

RESPIRATORY VIRUS DETECTION REPORT

August 21 to August 27, 2022
(Surveillance Week 2022-34)



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

Respiratory virus detections remain low in Canada.

- Influenza activity is at interseasonal levels, with only 21 detections (21 influenza A, 0 influenza B) reported in week 34 (week ending August 27, 2022).
- Enterovirus/Rhinovirus remains the most common seasonal respiratory virus detected in Canada (308 detections; 12.8% positive). Activity remains slightly 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 is above expected levels for this time of year (87 detections; 2.9% 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

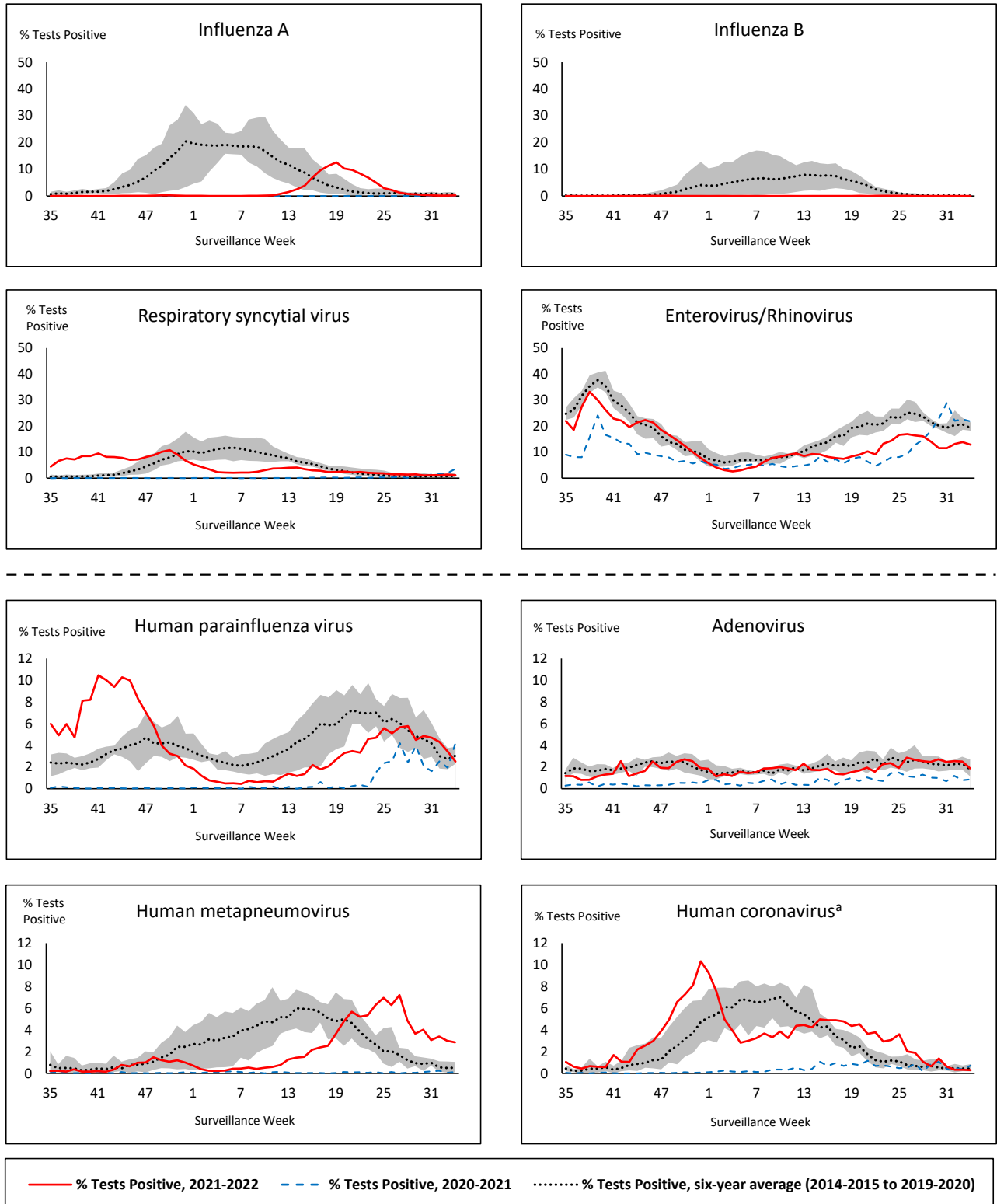
QC: Quebec

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 August 27, 2022 (surveillance week 2022-34)

