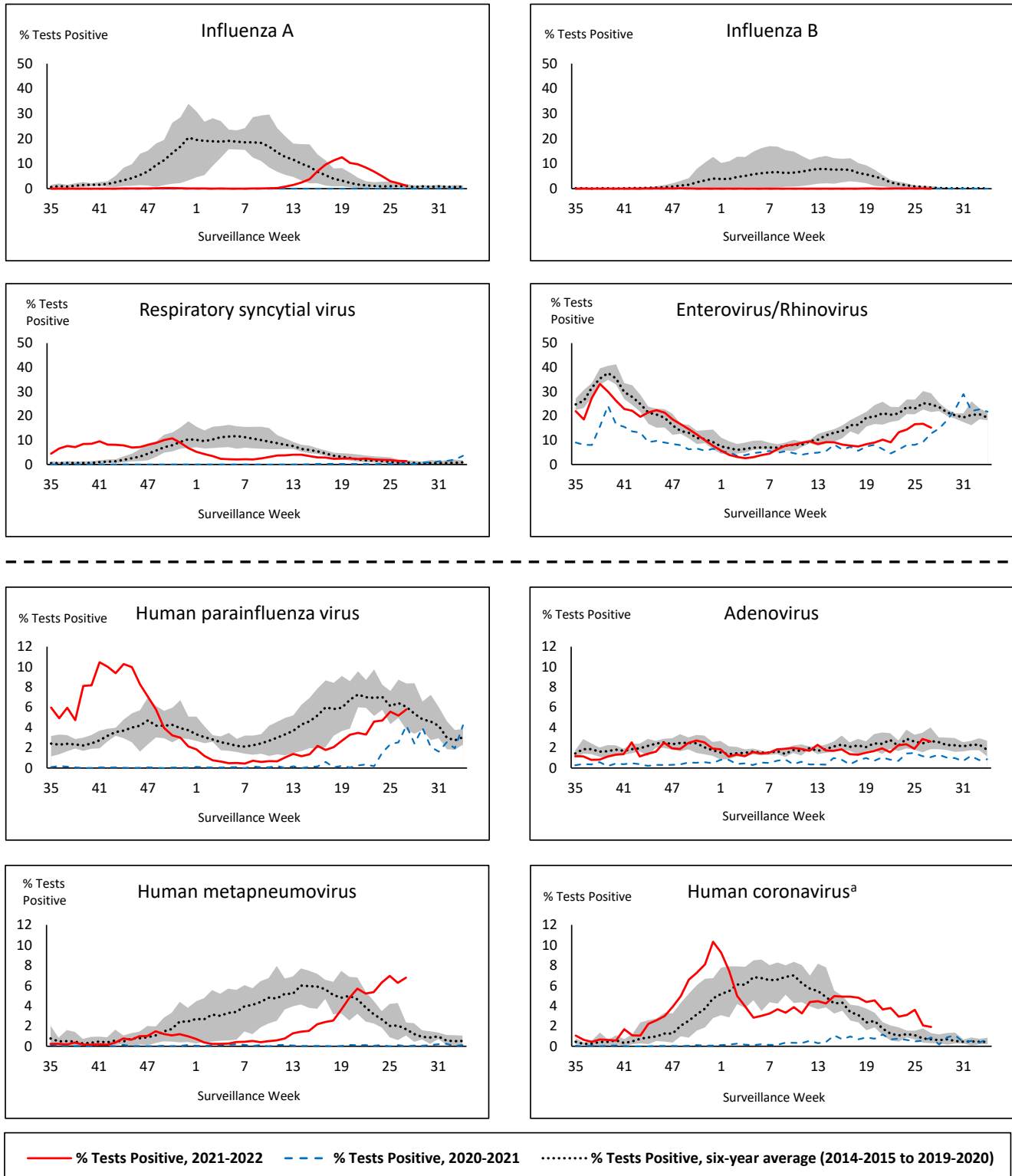
QC: Quebec

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 July 9, 2022 (surveillance week 2022-27)

