

RESPIRATORY VIRUS DETECTION REPORT

April 17 to April 23, 2022
(Surveillance Week 2022-16)



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 increased since February 2022, with influenza accounting for most of the increase in recent weeks. Activity of all respiratory viruses is within or below expected levels for this time of year.

- Influenza is the most common seasonal respiratory virus detected in Canada.
 - A total of 1,035 influenza detections were reported (1,033 influenza A, 2 influenza B).
 - Activity of influenza A (6.8% positive) continues to increase, and is near average levels for this time of year.
- Activity of other respiratory viruses is low; however, activity of seasonal human coronavirus (151 detections; 4.9% positive) has increased in recent weeks but is within expected levels.
- The number of tests performed for all viruses were 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

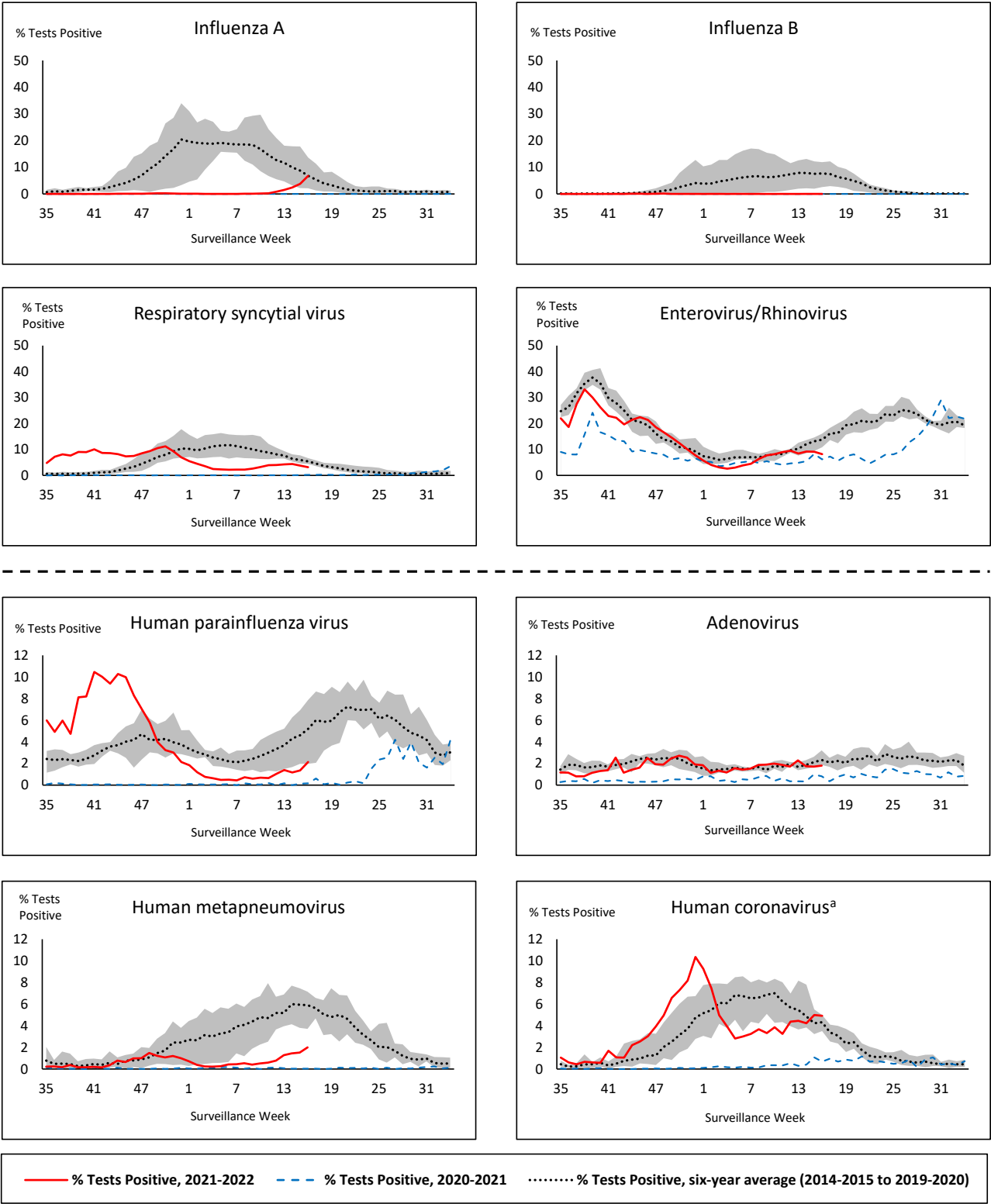
QC: Quebec

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 April 23, 2022 (surveillance week 2022-16)