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	221	0	0	0	0	0	221	7	221	3	0	0	0	0	221	2	221	4	221	38	221	0
Prince Edward Island	41	0	0	0	0	0	41	1	41	0	0	2	0	0	41	0	41	1	41	24	41	0
Nova Scotia	371	0	0	0	0	0	371	3	36	0	0	0	1	0	36	1	36	0	36	8	36	0
New Brunswick	351	0	0	0	0	0	278	1	34	0	0	3	0	0	34	6	34	0	34	2	34	0
Atlantic	984	0	0	0	0	0	911	12	332	3	0	5	1	0	332	9	332	5	332	72	332	0
Région Nord-Est	627	0	0	2	2	0	228	1	16	0	0	2	1	0	9	0	5	0	N.C.	N.C.	5	0
Québec-Chaudière-Appalaches	333	0	0	0	0	0	333	4	36	1	0	0	0	0	187	3	187	4	N.C.	N.C.	97	0
Centre-du-Québec	303	0	0	0	0	0	277	1	42	1	0	1	0	0	42	0	42	3	N.C.	N.C.	42	0
Montréal-Laval	742	0	0	1	1	0	705	17	390	2	1	1	0	0	390	7	390	15	N.C.	N.C.	408	1
Ouest du Québec	220	0	0	1	1	0	220	6	13	0	0	0	0	0	13	1	13	0	N.C.	N.C.	7	0
Montérégie	340	0	0	1	1	0	340	7	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	2565	0	0	5	5	0	2103	36	497	4	1	4	1	0	641	11	637	22	N.C.	N.C.	559	1
P.H.O.L. - Ottawa	24	0	0	0	0	0	24	0	24	0	0	0	0	0	24	0	24	0	24	1	24	0
EORLA	162	0	0	2	2	0	162	3	33	0	1	1	0	0	33	0	33	2	33	3	33	0
P.H.O.L. - Kingston	45	0	0	0	0	0	45	1	45	0	0	0	0	2	45	0	45	1	45	11	45	0
UHN / Mount Sinai Hospital	450	0	0	3	3	0	450	3	10	0	0	0	0	0	10	0	10	0	10	0	10	0
P.H.O.L. - Toronto	220	0	2	1	1	0	219	1	219	0	0	0	0	11	219	2	219	8	219	16	219	2
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	1	15	0	15	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	2	5	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	58	0	0	0	0	0	58	0	58	0	0	0	0	1	58	1	58	2	58	2	58	0
P.H.O.L. - Orillia	19	0	0	0	0	0	19	0	19	0	0	0	0	0	19	3	19	2	19	7	19	0
P.H.O.L. - Thunder Bay	10	0	0	0	0	0	10	0	10	0	0	0	0	0	10	0	10	0	10	2	10	0
P.H.O.L. - Sudbury	3	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	0	3	0	3	0
P.H.O.L. - Hamilton	49	0	0	0	0	0	49	1	49	0	0	0	0	1	49	1	49	2	49	10	49	2
P.H.O.L. - Peterborough	19	0	0	0	0	0	19	1	19	0	0	0	0	0	19	0	19	1	19	5	19	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	1079	0	2	6	6	0	1078	11	509	0	1	1	0	15	509	7	509	19	509	59	509	4
Province of Manitoba	553	0	0	3	3	0	553	4	132	0	0	5	3	0	132	2	154	9	132	17	154	0
Province of Saskatchewan	326	0	0	0	0	0	326	2	159	0	2	4	2	0	159	5	159	11	159	19	159	0
Province of Alberta	1620	1	1	1	3	0	1413	11	694	0	3	10	0	0	693	14	694	7	689	83	694	1
Prairies	2499	1	1	4	6	0	2292	17	985	0	5	19	5	0	984	21	1007	27	980	119	1007	1
British Columbia	2063	0	1	0	4	0	1953	10	560	1	1	2	2	0	560	9	560	14	552	46	552	3
Yukon	2	0	0	0	0	0	2	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	28	0	0	0	0	0	28	4	1	0	0	1	0	0	1	0	1	0	27	11	1	0
Nunavut	108	0	0	0	0	0	108	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	138	0	0	0	0	0	138	13	2	0	0	1	0	0	2	0	2	0	28	12	2	0
CANADA	9328	1	4	15	21	0	8475	99	2885	8	8	32	9	15	3028	57	3047	87	2401	308	2961	9

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 August 27, 2022 (surveillance week 2021-35 to 2022-34)