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	172	0	0	1	1	0	172	16	172	0	3	0	0	0	172	0	172	7	172	8	172	4
Prince Edward Island	22	0	1	0	1	0	22	0	22	0	0	0	1	0	22	1	22	5	22	8	22	0
Nova Scotia	522	0	0	10	10	0	522	13	73	0	1	1	0	0	73	1	73	6	73	7	73	0
New Brunswick	369	0	5	22	27	0	206	2	40	0	4	2	1	0	40	4	40	5	40	13	40	0
Atlantic	1085	0	6	33	39	0	922	31	307	0	8	3	2	0	307	6	307	23	307	36	307	4
Région Nord-Est	1161	0	0	5	5	2	452	3	3	0	1	0	0	0	3	0	3	1	N.C.	N.C.	3	0
Québec-Chaudière-Appalaches	653	0	0	4	4	3	653	1	21	0	1	0	1	0	249	3	246	2	N.C.	N.C.	130	2
Centre-du-Québec	505	0	0	8	8	0	388	5	17	0	0	1	0	0	17	0	17	0	N.C.	N.C.	17	0
Montréal-Laval	1684	0	0	6	6	0	974	9	367	3	4	22	1	0	367	18	367	13	N.C.	N.C.	400	7
Ouest du Québec	179	0	0	4	4	0	179	2	13	0	0	1	0	0	13	3	13	2	N.C.	N.C.	13	0
Montréal	427	0	0	5	5	0	427	1	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	4609	0	0	32	32	5	3073	21	421	3	6	24	2	0	649	24	646	18	N.C.	N.C.	563	9
P.H.O.L. - Ottawa	26	0	0	0	0	0	26	0	26	0	0	0	0	1	26	0	26	0	26	1	26	3
EORLA	256	0	0	3	3	0	256	1	40	0	0	1	2	0	40	2	40	3	40	10	40	0
P.H.O.L. - Kingston	50	0	0	0	0	0	50	1	48	0	0	0	0	5	48	0	48	8	48	17	48	1
UHN / Mount Sinai Hospital	451	0	0	1	1	0	451	0	15	0	0	0	0	0	15	0	15	0	15	1	15	0
P.H.O.L. - Toronto	305	0	2	0	1	0	305	3	305	0	0	0	0	17	305	8	305	36	305	37	305	16
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	9	0	0	0	0	0	9	3	9	0	0	0	0	0	9	1	9	0	9	3	9	0
P.H.O.L. - Timmins	11	0	0	0	0	0	11	0	11	0	0	0	0	1	11	0	11	2	11	2	11	0
St. Joseph's - London	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. - London	69	0	0	0	0	0	69	1	69	0	0	0	0	3	69	3	69	6	69	14	69	3
P.H.O.L. - Orillia	31	0	0	0	0	0	31	2	31	0	0	0	0	3	31	2	31	6	31	5	31	3
P.H.O.L. - Thunder Bay	4	0	1	0	1	0	4	0	4	0	0	0	0	0	4	0	4	0	4	0	4	0
P.H.O.L. - Sudbury	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. - Hamilton	54	0	1	0	1	0	54	1	54	0	0	0	0	5	54	1	54	4	54	4	54	1
P.H.O.L. - Peterborough	9	0	0	0	0	0	9	2	9	0	0	0	0	0	9	0	9	1	9	3	9	0
St. Joseph's - Hamilton	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.
Province of Ontario	1279	0	4	4	7	0	1279	14	625	0	0	1	2	35	625	17	625	66	625	98	625	27
Province of Manitoba	374	0	0	0	0	0	374	7	126	0	1	3	2	0	126	7	133	8	126	19	133	3
Province of Saskatchewan	291	0	0	3	3	0	291	4	48	0	0	0	1	0	48	0	48	7	48	15	47	0
Province of Alberta	1656	0	16	6	22	0	1464	21	580	0	5	29	4	0	580	5	578	14	558	75	580	4
Prairies	2321	0	16	9	25	0	2129	32	754	0	6	32	7	0	754	12	759	29	732	109	760	7
British Columbia	2339	0	9	0	31	0	2221	21	424	0	2	6	8	0	424	13	424	51	418	67	418	4
Yukon	8	0	0	0	0	0	8	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	61	0	0	0	0	0	61	14	2	0	0	0	0	0	2	0	2	0	59	15	2	0
Nunavut	95	0	1	0	1	0	95	9	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	164	0	1	0	1	0	164	23	3	0	0	0	0	0	3	0	3	0	60	15	3	0
CANADA	11797	0	36	78	135	5	9788	142	2534	3	22	66	21	35	2762	72	2764	187	2142	325	2676	51

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.

Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts, as some subtype detections are not available through routine testing but are subsequently reported if further subtype testing is conducted. In these instances, subtype counts do not reflect influenza A detections intended to be captured by routine surveillance, and are excluded from total detections and percent positivity.

Table 2: Cumulative respiratory virus detections from August 29, 2021 to July 9, 2022 (surveillance week 2021-35 to 2022-27)