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	80	0	0	1	1	0	80	0	80	0	0	0	0	0	80	1	80	0	80	4	N.C.	N.C.
Prince Edward Island	34	0	0	0	0	0	34	8	34	0	0	0	0	0	34	2	34	6	34	13	34	3
Nova Scotia	646	0	1	22	23	0	646	5	27	0	0	0	1	0	27	0	27	0	27	1	27	1
New Brunswick	669	0	0	3	3	0	576	4	136	0	0	0	0	0	136	0	136	0	136	4	136	0
Atlantic	1429	0	1	26	27	0	1336	17	277	0	0	0	1	0	277	3	277	6	277	22	197	4
Région Nord-Est	992	4	0	182	186	0	479	0	2	0	0	0	0	0	2	0	2	1	N.C.	N.C.	2	0
Québec-Chaudière-Appalaches	441	0	0	106	106	0	444	1	32	0	3	0	0	0	123	7	122	3	N.C.	N.C.	86	2
Centre-du-Québec	366	0	0	86	86	0	327	0	18	0	0	1	1	0	18	0	18	0	N.C.	N.C.	18	3
Montréal-Laval	835	0	1	123	124	1	805	1	213	1	9	2	0	0	213	11	213	4	N.C.	N.C.	213	17
Ouest du Québec	307	0	2	83	85	0	307	1	8	0	1	0	0	0	8	0	8	0	N.C.	N.C.	8	0
Montréal-Laval	119	0	0	13	13	0	85	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	3060	4	3	593	600	1	2447	3	273	1	13	3	1	0	364	18	363	8	N.C.	N.C.	327	22
P.H.O.L. - Ottawa	64	0	3	0	3	0	64	0	64	0	0	0	0	1	64	0	64	0	64	3	64	1
EORLA	135	0	0	6	6	0	135	0	24	0	0	0	0	0	24	0	24	0	24	3	24	2
P.H.O.L. - Kingston	34	0	1	0	1	0	34	1	34	0	0	0	0	0	34	0	33	0	34	4	33	1
UHN / Mount Sinai Hospital	526	0	0	3	3	0	526	1	17	0	0	0	0	0	17	0	17	0	17	0	17	1
P.H.O.L. - Toronto	257	0	7	0	7	0	257	1	257	0	0	0	0	5	257	8	256	6	257	13	256	11
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	0
P.H.O.L. - Timmins	14	0	0	0	0	0	14	0	14	0	0	0	0	0	14	0	14	0	14	0	14	0
St. Joseph's - London	53	0	0	4	4	0	53	0	53	0	0	0	0	1	53	2	53	1	53	3	3	0
P.H.O.L. - London	78	0	3	0	3	0	78	0	78	0	0	0	0	2	78	2	78	1	78	11	78	8
P.H.O.L. - Orillia	20	0	0	0	0	0	20	3	20	0	0	0	0	2	20	1	20	1	20	6	20	4
P.H.O.L. - Thunder Bay	7	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	0	7	5	7	0
P.H.O.L. - Sudbury	6	0	1	0	1	0	6	0	6	0	0	0	0	0	6	0	6	0	6	0	6	0
P.H.O.L. - Hamilton	46	0	0	0	0	0	46	0	46	0	0	0	0	1	46	0	46	3	46	0	46	5
P.H.O.L. - Peterborough	11	0	0	0	0	0	11	0	11	0	0	0	0	0	11	0	11	0	11	2	11	2
St. Joseph's - Hamilton	601	0	0	6	6	0	601	2	601	0	0	1	0	0	601	2	601	9	601	27	0	0
Province of Ontario	1859	0	15	19	34	0	1859	8	1239	0	0	1	0	12	1239	15	1237	21	1239	77	586	35
Province of Manitoba	1187	0	9	42	51	0	1187	62	113	0	0	0	1	0	113	3	139	2	113	14	139	1
Province of Saskatchewan	702	0	1	78	79	0	702	141	184	0	0	0	7	0	184	4	184	2	184	23	184	13
Province of Alberta	2504	0	40	105	145	0	982	90	982	0	8	5	10	0	982	9	982	28	982	63	982	29
Prairies	4393	0	50	225	275	0	2871	293	1279	0	8	5	18	0	1279	16	1305	32	1279	100	1305	43
British Columbia	4347	0	11	0	78	1	4097	61	660	0	1	1	10	5	660	17	660	10	645	80	645	47
Yukon	76	0	0	0	0	0	76	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	59	0	18	1	19	0	57	10	2	0	0	0	0	0	2	0	2	0	57	8	2	0
Nunavut	67	0	0	0	0	0	67	8	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	202	0	18	1	19	0	200	19	2	0	0	0	0	0	2	0	2	0	57	8	2	0
CANADA	15290	4	98	864	1033	2	12810	401	3730	1	22	10	30	17	3821	69	3844	77	3497	287	3062	151

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 April 23, 2022 (surveillance week 2021-35 to 2022-16)

