

RESPIRATORY VIRUS DETECTION REPORT

May 22 to May 28, 2022
(Surveillance Week 2022-21)



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 stabilized in recent weeks.

- Influenza is the most common seasonal respiratory virus detected in Canada. Influenza activity has continued to decrease but remains above the epidemic threshold.
 - A total of 1,551 influenza detections were reported (1,545 influenza A, 6 influenza B).
 - Activity of influenza A (9.6% positive) has decreased, but remains above expected levels for this time of year.
- Activity of other respiratory viruses is low, and is near expected levels for most viruses.
 - Activity of human metapneumovirus (252 detections; 5.5% positive) has increased in recent weeks, but remains within expected levels for this time of year.
- The number of tests performed for all viruses was 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

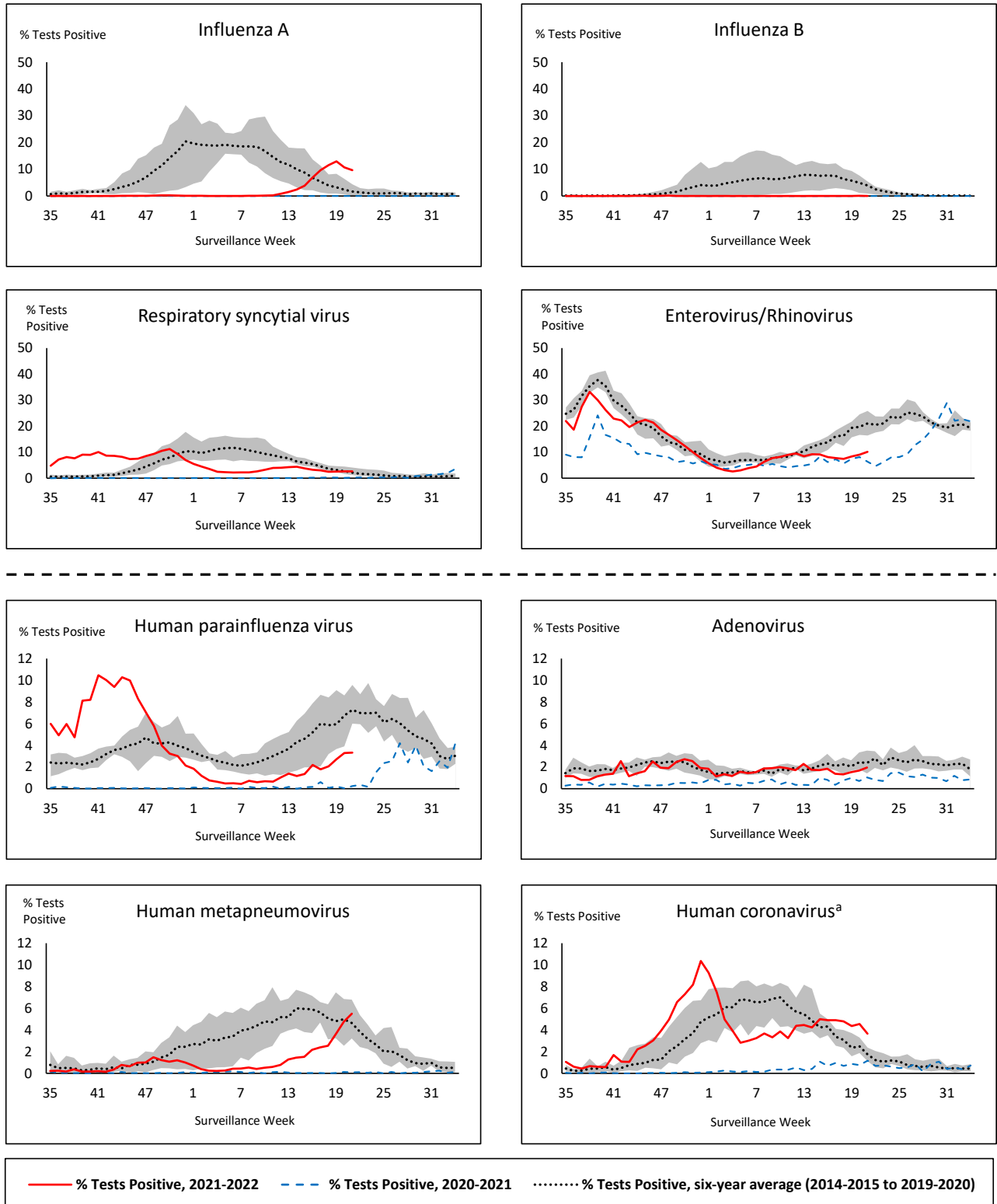
QC: Quebec

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 May 28, 2022 (surveillance week 2022-21)