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	14741	0	0	317	317	0	14739	218	14742	1	28	116	0	314	14749	48	14736	85	14803	2136	523	19
Prince Edward Island	2601	0	48	17	65	0	2601	259	2556	0	0	158	24	1	2601	70	2601	101	2601	607	2601	140
Nova Scotia	24107	0	2	401	403	8	24112	382	1854	0	4	42	29	0	1874	23	1874	52	1874	166	1874	48
New Brunswick	19219	0	111	381	492	0	12250	339	3409	0	8	33	29	0	3402	38	3409	43	3409	132	3318	18
Atlantic	60668	0	161	1116	1277	8	53702	1198	22561	1	40	349	82	315	22626	179	22620	281	22687	3041	8316	225
Région Nord-Est	34450	45	1	2189	2235	26	15572	1465	820	2	1	10	1	0	911	18	424	16	N.C.	N.C.	1255	24
Québec-Chaudière-Appalaches	13108	0	0	1427	1427	54	14178	1011	1785	1	17	11	18	0	4708	136	4606	131	N.C.	N.C.	2859	112
Centre-du-Québec	13611	0	3	1281	1284	11	12196	1101	1425	4	8	30	3	0	1425	41	1433	27	N.C.	N.C.	1418	30
Montréal-Laval	35649	0	5	1549	1554	8	30318	2488	9744	26	87	94	10	0	9743	559	9741	402	N.C.	N.C.	10001	250
Ouest du Québec	8452	0	6	650	656	0	8394	942	285	1	8	8	7	0	278	25	274	15	N.C.	N.C.	274	6
Montréal	6047	0	0	313	313	0	5256	394	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	111317	45	15	7409	7469	99	85914	7401	14059	34	121	153	39	0	17065	779	16478	591	N.C.	N.C.	15807	422
P.H.O.L. - Ottawa	7096	2	81	1	84	0	7096	1442	7096	0	0	0	0	742	7096	313	7094	47	7096	2254	7094	295
EORLA	8471	0	0	175	175	0	8446	653	1255	0	2	27	12	0	1255	25	936	27	1255	204	913	30
P.H.O.L. - Kingston	1617	0	219	0	8	0	1624	141	1621	0	0	0	0	142	1622	27	1603	29	1621	375	1603	100
UHN / Mount Sinai Hospital	21046	0	0	56	56	5	21047	118	698	0	0	0	0	0	698	1	698	2	698	18	698	13
P.H.O.L. - Toronto	11378	2	377	1	124	0	11365	297	11365	0	0	0	0	419	11371	170	11355	208	11365	1286	11356	493
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	364	0	4	1	4	0	363	12	363	0	0	0	0	9	363	4	363	2	363	57	363	23
P.H.O.L. - Timmins	524	0	17	0	10	0	524	28	524	0	0	0	0	23	524	1	523	5	524	42	523	33
St. Joseph's - London	13050	0	0	71	71	0	13053	783	11496	0	0	7	0	96	11496	155	11496	99	11450	636	548	4
P.H.O.L. - London	4065	0	56	10	58	0	4064	468	4064	0	0	0	0	189	4064	98	4061	102	4064	527	4061	300
P.H.O.L. - Orillia	1076	0	8	1	9	0	1076	146	1076	0	0	0	0	70	1076	38	1073	66	1076	266	1073	80
P.H.O.L. - Thunder Bay	363	0	6	0	5	0	363	27	363	0	0	0	0	25	363	1	363	12	363	63	363	37
P.H.O.L. - Sudbury	384	0	6	0	6	0	384	12	384	0	0	0	0	12	384	2	384	7	384	35	384	14
P.H.O.L. - Hamilton	2119	0	25	2	23	0	2114	79	2114	0	0	0	0	74	2115	22	2114	54	2114	279	2114	114
P.H.O.L. - Peterborough	687	0	2	0	2	0	687	51	680	0	0	0	0	15	680	6	677	4	680	114	677	45
St. Joseph's - Hamilton	24329	0	4	237	241	1	24323	1651	24323	5	0	663	0	0	24323	234	24323	263	24323	2098	0	0
Province of Ontario	97408	4	805	555	876	6	96529	5908	68261	5	4	765	13	1816	68269	1109	67902	928	68215	8487	32609	1591
Manitoba	57703	1	85	487	573	0	57703	1415	3651	2	15	80	25	0	3651	66	5070	52	3651	467	4876	98
Province of Saskatchewan	30192	2	477	294	773	0	30157	1751	6062	1	18	210	95	0	6062	119	6062	120	6062	911	6050	313
Province of Alberta	91048	8	1797	842	2647	3	70529	3664	37291	6	161	862	257	0	37283	401	37268	605	36913	4241	37291	1549
Prairies	178943	11	2359	1623	3993	3	158389	6830	47004	9	194	1152	377	0	46996	586	48400	777	46626	5619	48217	1960
British Columbia	207349	13	920	6	1363	88	202413	9402	28280	12	30	1119	329	189	28280	568	28276	615	27739	4278	27757	989
Yukon	5472	1	5	2	14	7	5481	308	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	2002	0	205	1	206	0	1962	212	128	0	1	2	0	0	128	3	128	0	1920	225	128	1
Nunavut	16506	0	402	7	409	0	16504	423	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	23980	1	612	10	629	7	23947	943	180	0	1	6	0	0	180	6	180	0	1972	238	163	1
CANADA	679665	74	4872	10719	15607	211	620894	31682	180345	61	390	3544	840	2320	183416	3227	183856	3192	167239	21663	132869	5188

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.

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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.

Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts, as some subtype detections are not available through routine testing but are subsequently reported if further subtype testing is conducted. In these instances, subtype counts do not reflect influenza A detections intended to be captured by routine surveillance, and are excluded from total detections and percent positivity.