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	8547	0	0	1	1	0	8546	102	8549	1	7	116	0	154	8556	30	8543	33	8550	1757	N.C.	N.C.
Prince Edward Island	2137	0	1	0	1	0	2137	224	2092	0	0	154	0	0	2137	58	2137	30	2137	510	2137	114
Nova Scotia	17384	0	2	62	64	5	17383	317	1463	0	2	39	13	0	1477	13	1477	6	1477	114	1477	37
New Brunswick	14659	0	0	11	11	0	9266	272	2884	0	0	23	4	0	2877	17	2884	6	2884	52	2793	7
Atlantic	42727	0	3	74	77	5	37332	915	14988	1	9	332	17	154	15047	118	15041	75	15048	2433	6407	158
Région Nord-Est	18822	5	0	272	277	3	8112	1439	792	0	0	9	1	0	891	17	394	8	N.C.	N.C.	1230	21
Québec-Chaudière-Appalaches	5594	0	0	163	163	4	6185	995	1471	0	10	7	10	0	1746	75	1656	71	N.C.	N.C.	1478	48
Centre-du-Québec	6562	0	0	150	150	4	6627	1081	602	0	3	22	1	0	602	31	610	20	N.C.	N.C.	595	16
Montréal-Laval	19945	0	3	308	311	6	19897	2450	6848	7	27	27	5	0	6847	404	6845	340	N.C.	N.C.	6844	116
Ouest du Québec	5101	0	4	114	118	0	5043	930	111	0	3	3	4	0	104	7	100	1	N.C.	N.C.	100	3
Montréal	3011	0	0	37	37	0	2940	387	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	59035	5	7	1044	1056	17	48804	7282	9824	7	43	68	21	0	10190	534	9605	440	N.C.	N.C.	10247	204
P.H.O.L. - Ottawa	6628	2	11	0	13	0	6628	1439	6628	0	0	0	0	733	6628	311	6626	40	6628	2227	6626	270
EORLA	5923	0	0	16	16	0	5898	608	853	0	2	19	1	0	853	15	534	4	853	148	511	19
P.H.O.L. - Kingston	1294	0	4	0	4	0	1293	125	1292	0	0	0	0	129	1292	19	1285	2	1292	298	1285	88
UHN / Mount Sinai Hospital	15861	0	0	24	24	3	15861	99	504	0	0	0	0	0	504	0	504	1	504	13	504	5
P.H.O.L. - Toronto	8346	2	13	1	16	0	8334	275	8334	0	0	0	0	285	8337	116	8331	22	8334	985	8332	267
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	300	0	2	1	3	0	299	5	299	0	0	0	0	7	299	3	299	1	299	50	299	18
P.H.O.L. - Timmins	385	0	0	0	0	0	385	25	385	0	0	0	0	18	385	1	385	0	385	31	385	26
St. Joseph's - London	12453	0	0	40	40	0	12456	766	10899	0	0	7	0	87	10899	135	10899	31	10853	558	519	2
P.H.O.L. - London	3192	0	8	1	9	0	3191	452	3191	0	0	0	0	159	3191	75	3190	14	3191	444	3190	249
P.H.O.L. - Orillia	801	0	1	0	1	0	801	111	801	0	0	0	0	43	801	26	798	7	801	205	798	59
P.H.O.L. - Thunder Bay	286	0	1	0	1	0	286	18	286	0	0	0	0	21	286	1	286	0	286	55	286	35
P.H.O.L. - Sudbury	303	0	2	0	2	0	303	11	303	0	0	0	0	9	303	1	303	2	303	31	303	9
P.H.O.L. - Hamilton	1563	0	5	0	5	0	1558	68	1558	0	0	0	0	45	1559	13	1558	12	1558	214	1558	92
P.H.O.L. - Peterborough	573	0	0	0	0	0	573	45	566	0	0	0	0	11	566	1	564	1	566	90	564	43
St. Joseph's - Hamilton	20188	0	4	40	44	1	20182	1625	20182	2	0	651	0	0	20182	196	20182	54	20182	1839	0	0
Province of Ontario	78935	4	51	123	178	4	78048	5672	56920	2	4	745	2	1547	56924	925	56583	192	56874	7421	25999	1192
Manitoba	49784	1	30	72	103	0	49784	1099	2324	2	8	74	3	0	2324	37	3570	8	2324	270	3376	77
Province of Saskatchewan	24327	2	99	135	236	0	24296	1199	4208	0	2	196	42	0	4207	76	4207	18	4207	592	4204	238
Province of Alberta	68989	1	142	348	491	2	27737	2997	27737	1	45	667	180	0	27737	283	27737	154	27737	3283	27737	1394
Prairies	143100	4	271	555	830	2	101817	5295	34269	3	55	937	225	0	34268	396	35514	180	34268	4145	35317	1709
British Columbia	170466	5	126	5	379	87	166752	8900	20661	6	9	1060	208	157	20661	398	20657	101	20225	3252	20273	658
Yukon	5280	1	2	2	7	7	5290	300	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	1098	0	33	1	34	0	1039	107	86	0	0	1	0	0	86	2	86	0	1038	120	86	1
Nunavut	15195	0	0	0	0	0	15180	20	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	21573	1	35	3	41	7	21509	427	112	0	0	2	0	0	112	3	112	0	1064	129	109	1
CANADA	515836	19	493	1804	2561	122	454262	28491	136774	19	120	3144	473	1858	137202	2374	137512	988	127479	17380	98352	3922