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	956	0	0	42	42	0	956	9	956	0	3	0	0	37	956	1	956	10	956	71	N.C.	N.C.
Prince Edward Island	55	0	3	3	6	0	55	7	55	0	0	1	4	0	55	0	55	5	55	8	55	0
Nova Scotia	564	0	0	19	19	0	564	7	23	0	0	0	4	0	23	1	23	2	23	8	23	1
New Brunswick	444	0	0	59	59	0	261	1	56	0	0	0	4	0	56	2	56	3	56	4	56	1
Atlantic	2019	0	3	123	126	0	1836	24	1090	0	3	1	12	37	1090	4	1090	20	1090	91	134	2
Région Nord-Est	1281	11	0	196	207	0	666	0	0	0	0	0	0	0	0	0	2	1	N.C.	N.C.	0	0
Québec-Chaudière-Appalaches	738	0	0	123	123	5	738	2	27	0	0	0	0	0	276	7	275	8	N.C.	N.C.	119	6
Centre-du-Québec	710	0	0	121	121	0	519	0	29	0	0	0	0	0	29	2	29	0	N.C.	N.C.	29	3
Montréal-Laval	1338	0	0	151	151	0	798	0	120	1	7	1	1	0	120	12	120	4	N.C.	N.C.	141	13
Ouest du Québec	278	0	0	51	51	0	278	3	15	0	2	0	1	0	15	2	15	2	N.C.	N.C.	15	0
Montérégie	206	0	0	46	46	0	206	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	4551	11	0	688	699	5	3205	5	191	1	9	1	2	0	440	23	441	15	N.C.	N.C.	304	22
P.H.O.L. - Ottawa	26	0	0	0	0	0	26	0	26	0	0	0	0	0	26	0	26	0	26	1	26	0
EORLA	270	0	0	27	27	0	270	6	32	0	0	1	1	0	32	0	32	1	32	4	32	0
P.H.O.L. - Kingston	16	0	0	0	0	0	15	0	15	0	0	0	0	0	16	0	15	0	15	2	15	2
UHN / Mount Sinai Hospital	432	0	0	3	3	0	432	2	19	0	0	0	0	0	19	1	19	0	19	1	19	1
P.H.O.L. - Toronto	223	0	8	0	8	0	223	1	223	0	0	0	0	11	223	8	223	17	223	17	223	7
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	7	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	0	7	0	7	1
P.H.O.L. - Timmins	16	0	0	0	0	0	16	0	16	0	0	0	0	0	16	0	16	1	16	6	16	0
St. Joseph's - London	57	0	0	3	3	0	57	3	57	0	0	0	0	0	57	1	57	3	57	6	2	0
P.H.O.L. - London	97	0	11	0	11	0	97	4	97	0	0	0	0	6	97	1	95	8	97	11	95	5
P.H.O.L. - Orillia	27	0	0	0	0	0	27	3	27	0	0	0	0	3	27	2	27	6	27	8	27	4
P.H.O.L. - Thunder Bay	8	0	0	0	0	0	8	0	8	0	0	0	0	0	8	0	8	7	8	0	8	0
P.H.O.L. - Sudbury	4	0	1	0	1	0	4	0	4	0	0	0	0	0	4	0	4	1	4	1	4	0
P.H.O.L. - Hamilton	52	0	3	0	3	0	52	5	52	0	0	0	0	4	52	0	52	5	52	10	52	2
P.H.O.L. - Peterborough	8	0	0	0	0	0	8	0	8	0	0	0	0	0	8	1	8	0	8	3	8	0
St. Joseph's - Hamilton	736	0	0	35	35	0	736	0	736	1	0	0	0	0	736	8	736	63	736	51	0	0
Province of Ontario	1979	0	23	68	91	0	1978	24	1327	1	0	1	1	24	1328	22	1325	112	1327	121	534	22
Province of Manitoba	834	0	8	70	78	0	834	36	125	0	0	0	1	0	125	2	135	4	125	20	135	2
Province of Saskatchewan	539	0	0	68	68	0	537	41	157	0	1	0	5	0	157	2	157	9	157	33	157	8
Province of Alberta	2393	0	49	287	336	1	789	46	789	0	8	10	8	0	789	18	789	52	789	88	789	14
Prairies	3766	0	57	425	482	1	2160	123	1071	0	9	10	14	0	1071	22	1081	65	1071	141	1081	24
British Columbia	3499	0	30	0	116	0	3275	49	631	1	2	0	8	5	631	18	631	40	620	66	620	28
Yukon	7	0	0	0	2	0	7	1	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	64	0	15	0	15	0	62	2	5	0	0	0	0	0	5	0	5	0	62	2	5	0
Nunavut	146	0	10	4	14	0	145	104	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	217	0	25	4	31	0	214	107	13	0	0	2	0	0	13	0	13	0	70	4	8	0
CANADA	16031	11	138	1308	1545	6	12668	332	4323	3	23	15	37	66	4573	89	4581	252	4178	423	2681	98

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 May 28, 2022 (surveillance week 2021-35 to 2022-21)