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

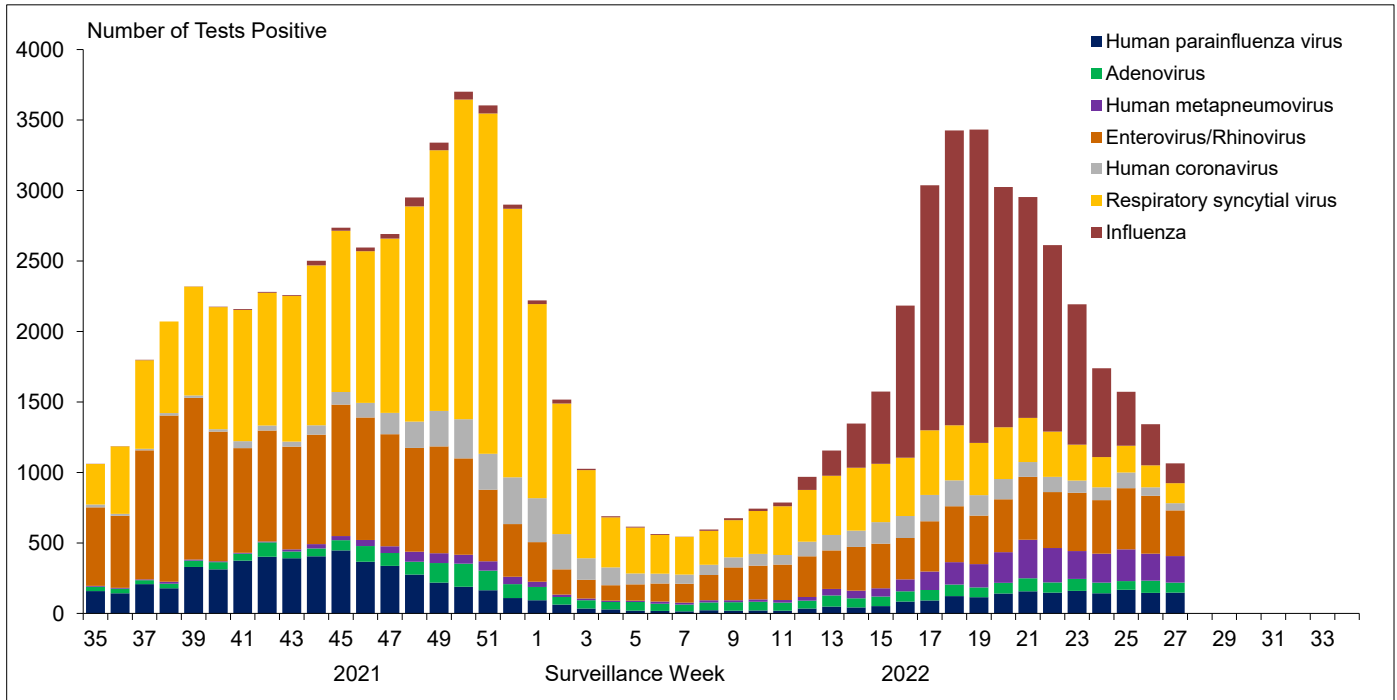


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

