

RESPIRATORY VIRUS DETECTION REPORT

January 23 to January 29, 2022
(Surveillance Week 2022-04)



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 week 4 (January 23 to January 29, 2022), activity of all respiratory viruses is within or below expected levels for this time of year.

- Respiratory syncytial virus (330 detections; 2.3% positive) is the most common seasonal respiratory viruses detected in Canada. Activity has decreased in recent weeks and is below expected levels.
- Detections of other respiratory viruses are low.
- The number of tests performed for each virus is either within or above 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

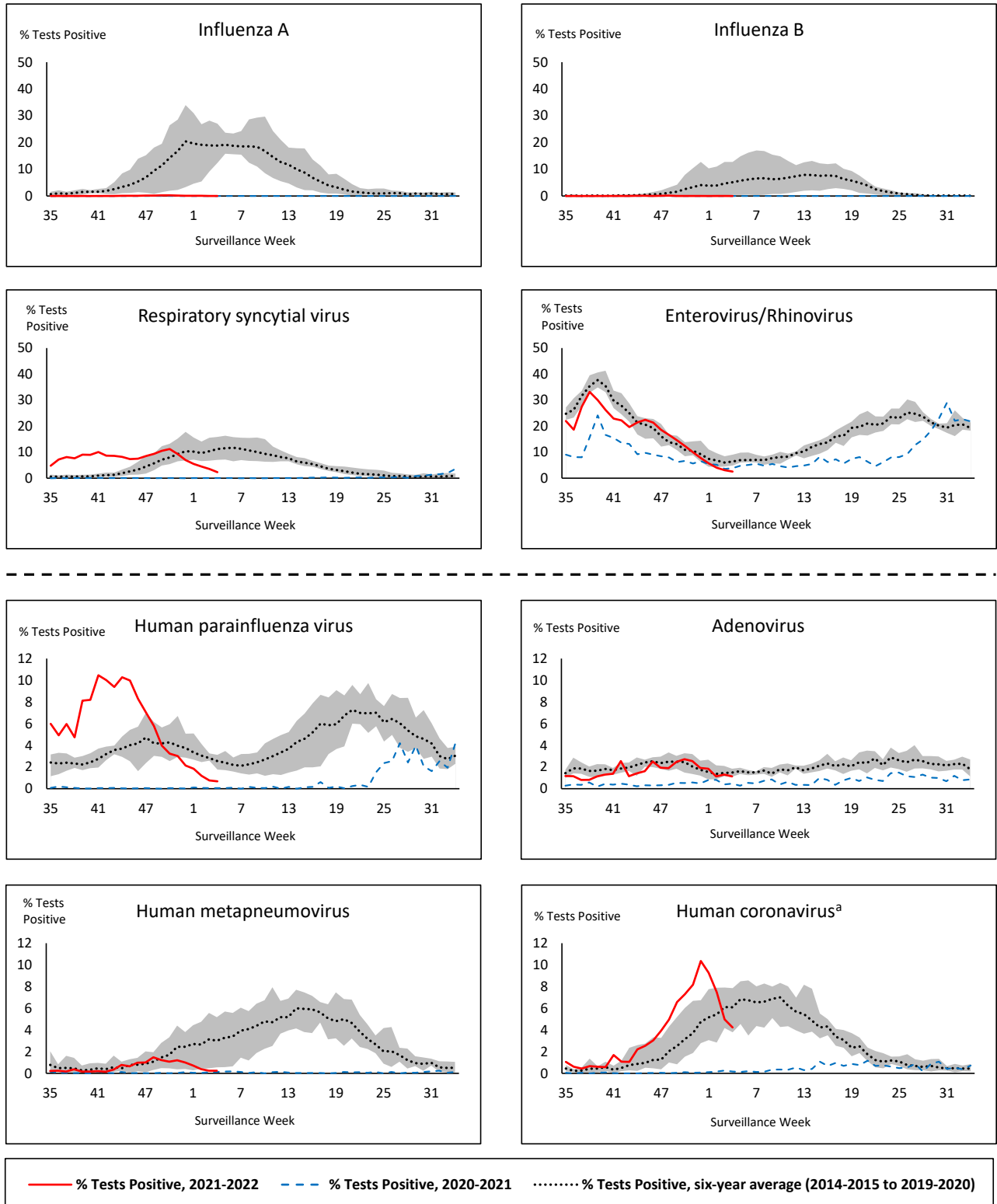
QC: Quebec

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 January 29, 2022 (surveillance week 2022-04)