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	12534	0	0	235	235	0	12532	148	12535	1	17	116	0	263	12542	40	12529	52	12536	1985	N.C.	N.C.
Prince Edward Island	2401	0	31	15	46	0	2401	252	2356	0	0	158	9	1	2401	61	2401	71	2401	549	2401	133
Nova Scotia	20495	0	2	191	193	8	20500	333	1596	0	2	41	23	0	1610	16	1610	20	1610	135	1610	42
New Brunswick	16765	0	4	176	180	0	10623	294	3078	0	0	26	18	0	3071	25	3078	23	3078	75	2987	12
Atlantic	52195	0	37	617	654	8	46056	1027	19565	1	19	341	50	264	19624	142	19618	166	19625	2744	6998	187
Région Nord-Est	26520	32	1	1950	1983	4	12638	1444	809	2	0	10	1	0	900	18	411	12	N.C.	N.C.	1244	23
Québec-Chaudière-Appalaches	9401	0	0	1219	1219	24	9999	1004	1630	0	12	8	12	0	3167	106	3074	114	N.C.	N.C.	2122	89
Centre-du-Québec	10136	0	2	1018	1020	7	9407	1086	1299	2	8	24	3	0	1299	37	1307	22	N.C.	N.C.	1292	23
Montréal-Laval	26353	0	5	1222	1227	8	24547	2456	7919	9	55	31	8	0	7918	471	7916	357	N.C.	N.C.	7990	190
Ouest du Québec	6706	0	6	467	473	0	6648	935	184	0	8	3	5	0	177	11	173	9	N.C.	N.C.	173	4
Montérégie	4053	0	0	176	176	0	3755	387	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	83169	32	14	6052	6098	43	66994	7312	11841	13	83	76	29	0	13461	643	12881	514	N.C.	N.C.	12821	329
P.H.O.L. - Ottawa	6927	2	79	1	82	0	6927	1441	6927	0	0	0	0	736	6927	312	6925	44	6927	2242	6925	287
EORLA	7082	0	0	124	124	0	7057	631	1024	0	2	20	5	0	1024	17	705	9	1024	160	682	24
P.H.O.L. - Kingston	1436	0	8	0	8	0	1443	128	1442	0	0	0	0	132	1443	21	1424	4	1442	322	1424	96
UHN / Mount Sinai Hospital	18376	0	0	44	44	3	18376	108	601	0	0	0	0	0	601	1	601	1	601	15	601	9
P.H.O.L. - Toronto	9778	2	69	1	72	0	9766	285	9766	0	0	0	0	335	9770	138	9762	87	9766	1102	9763	378
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	334	0	3	1	4	0	333	8	333	0	0	0	0	7	333	3	333	1	333	50	333	23
P.H.O.L. - Timmins	466	0	5	0	5	0	466	26	466	0	0	0	0	18	466	1	466	1	466	37	466	28
St. Joseph's - London	12754	0	0	58	58	0	12757	775	11200	0	0	7	0	89	11200	145	11200	57	11154	596	534	4
P.H.O.L. - London	3655	0	39	8	47	0	3654	460	3654	0	0	0	0	173	3654	87	3651	53	3654	479	3651	273
P.H.O.L. - Orillia	907	0	6	1	7	0	907	122	907	0	0	0	0	52	907	29	904	19	907	226	904	69
P.H.O.L. - Thunder Bay	326	0	1	0	1	0	326	22	326	0	0	0	0	24	326	1	326	7	326	59	326	37
P.H.O.L. - Sudbury	346	0	6	0	6	0	346	12	346	0	0	0	0	9	346	2	346	5	346	32	346	10
P.H.O.L. - Hamilton	1843	0	16	2	18	0	1838	75	1838	0	0	0	0	52	1839	14	1838	27	1838	244	1838	109
P.H.O.L. - Peterborough	637	0	0	0	0	0	637	45	630	0	0	0	0	13	630	4	627	2	630	103	627	45
St. Joseph's - Hamilton	23738	0	4	208	212	1	23732	1646	23732	4	0	656	0	0	23732	227	23732	211	23732	2060	0	0
Province of Ontario	89444	4	236	448	688	4	88565	5784	64031	4	4	751	6	1640	64037	1014	63679	529	63985	7960	29259	1402
Manitoba	54879	1	72	424	497	0	54879	1325	2916	2	10	74	12	0	2916	46	4311	18	2916	347	4117	89
Province of Saskatchewan	27724	2	340	325	667	0	27689	1666	5253	1	10	198	69	0	5253	91	5253	59	5253	729	5242	288
Province of Alberta	82698	3	500	1772	2275	3	32772	3397	32772	2	95	712	221	0	32772	344	32772	394	32772	3677	32772	1491
Prairies	165301	6	912	2521	3439	3	115340	6388	40941	5	115	984	302	0	40941	481	42336	471	40941	4753	42131	1868
British Columbia	190160	7	472	6	904	87	185732	9188	24334	7	17	1081	264	172	24334	482	24330	242	23856	3644	23904	897
Yukon	5439	1	2	2	12	7	5449	307	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	1648	0	171	1	172	0	1579	147	107	0	1	1	0	0	107	3	107	0	1578	168	107	1
Nunavut	15779	0	150	6	156	0	15759	254	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	22866	1	323	9	340	7	22787	708	149	0	1	4	0	0	149	5	149	0	1620	180	136	1
CANADA	603135	50	1994	9653	12123	152	525474	30407	160861	30	239	3237	651	2076	162546	2767	162993	1922	150027	19281	115249	4684

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.