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	15930	0	135	192	327	0	15928	251	15931	4	37	117	1	314	15939	61	15925	109	15992	2241	1712	22
Prince Edward Island	2807	0	48	17	65	0	2807	264	2762	1	1	165	33	1	2807	76	2807	127	2807	663	2807	140
Nova Scotia	27351	0	2	420	422	9	27354	420	2084	1	4	44	33	0	2099	29	2099	63	2099	199	2099	49
New Brunswick	21601	0	111	384	495	0	13706	371	3713	1	11	56	29	0	3706	67	3713	48	3713	161	3622	23
Atlantic	67689	0	296	1013	1309	9	59795	1306	24490	7	53	382	96	315	24551	233	24544	347	24611	3264	10240	234
Région Nord-Est	38765	45	1	2196	2242	28	16978	1486	874	2	1	16	2	0	958	19	467	17	N.C.	N.C.	1293	24
Québec-Chaudière-Appalaches	15973	0	0	1434	1434	60	16789	1025	1995	2	19	32	19	0	6280	160	6111	148	N.C.	N.C.	3553	117
Centre-du-Québec	15948	0	3	1291	1294	11	14150	1109	1616	8	8	39	5	0	1616	44	1624	37	N.C.	N.C.	1609	31
Montréal-Laval	42636	0	5	1564	1569	10	36686	2591	12109	39	104	182	12	0	12144	629	12106	497	N.C.	N.C.	12564	267
Ouest du Québec	9768	0	6	657	663	0	9697	962	384	3	8	12	7	0	377	29	373	16	N.C.	N.C.	367	8
Montérégie	8476	0	0	322	322	1	7185	426	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	131566	45	15	7464	7524	110	101485	7599	16978	54	140	281	45	0	21375	881	20681	715	N.C.	N.C.	19386	447
P.H.O.L. - Ottawa	7342	2	81	1	84	0	7342	1442	7342	0	0	0	0	750	7342	313	7340	61	7342	2268	7340	298
EORLA	9722	0	0	178	178	1	9697	676	1475	0	5	33	13	0	1475	30	1156	37	1475	235	1133	33
P.H.O.L. - Kingston	1845	0	220	0	9	0	1852	149	1849	0	0	0	0	148	1850	31	1831	49	1849	408	1831	101
UHN / Mount Sinai Hospital	24163	0	0	60	60	5	24164	134	800	0	1	0	0	0	800	1	800	2	800	21	800	13
P.H.O.L. - Toronto	13047	2	401	3	132	0	13032	316	13032	0	0	0	0	495	13038	199	13022	285	13032	1409	13023	507
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	424	0	4	1	4	0	423	14	423	0	0	0	0	11	423	5	423	3	423	70	423	23
P.H.O.L. - Timmins	577	0	17	0	10	0	577	28	577	0	0	0	0	23	577	1	576	8	577	50	576	33
St. Joseph's - London	13456	0	0	73	73	0	13459	792	11902	0	0	7	0	101	11902	167	11902	123	11856	694	580	4
P.H.O.L. - London	4470	0	57	11	60	0	4469	481	4469	0	0	0	0	203	4469	101	4466	122	4469	549	4466	303
P.H.O.L. - Orillia	1230	0	9	1	10	0	1230	158	1230	0	0	0	0	85	1230	49	1227	80	1230	306	1227	81
P.H.O.L. - Thunder Bay	406	0	6	0	5	0	406	27	406	0	0	0	0	26	406	2	406	13	406	66	406	37
P.H.O.L. - Sudbury	414	0	6	0	6	0	414	12	414	0	0	0	0	12	414	3	414	7	414	37	414	14
P.H.O.L. - Hamilton	2448	0	25	2	23	0	2443	83	2443	0	0	0	0	79	2444	27	2443	66	2443	315	2443	122
P.H.O.L. - Peterborough	797	0	2	0	2	0	797	73	790	0	0	0	0	20	790	10	787	16	790	132	787	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	105509	4	832	567	897	7	104628	6036	72314	5	8	771	14	1953	72322	1185	71955	1136	72268	8891	36288	1624
Manitoba	60920	1	86	490	577	0	60920	1471	4534	3	16	93	44	0	4534	92	6071	100	4534	655	5877	107
Province of Saskatchewan	32892	2	483	296	781	0	32856	1770	7306	1	31	239	119	0	7306	161	7306	235	7306	1123	7295	315
Province of Alberta	102830	11	1845	857	2713	3	80918	3768	42296	11	198	1021	283	0	42279	503	42268	647	41815	4827	42296	1578
Prairies	196642	14	2414	1643	4071	3	174694	7009	54136	15	245	1353	446	0	54119	756	55645	982	53655	6605	55468	2000
British Columbia	225352	19	986	7	1462	96	219566	9529	32143	15	48	1195	367	195	32143	688	32139	799	31527	4900	31545	1019
Yukon	5511	1	5	2	14	7	5520	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	2263	0	206	1	207	0	2222	248	144	0	1	4	0	0	144	3	144	0	2169	296	144	1
Nunavut	17177	0	403	7	410	0	17175	462	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	24951	1	614	10	631	7	24917	1018	211	0	1	8	0	0	211	8	211	0	2235	315	194	2
CANADA	751709	83	5157	10704	15894	232	685085	32497	200272	96	495	3990	968	2463	204721	3751	205175	3979	184296	23975	153121	5326

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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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.