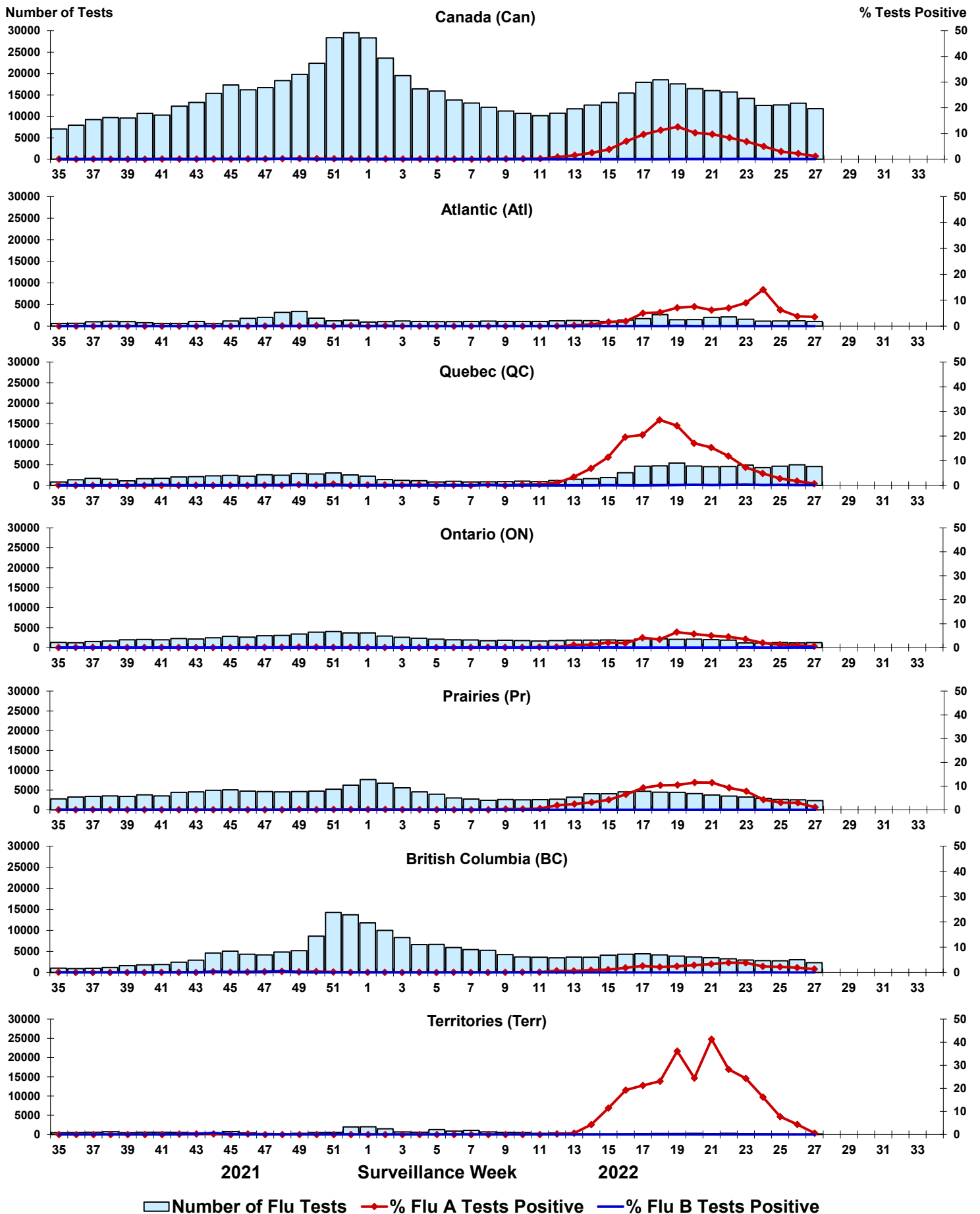


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

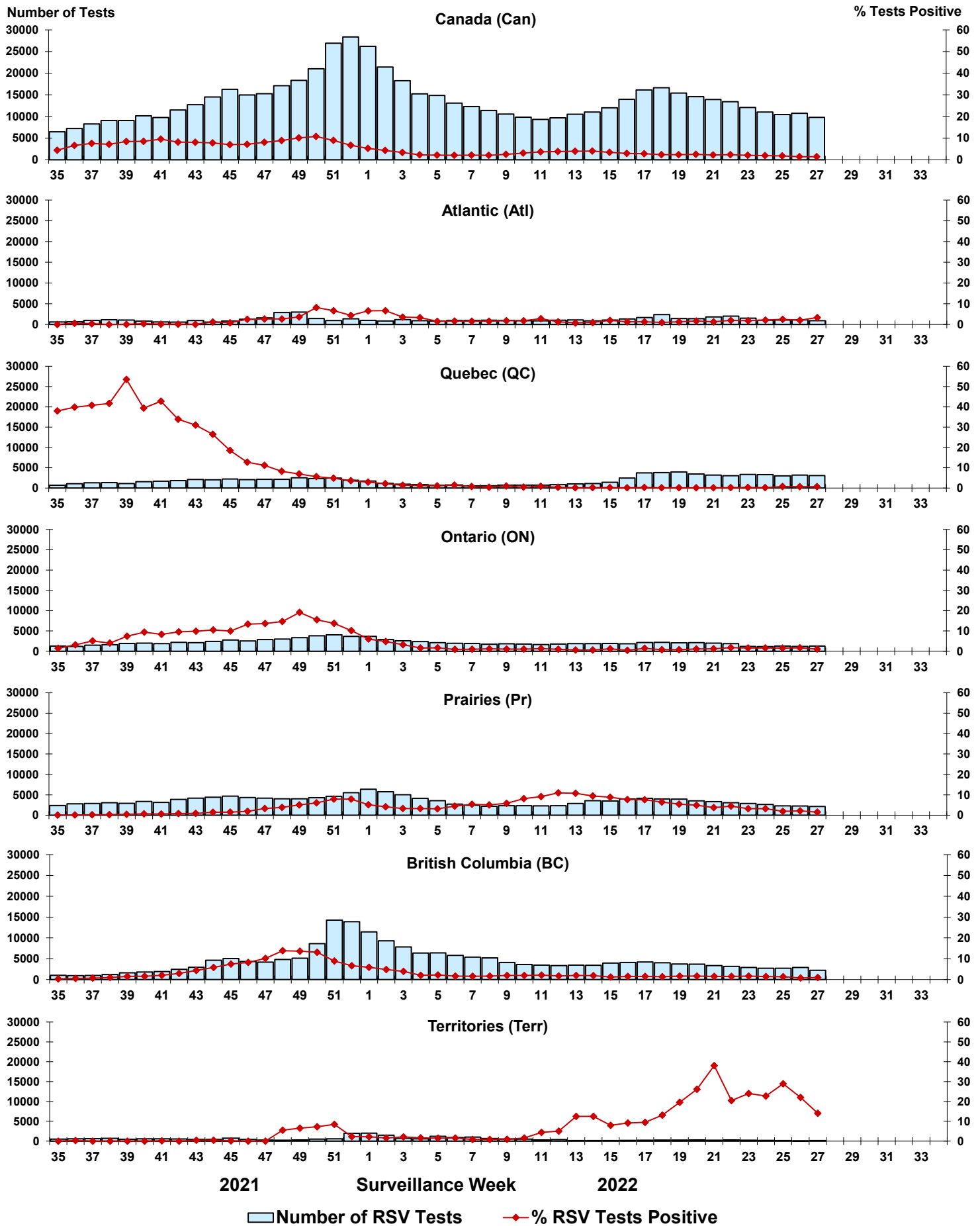