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

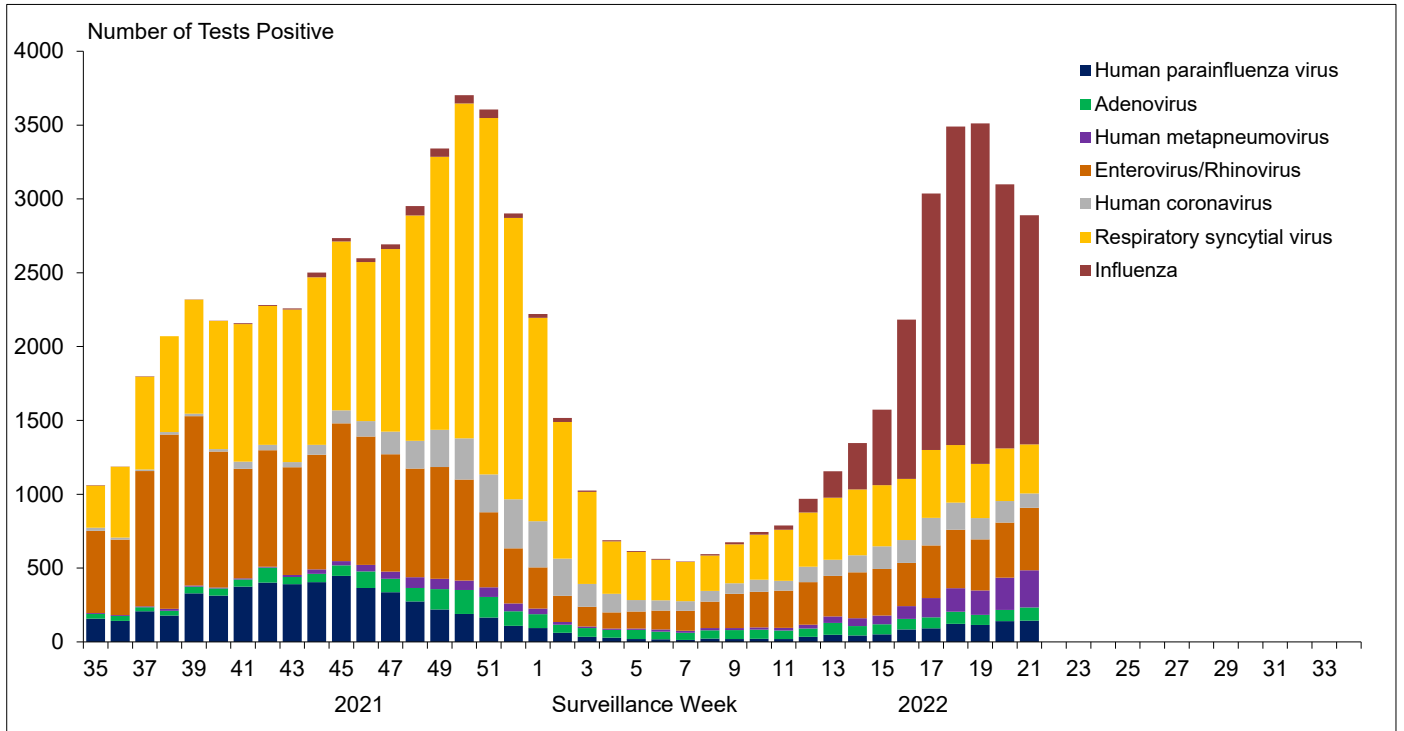


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