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

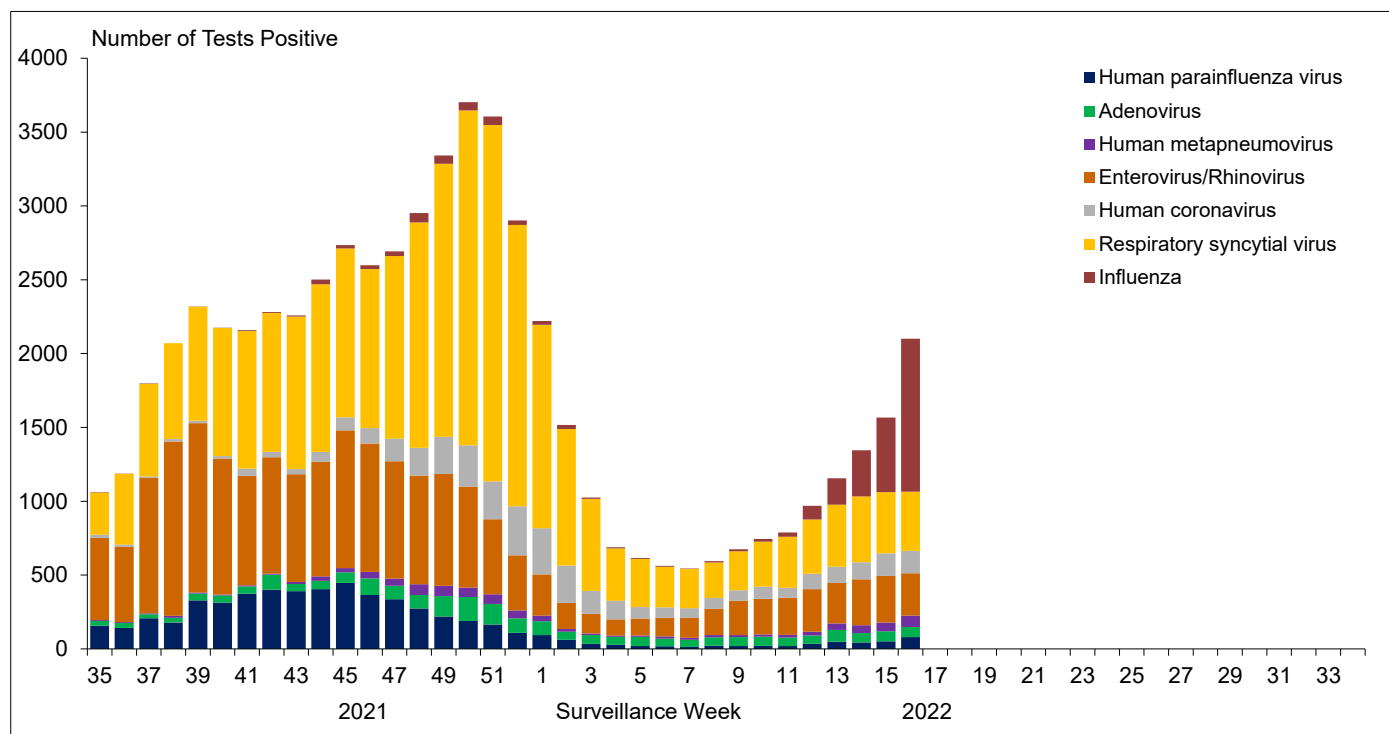


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