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

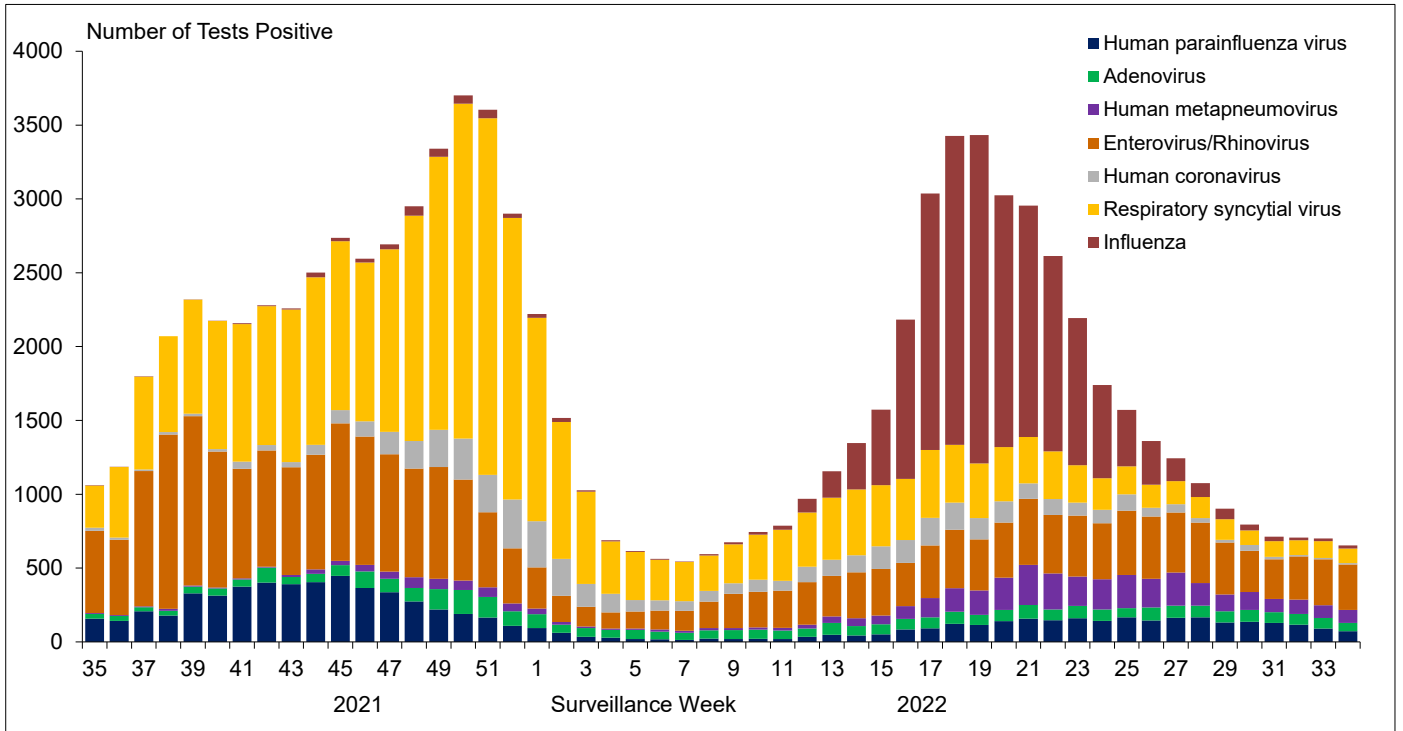


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