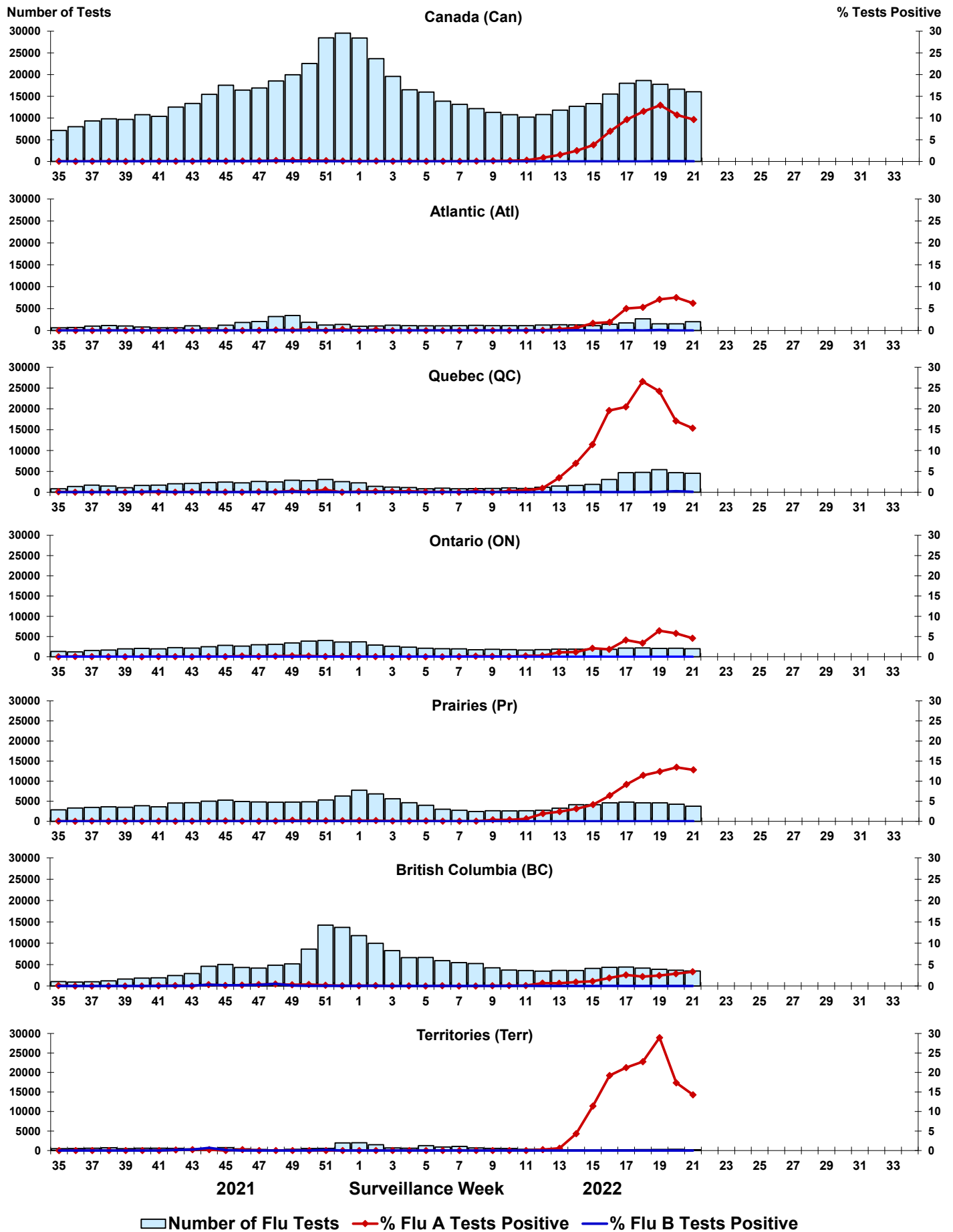


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

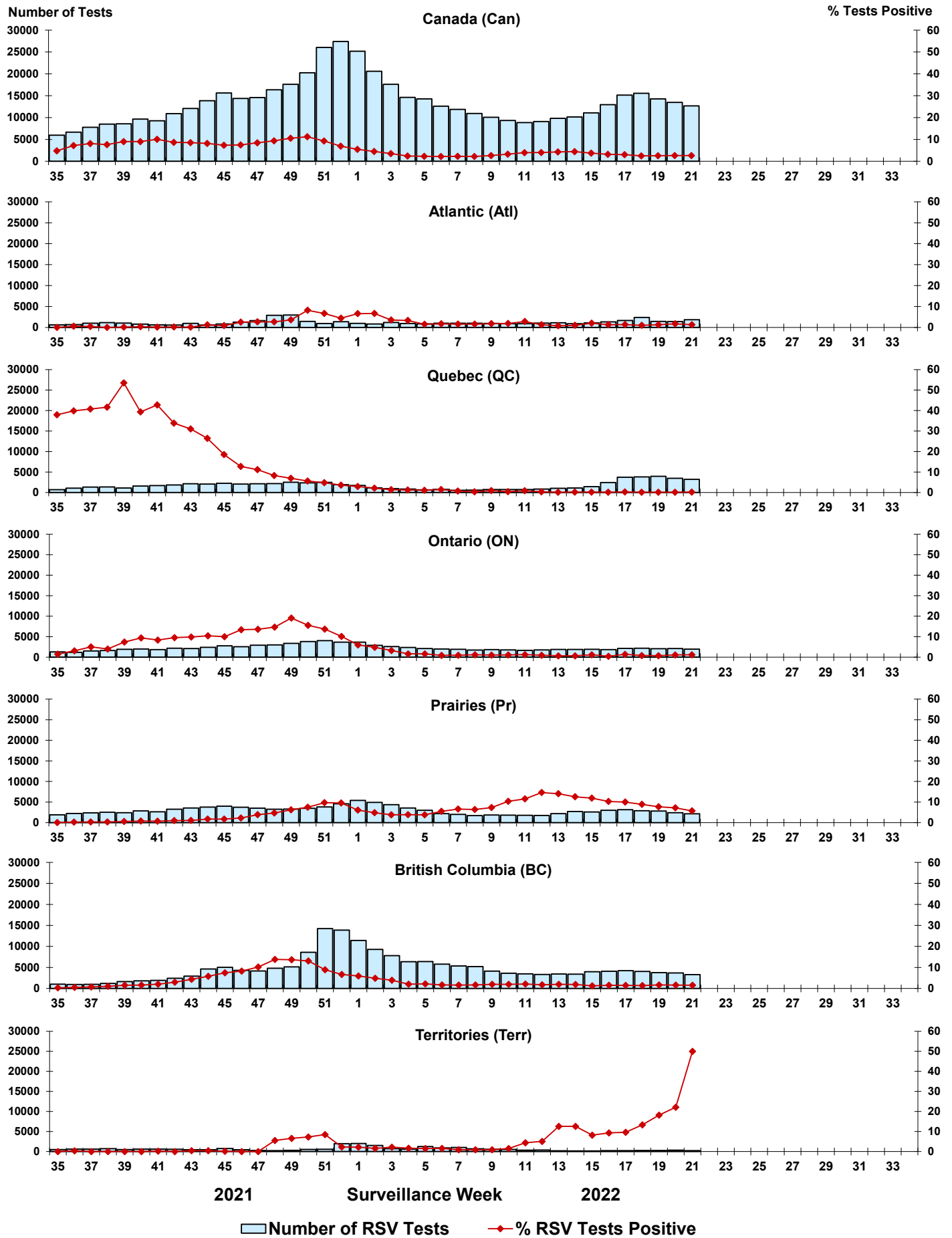