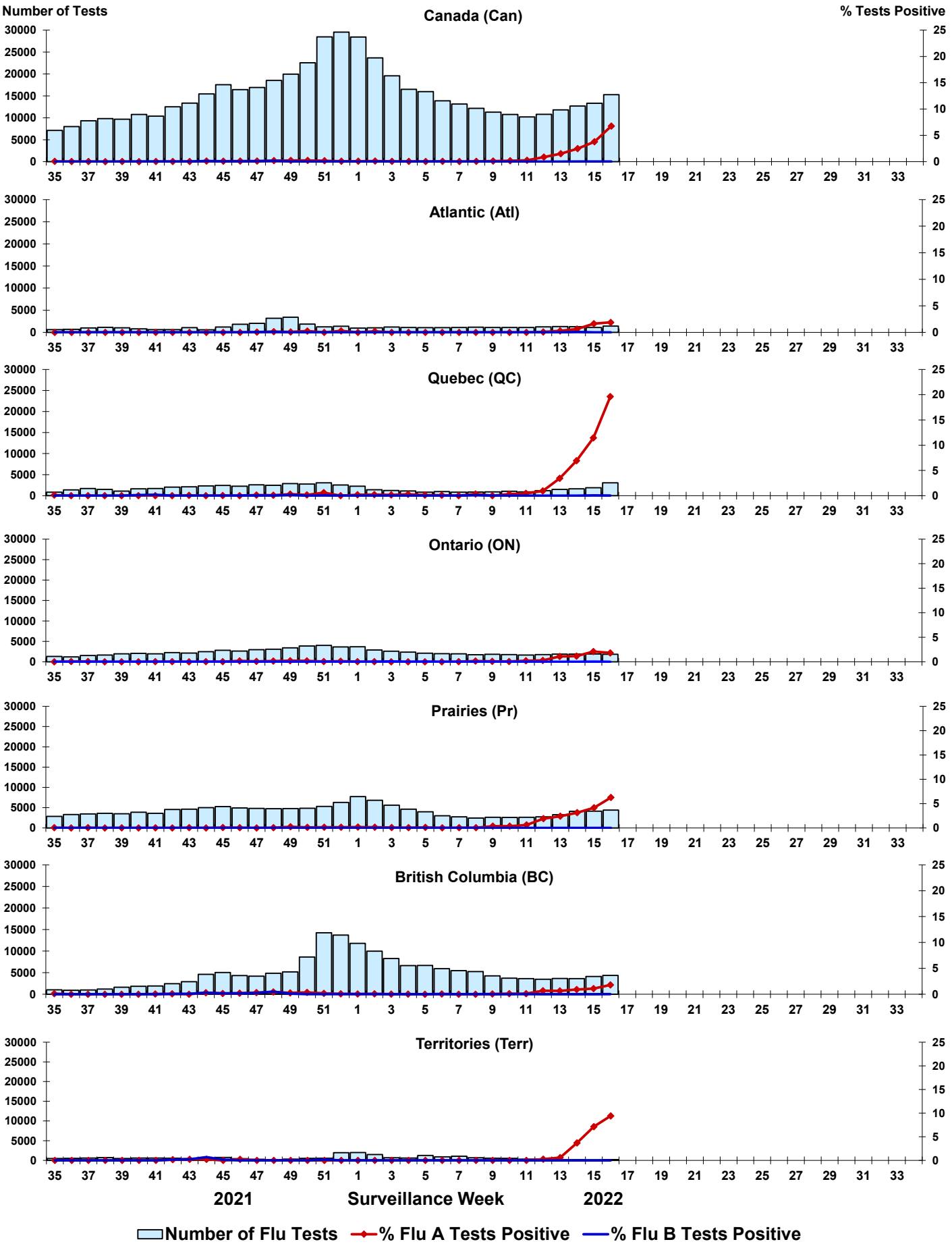


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

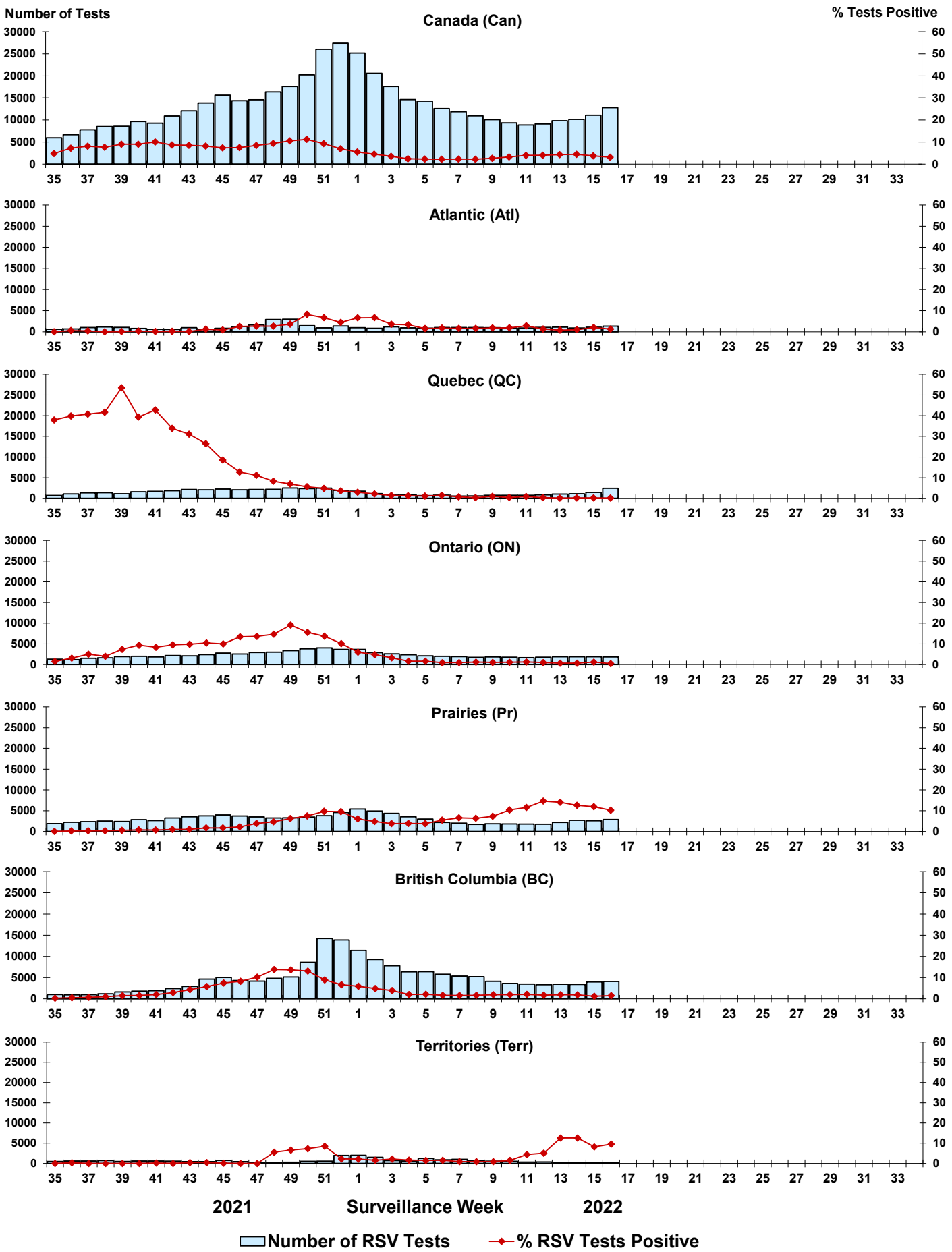