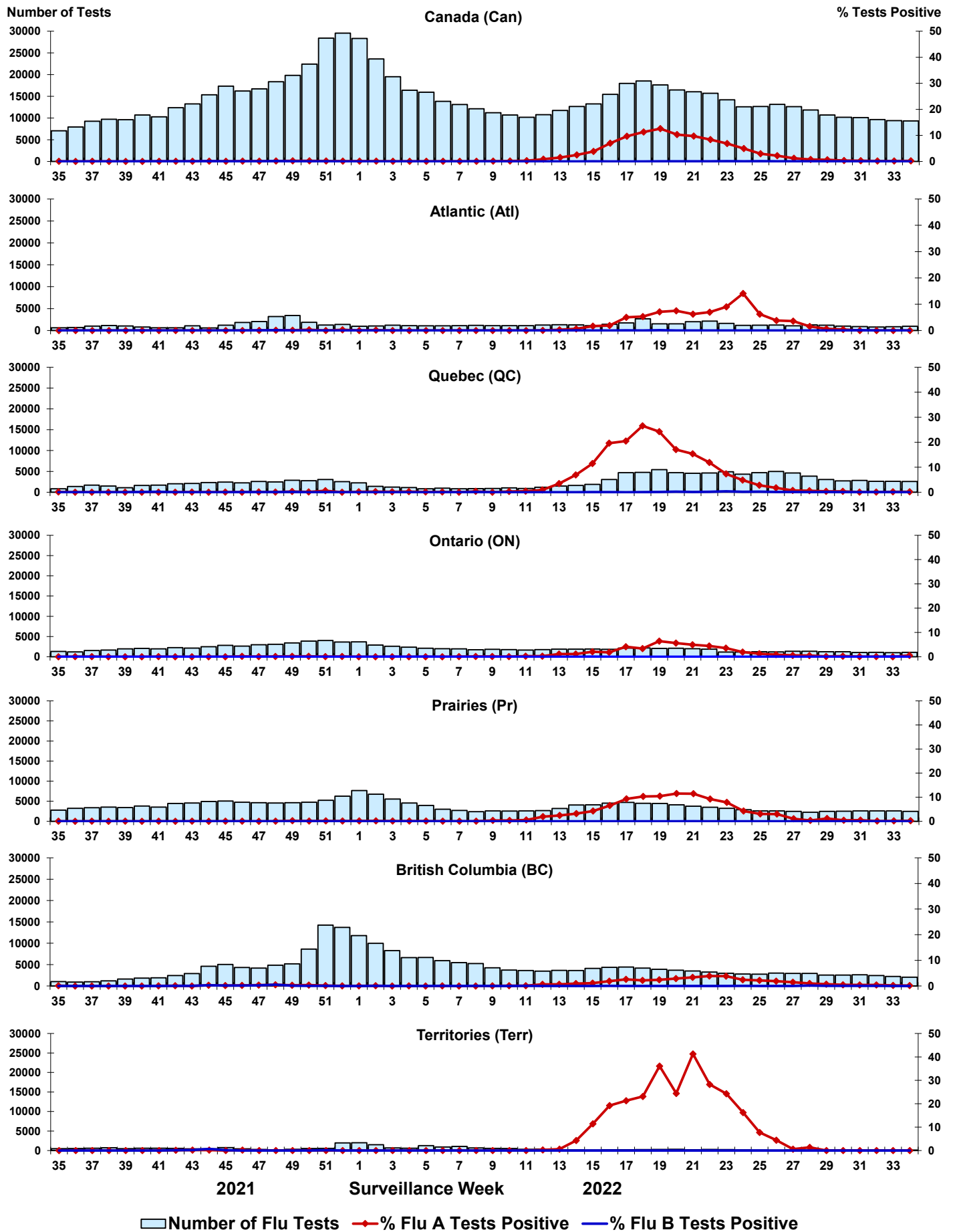


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

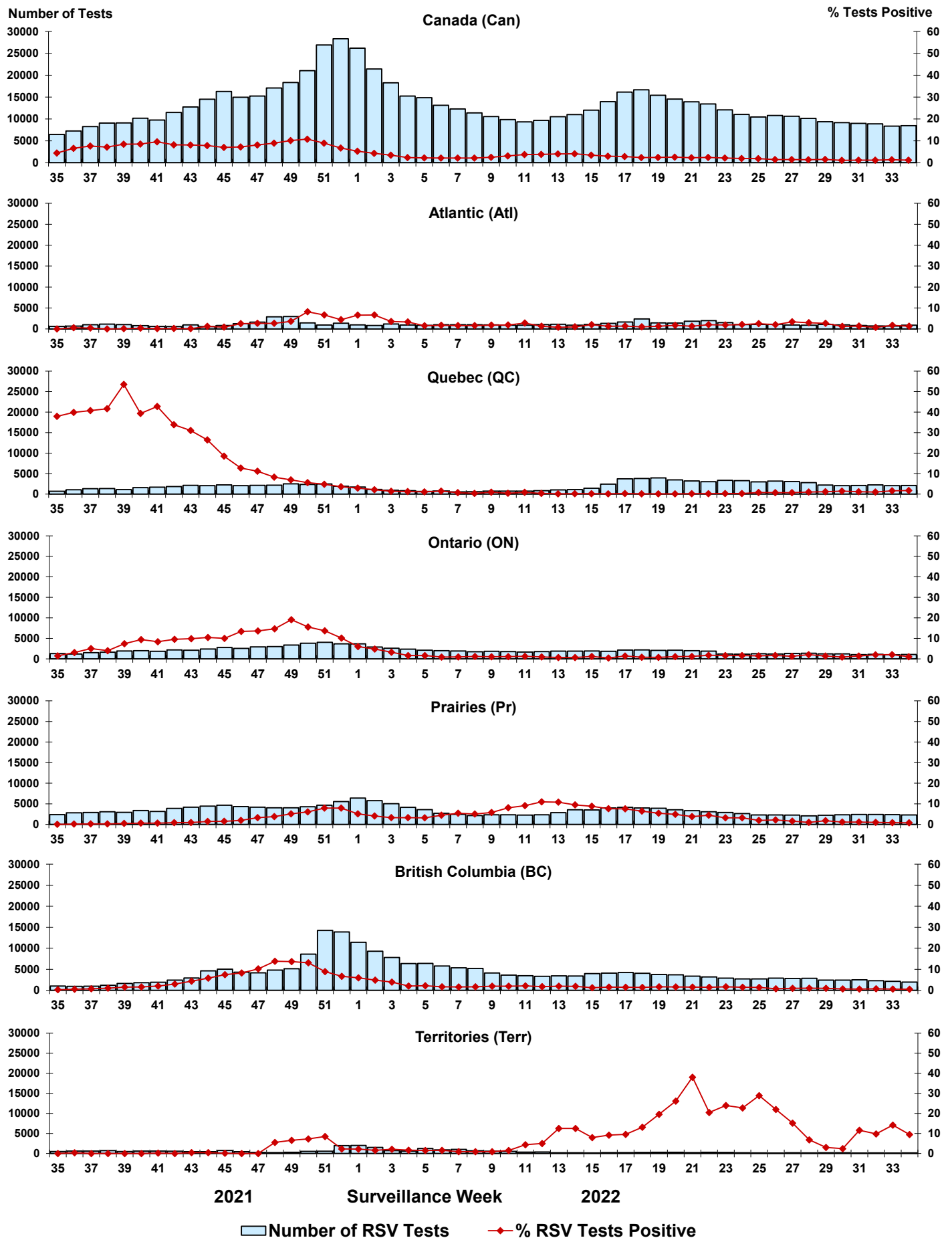