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

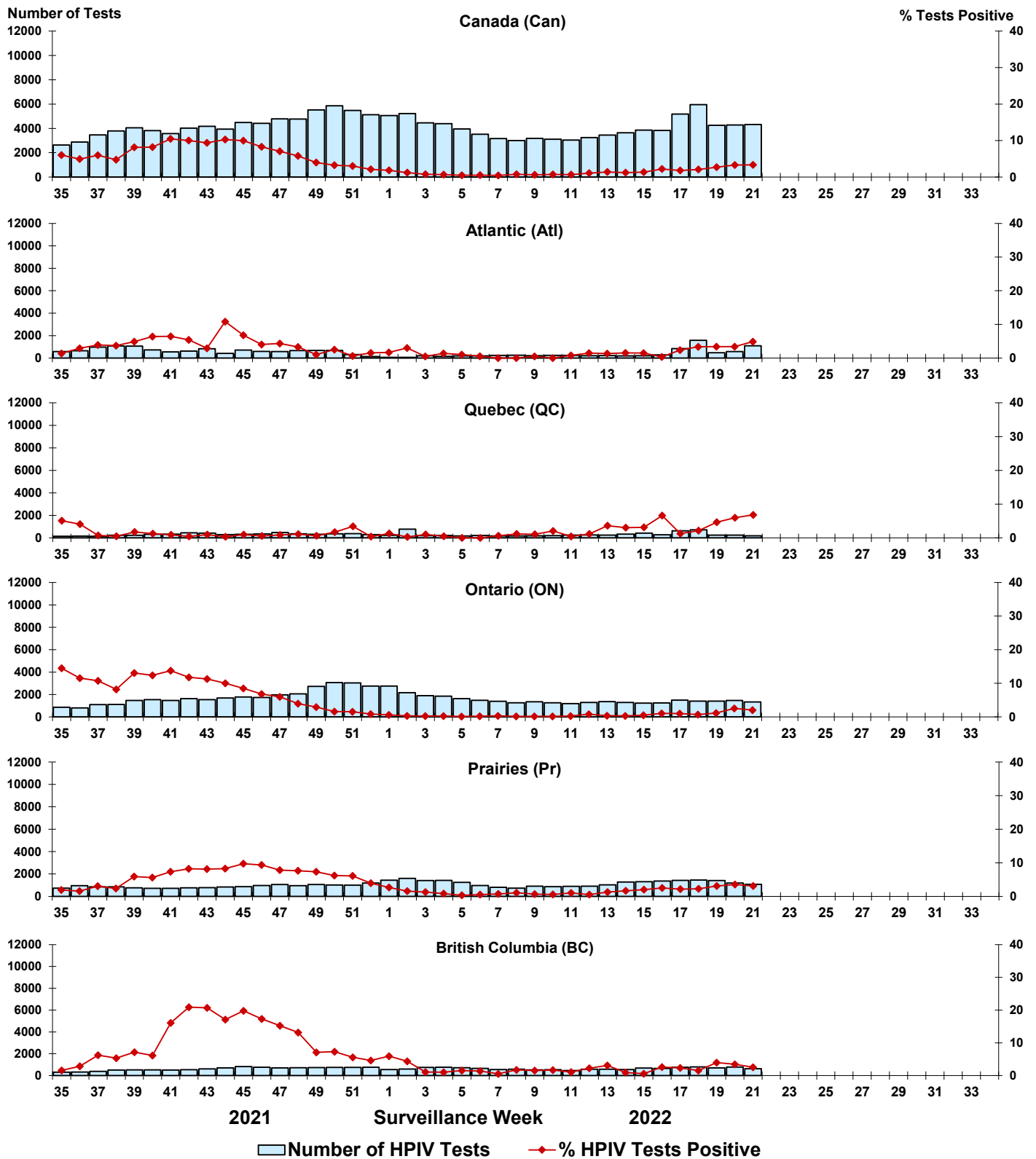


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