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

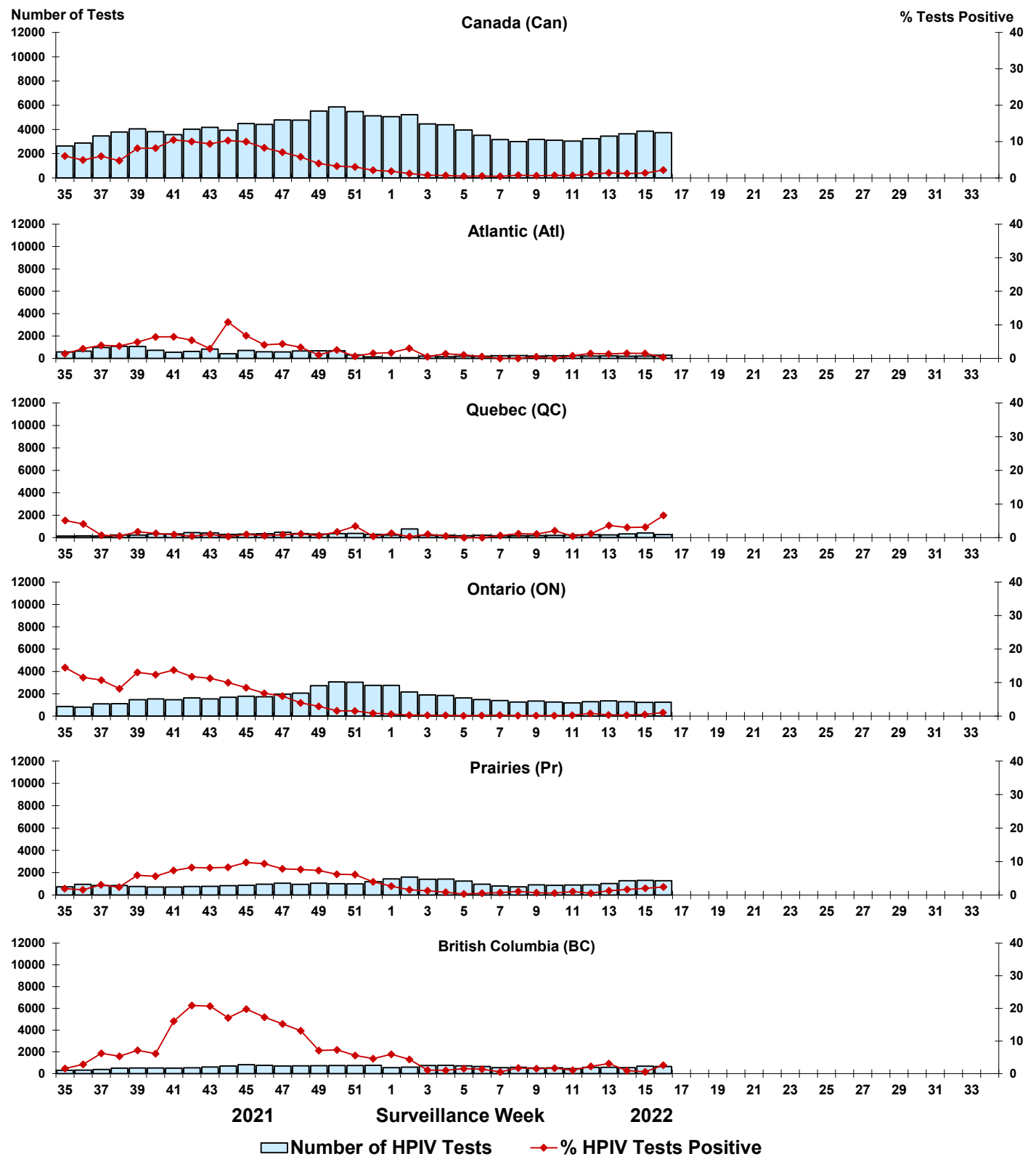


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