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

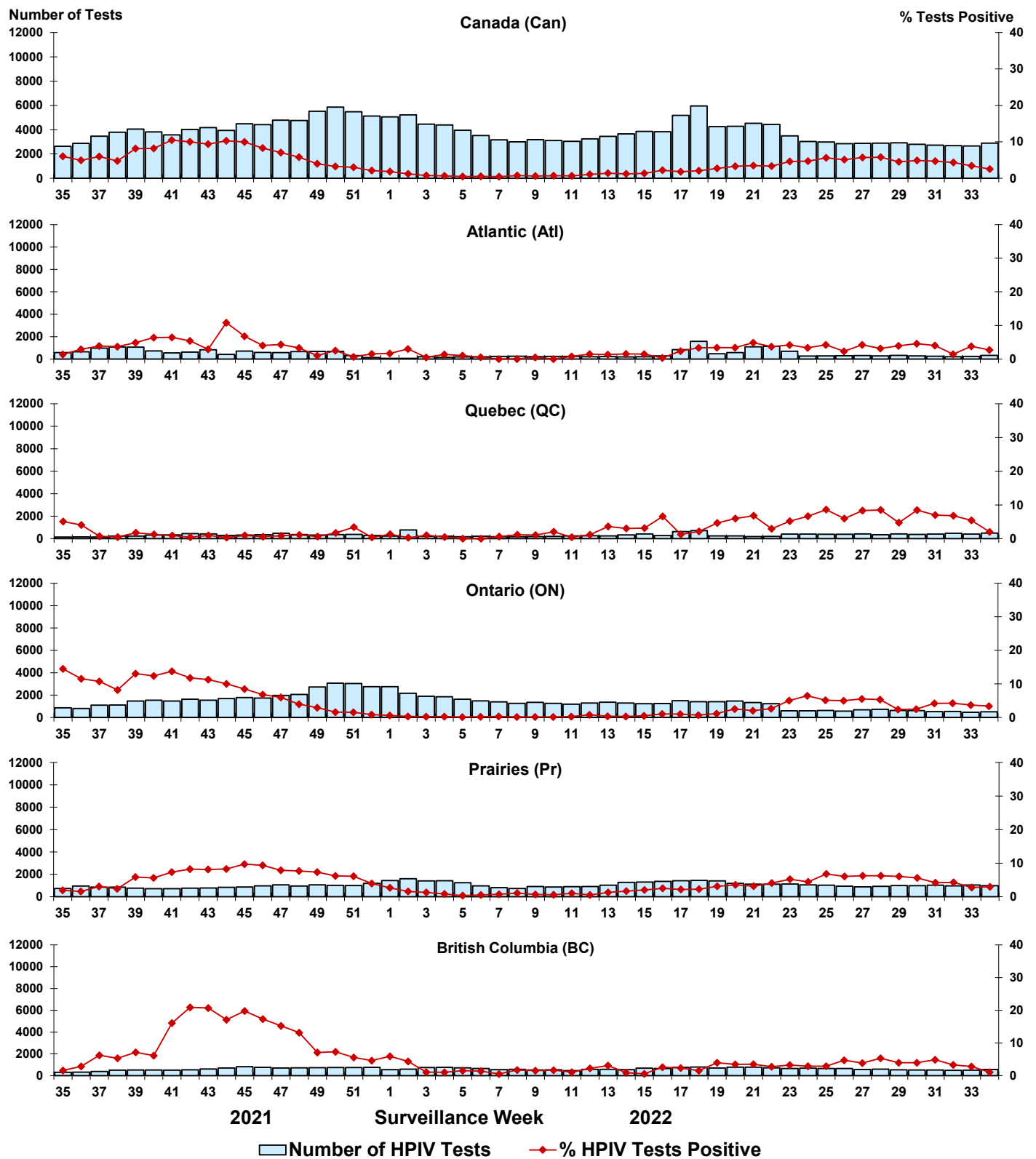


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