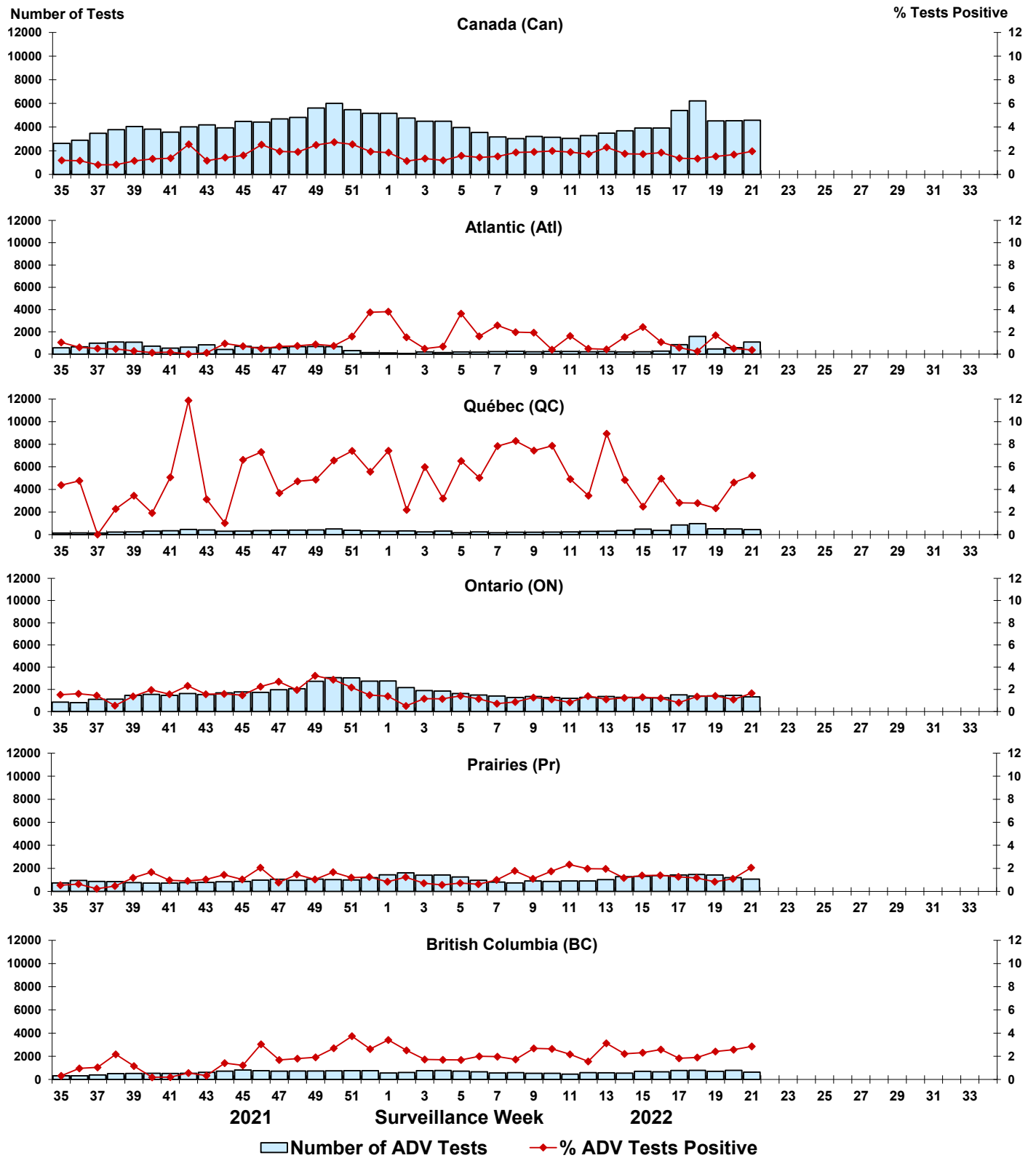


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

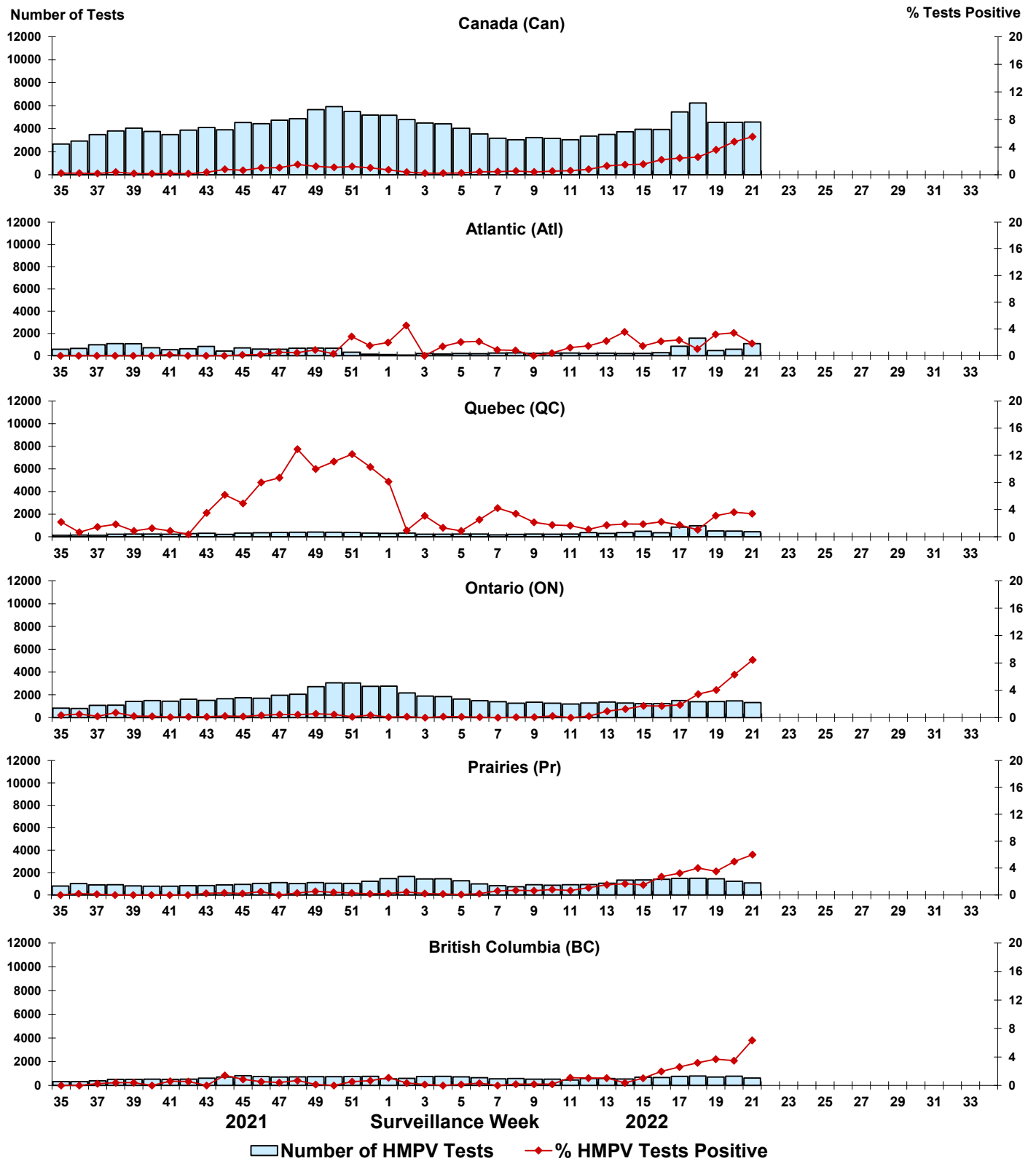