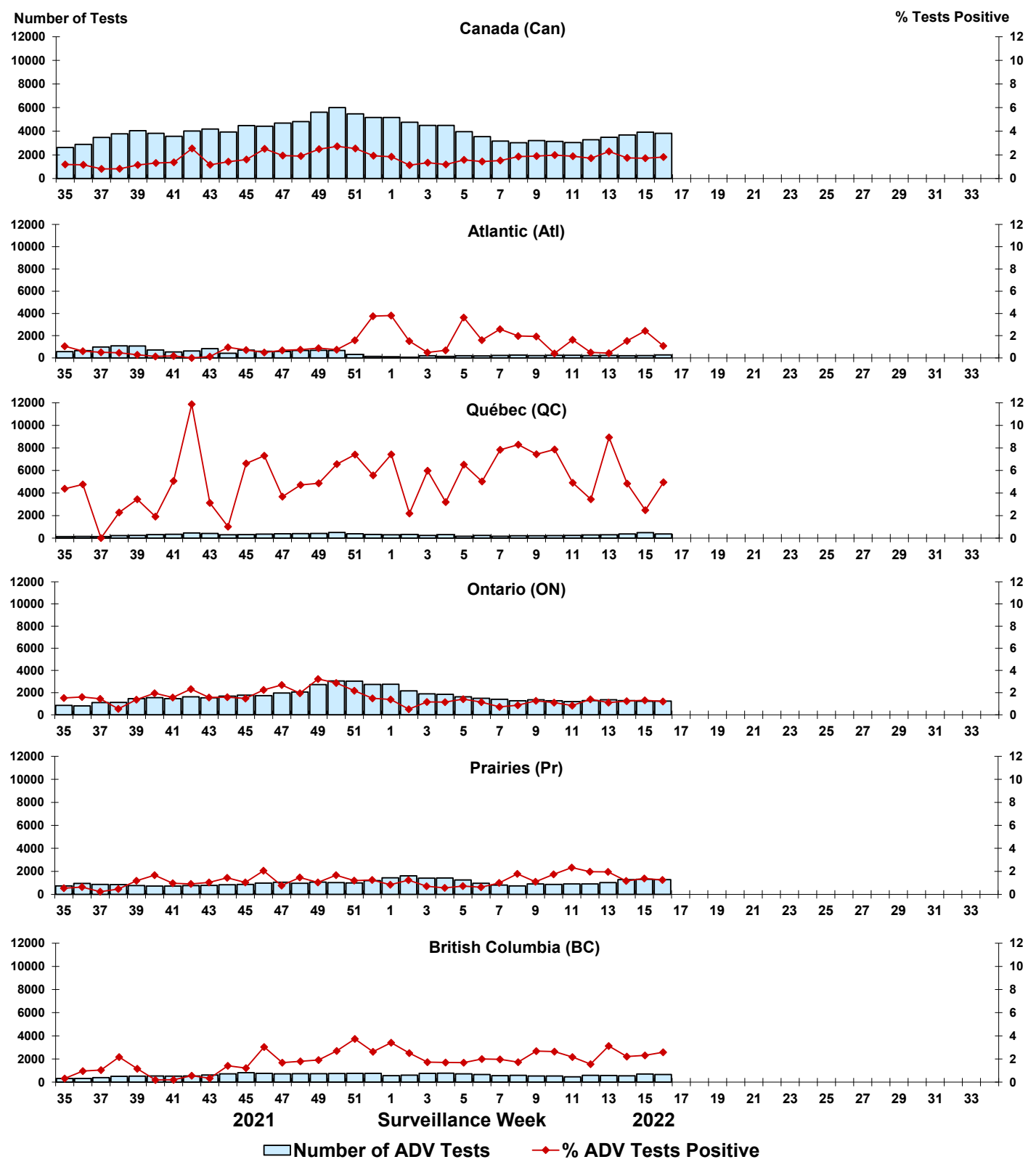


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

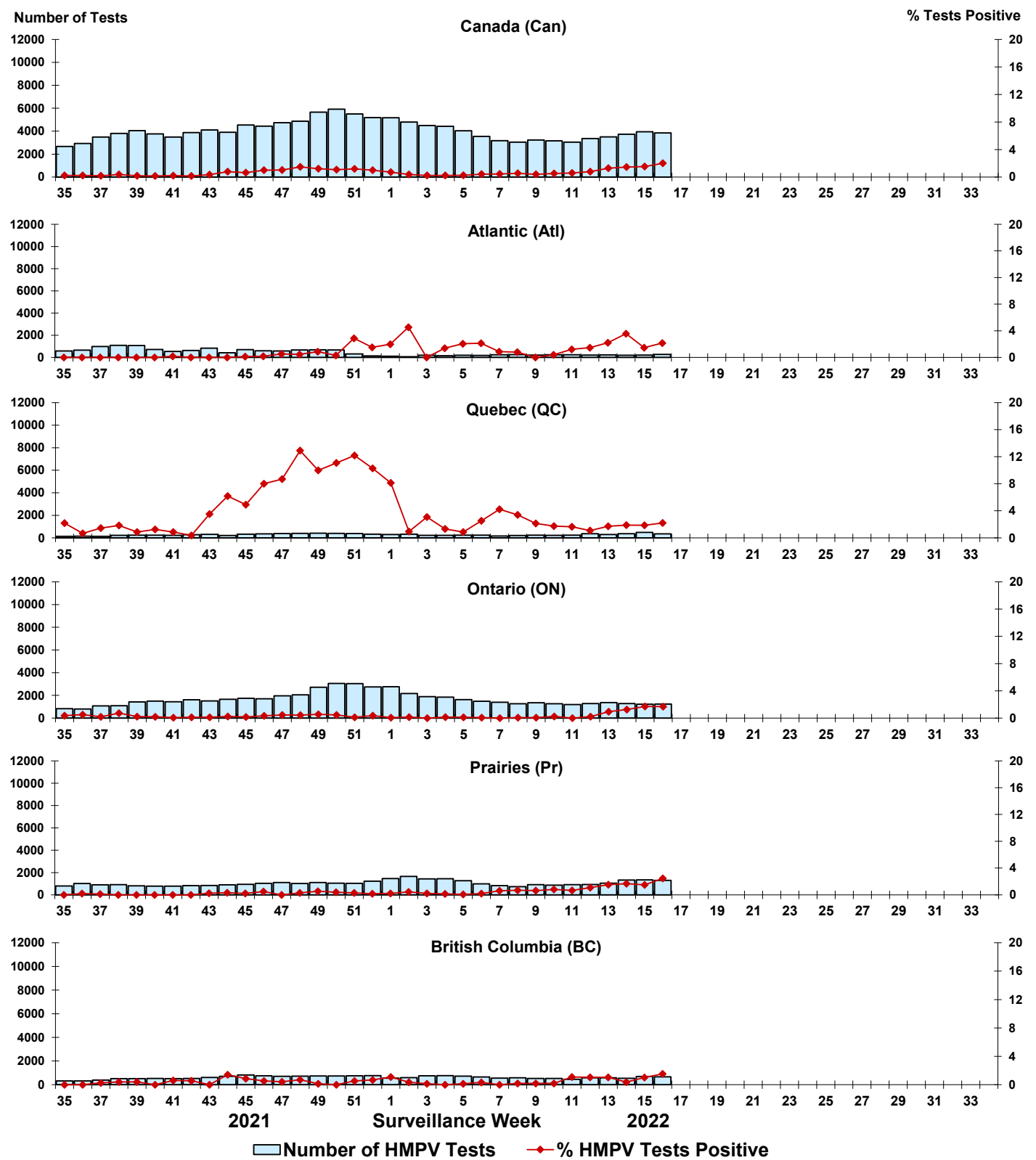