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

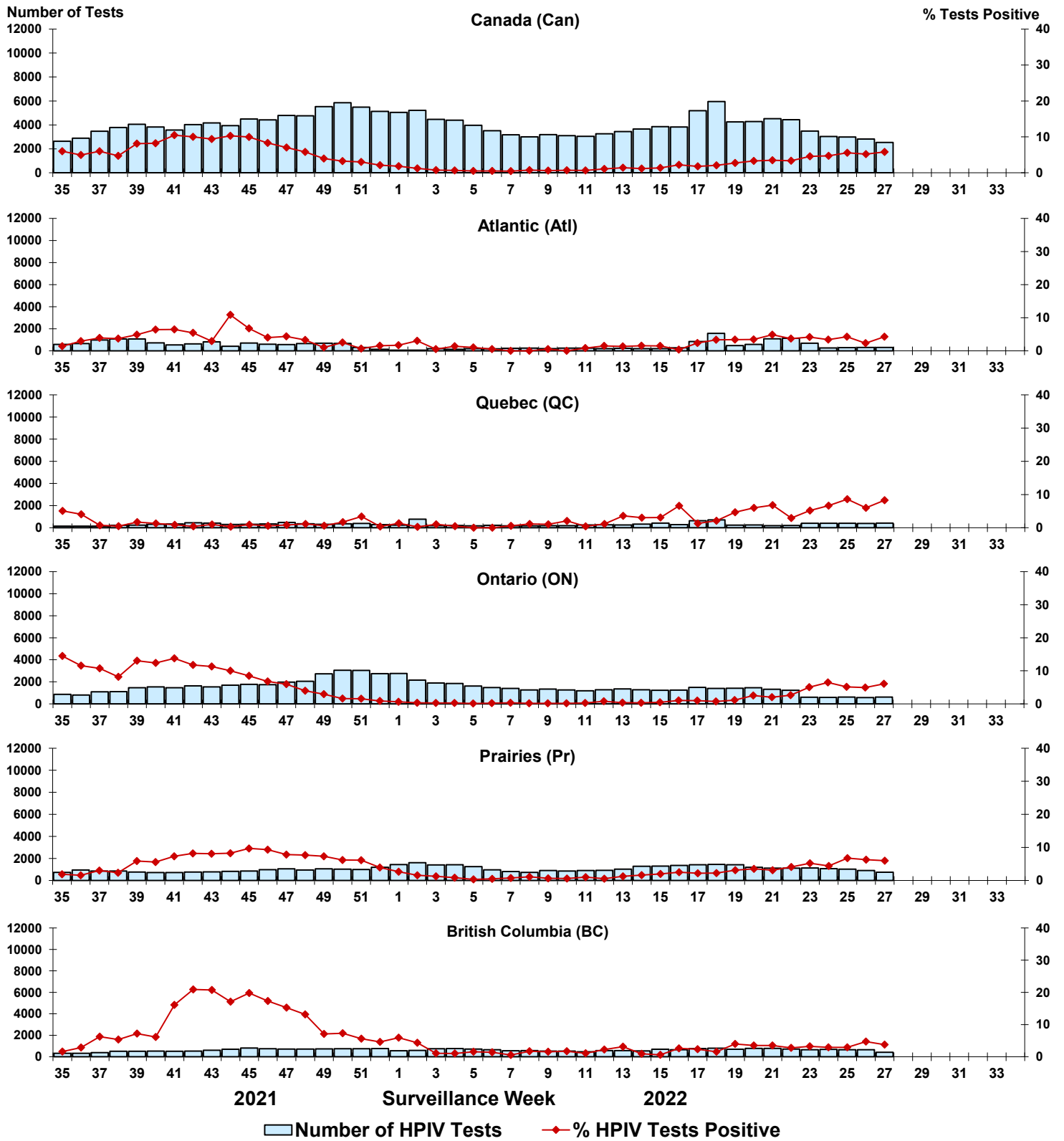


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