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

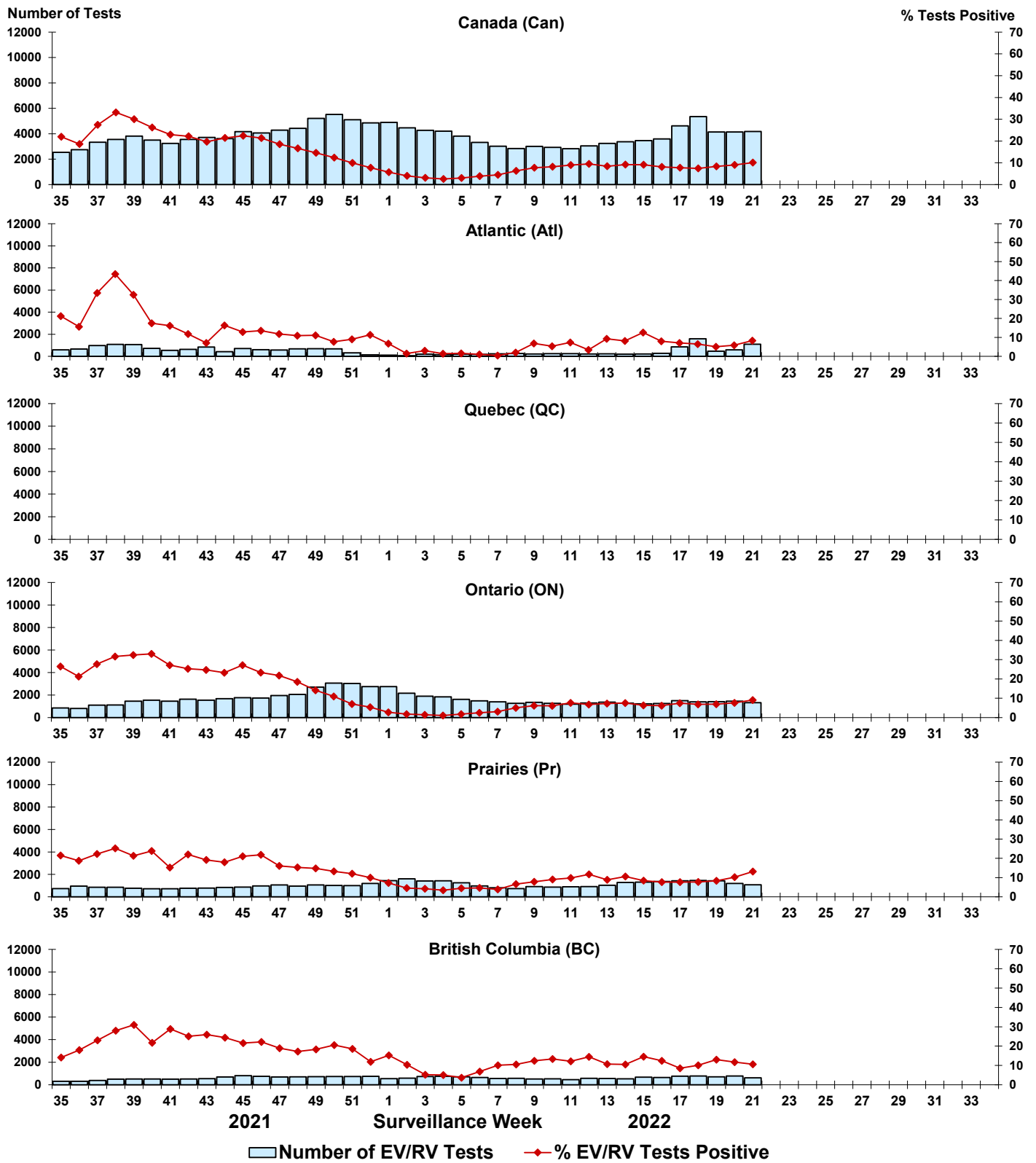


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