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

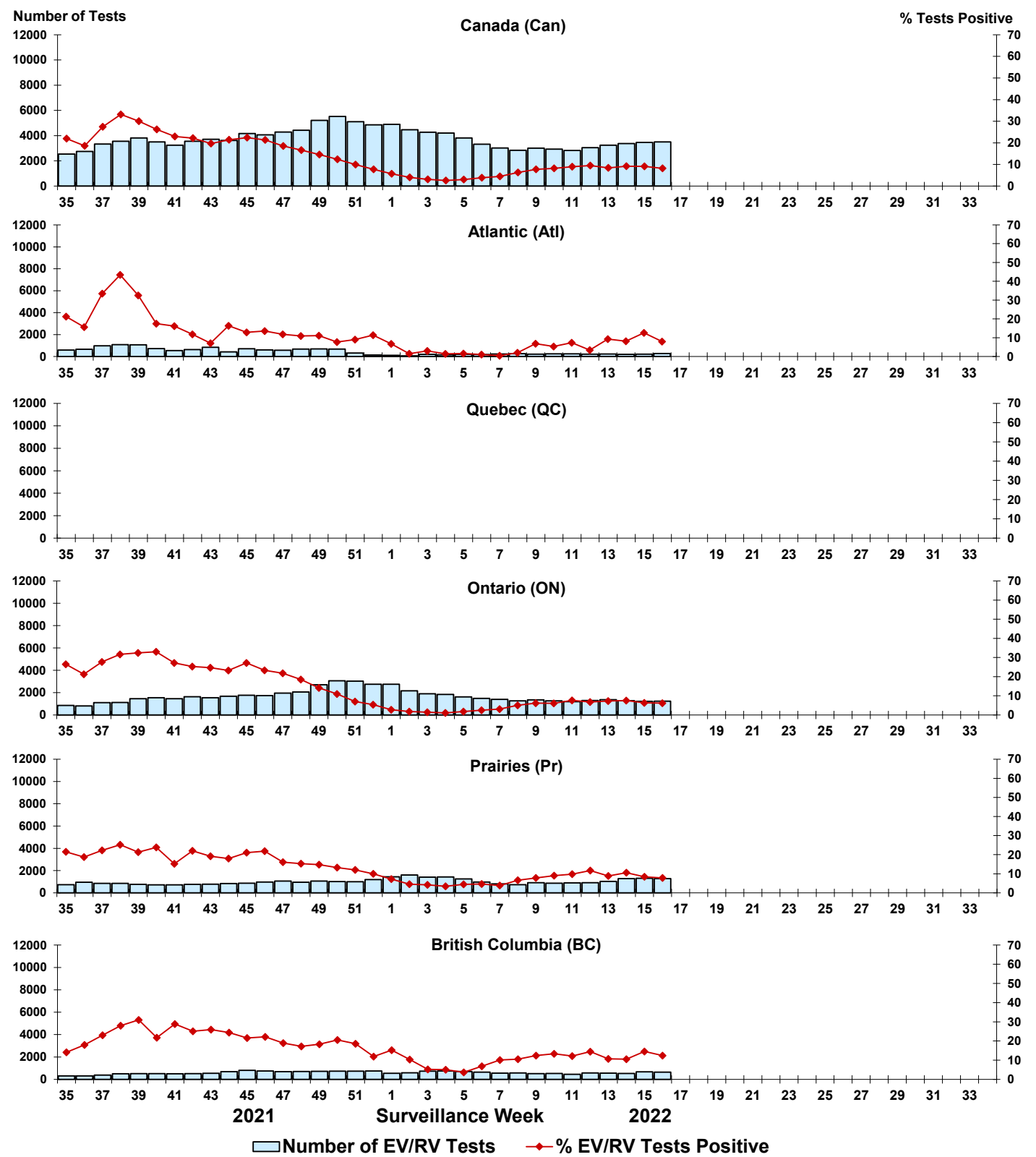


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