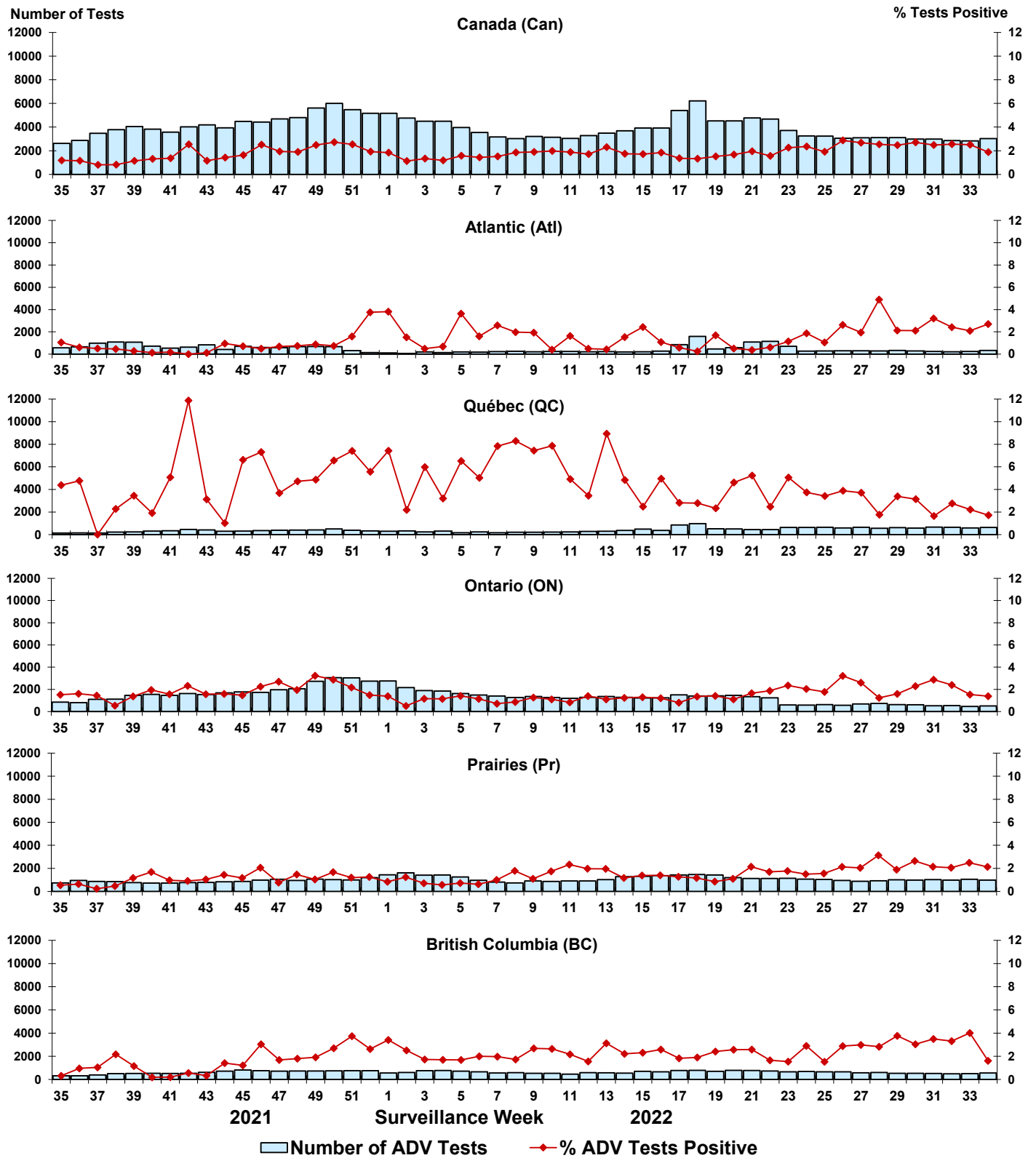


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

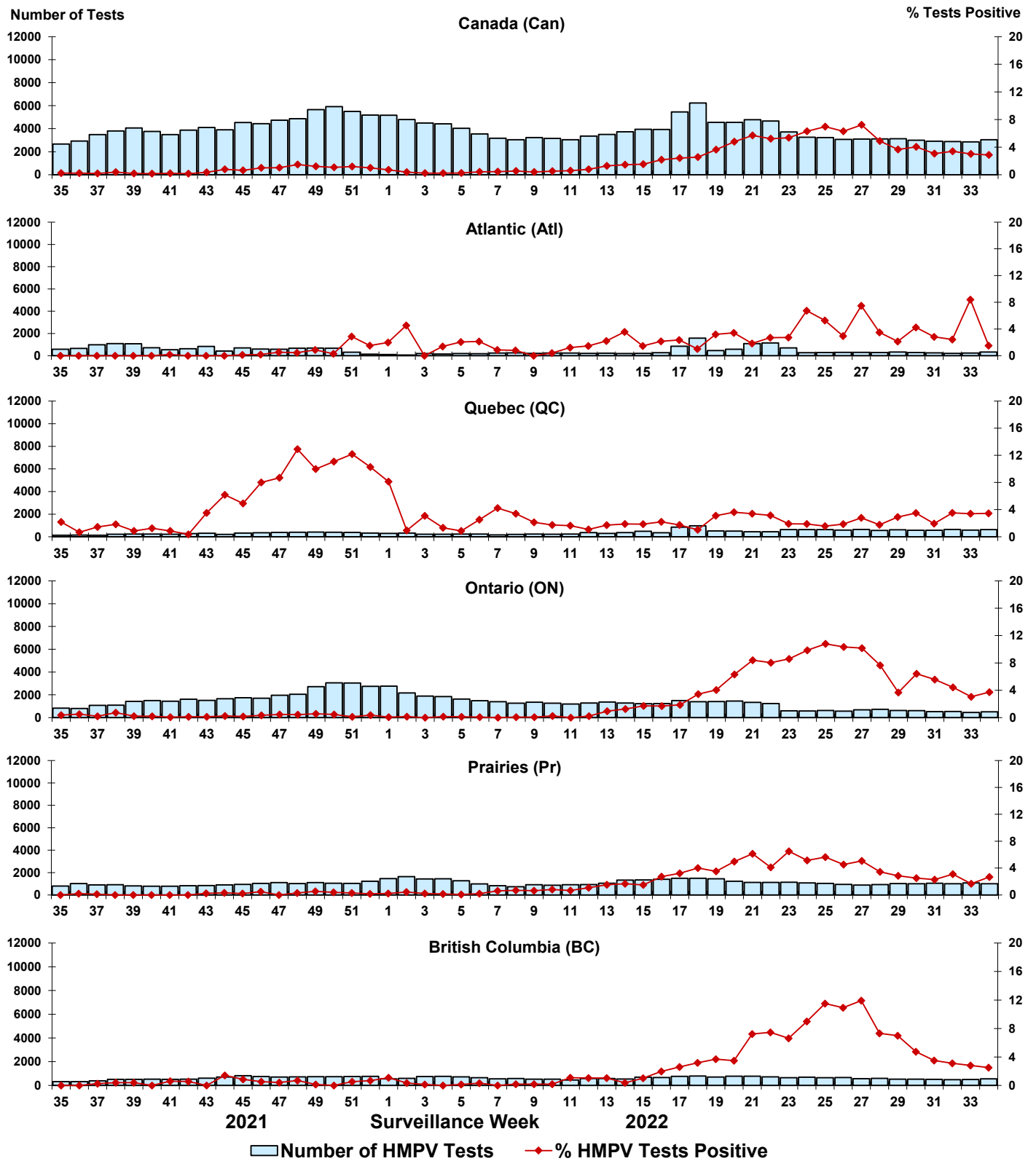