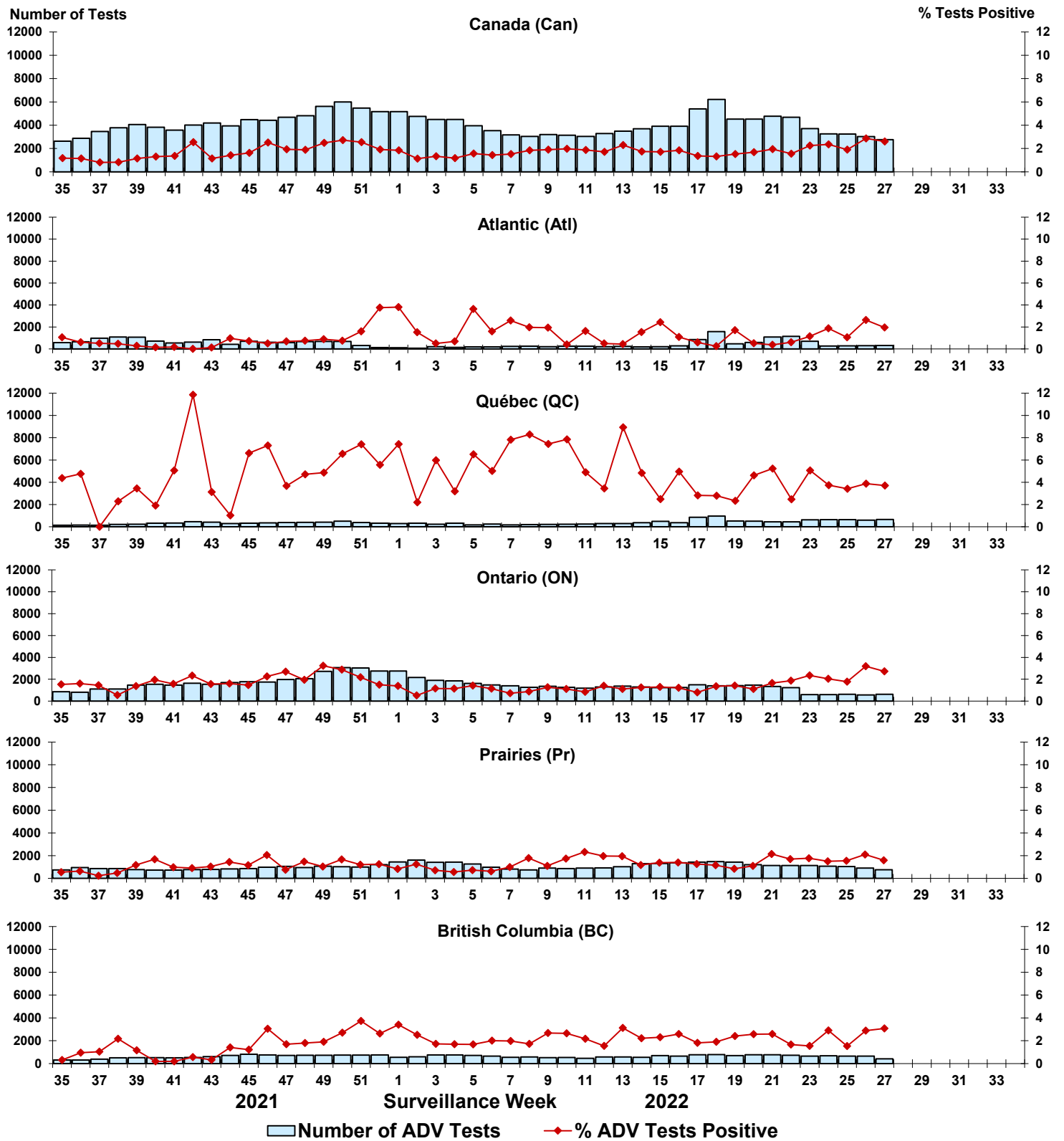


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

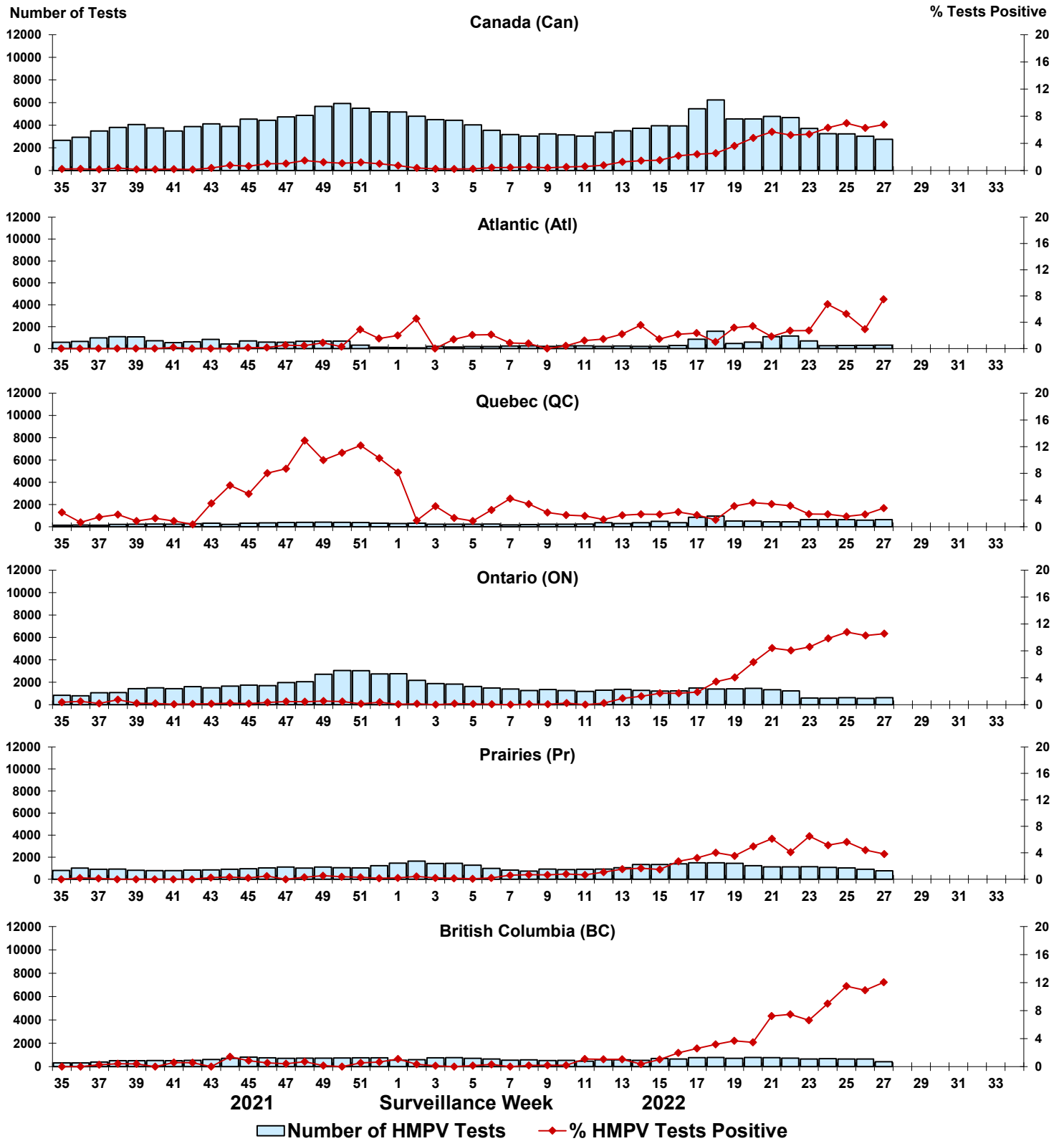