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

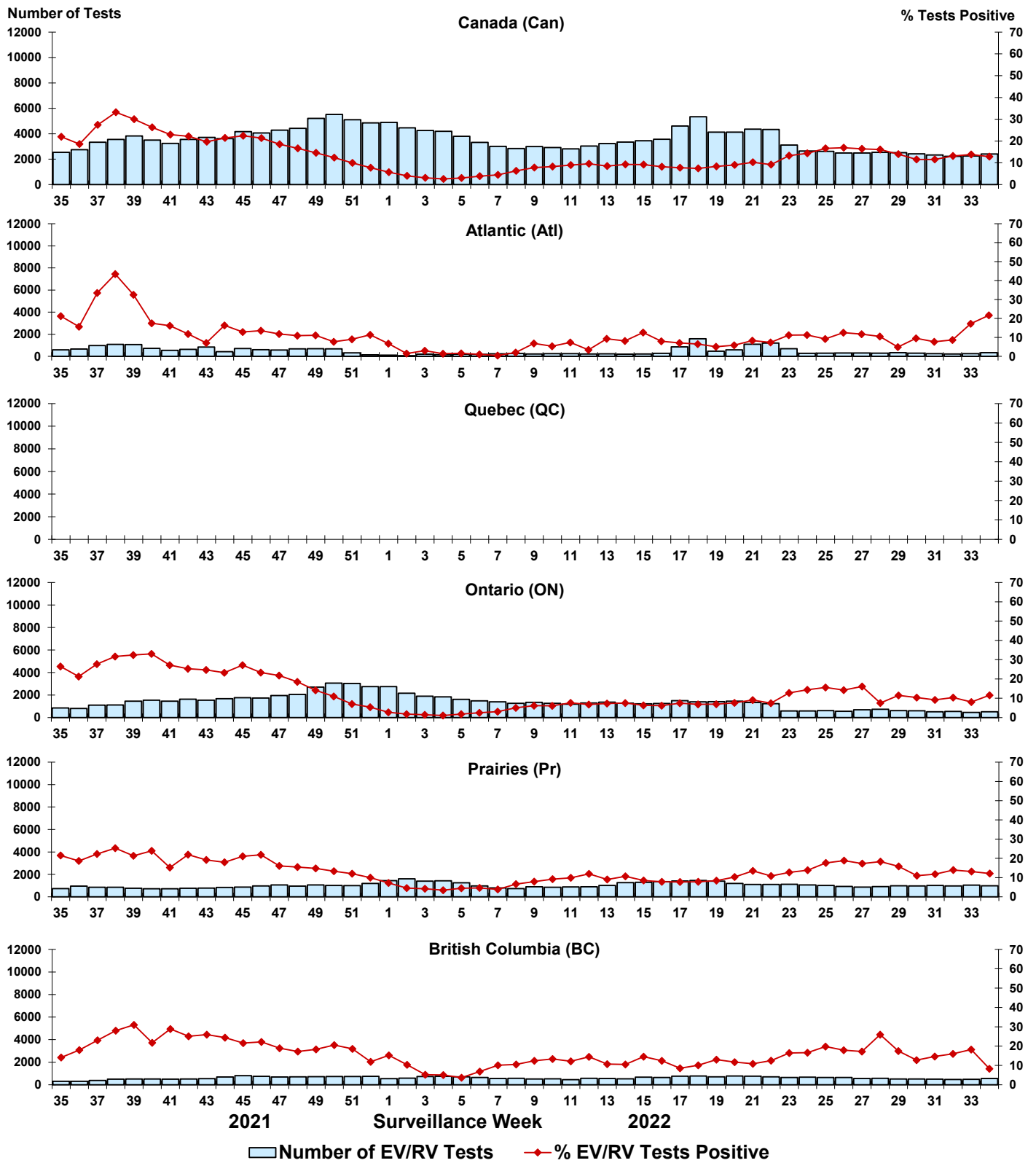


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