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

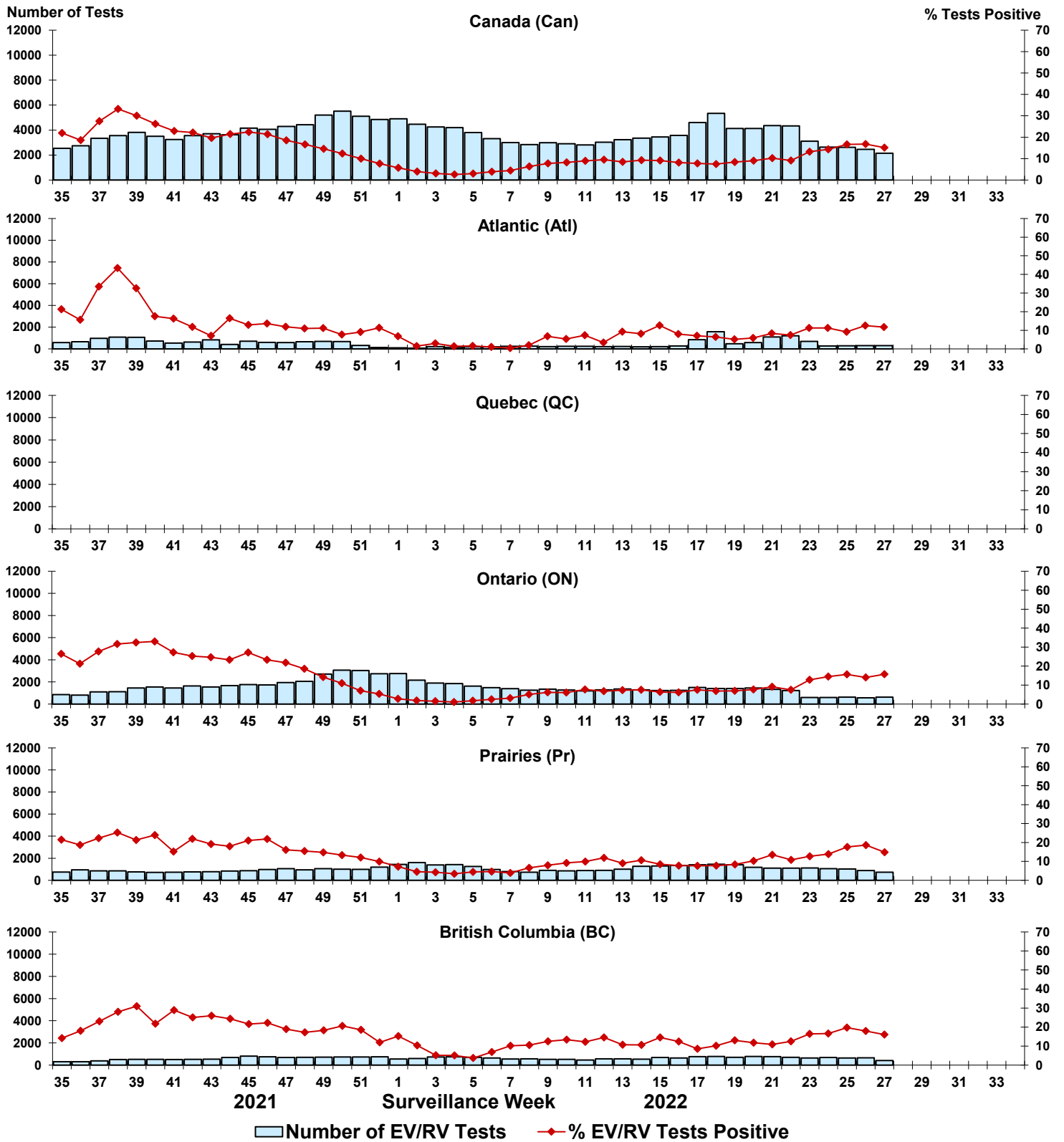


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