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	36	0	0	0	0	0	36	3	36	0	0	0	0	0	36	0	36	1	36	0	N.C.	N.C.
Prince Edward Island	47	0	0	0	0	0	47	12	47	0	0	0	0	0	47	1	47	1	47	2	47	0
Nova Scotia	513	0	0	0	0	0	513	16	28	0	0	0	1	0	28	0	28	0	28	0	28	0
New Brunswick	503	0	0	0	0	0	339	0	33	0	0	0	1	0	33	0	33	0	33	0	33	0
Atlantic	1099	0	0	0	0	0	935	31	144	0	0	0	2	0	144	1	144	2	144	2	108	0
Région Nord-Est	467	0	0	1	1	0	180	1	0	0	0	0	0	0	84	1	0	0	N.C.	N.C.	84	2
Québec-Chaudière-Appalaches	113	0	0	1	1	0	113	3	32	0	0	0	0	0	54	2	53	1	N.C.	N.C.	53	3
Centre-du-Québec	102	0	0	0	0	0	97	2	18	0	0	0	0	0	18	1	18	0	N.C.	N.C.	18	0
Montréal-Laval	252	0	0	1	1	0	238	2	62	0	0	0	1	0	61	4	61	2	N.C.	N.C.	61	2
Ouest du Québec	70	0	0	0	0	0	70	1	11	0	0	0	0	0	11	0	11	0	N.C.	N.C.	11	0
Montérégie	44	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	1048	0	0	3	3	0	742	9	123	0	0	0	1	0	228	8	143	3	N.C.	N.C.	227	7
P.H.O.L. - Ottawa	38	0	0	0	0	0	38	1	38	0	0	0	0	0	38	0	38	0	38	0	38	4
EORLA	146	0	0	0	0	0	146	0	19	0	0	0	0	0	19	0	19	0	19	0	0	0
P.H.O.L. - Kingston	20	0	0	0	0	0	20	1	20	0	0	0	0	0	20	1	20	0	20	0	20	0
UHN / Mount Sinai Hospital	408	0	0	0	0	0	408	0	14	0	0	0	0	0	14	0	14	0	14	0	14	0
P.H.O.L. - Toronto	249	0	0	0	0	0	249	0	249	0	0	0	0	0	249	1	249	0	249	4	249	12
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	12	0	0	0	0	0	12	0	12	0	0	0	0	0	12	1	12	1	12	0	12	1
P.H.O.L. - Timmins	13	0	0	0	0	0	13	2	13	0	0	0	0	0	13	0	13	0	13	0	13	0
St. Joseph's - London	591	0	0	0	0	0	591	16	591	0	0	0	0	1	591	3	591	1	591	8	10	0
P.H.O.L. - London	159	0	0	0	0	0	159	5	159	0	0	0	0	4	159	1	159	0	159	1	159	13
P.H.O.L. - Orillia	17	0	0	0	0	0	17	1	17	0	0	0	0	0	17	0	17	0	17	4	17	3
P.H.O.L. - Thunder Bay	4	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	0	4	0	4	1
P.H.O.L. - Sudbury	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	1	0	1	0
P.H.O.L. - Hamilton	50	0	0	0	0	0	50	1	50	0	0	0	0	0	50	0	50	1	50	1	50	2
P.H.O.L. - Peterborough	2	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	0	2	0	2	1
St. Joseph's - Hamilton	653	0	0	0	0	0	653	10	653	0	0	0	0	0	653	14	653	0	653	2	0	0
Province of Ontario	2363	0	0	0	0	0	2363	37	1842	0	0	0	0	5	1842	21	1842	3	1842	20	589	37
Province of Manitoba	1024	0	1	0	1	0	1024	17	103	0	0	0	0	0	103	0	120	1	103	1	120	3
Province of Saskatchewan	1240	0	1	1	2	0	1280	23	136	0	0	4	0	0	136	2	136	1	136	4	136	21
Province of Alberta	2144	0	0	0	0	0	1113	86	1113	0	0	4	4	0	1113	5	1113	0	1113	42	1113	44
Prairies	4408	0	2	1	3	0	3417	126	1352	0	0	8	4	0	1352	7	1369	2	1352	47	1369	68
British Columbia	6514	0	0	0	2	0	6232	127	644	0	1	4	3	0	644	11	644	0	631	32	631	12
Yukon	77	0	0	0	0	0	77	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	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.
Nunavut	491	0	0	0	0	0	490	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.
Territories	572	0	0	0	0	0	569	0	2	0	0	0	0	0	2	0	2	0	2	0	2	0
CANADA	16004	0	2	4	8	0	14258	330	4107	0	1	12	10	5	4212	48	4144	10	3971	101	2926	124

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 January 29, 2022 (surveillance week 2021-35 to 2022-04)

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	7116	0	0	0	0	0	7115	79	7118	1	3	116	0	154	7123	21	7112	25	7119	1726	N.C.	N.C.
Prince Edward Island	1654	0	0	0	0	0	1654	111	1609	0	0	152	0	0	1654	38	1654	4	1654	431	1654	100
Nova Scotia	10678	0	1	12	13	4	10677	280	1133	0	2	37	5	0	1147	10	1147	2	1147	93	1147	29
New Brunswick	9221	0	0	6	6	0	5794	254	2456	0	0	23	1	0	2449	6	2456	4	2456	35	2365	4
Atlantic	28669	0	1	18	19	4	25240	724	12316	1	5	328	6	154	12373	75	12369	35	12376	2285	5166	133
Région Nord-Est	12944	0	0	2	2	2	6293	1422	588	0	0	6	1	0	683	13	25	0	N.C.	N.C.	775	10
Québec-Chaudière-Appalaches	4253	0	0	5	5	4	4808	992	1187	0	3	7	5	0	1085	38	996	49	N.C.	N.C.	907	43
Centre-du-Québec	4966	0	0	3	3	4	5114	1079	422	0	0	19	0	0	422	17	430	15	N.C.	N.C.	415	8
Montréal-Laval	14969	0	0	31	31	4	14878	2423	4612	5	2	21	5	0	4611	278	4608	307	N.C.	N.C.	4608	54
Ouest du Québec	3804	0	1	7	8	0	3761	927	43	0	0	2	0	0	36	3	32	1	N.C.	N.C.	32	1
Montérégie	2352	0	0	2	2	0	2345	386	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	43288	0	1	50	51	14	37199	7229	6852	5	5	55	11	0	6837	349	6091	372	N.C.	N.C.	6737	116
P.H.O.L. - Ottawa	6314	2	1	0	3	0	6314	1436	6314	0	0	0	0	727	6314	310	6313	38	6314	2205	6313	250
EORLA	4365	0	0	0	0	0	4340	590	560	0	2	19	0	0	560	10	241	3	560	111	218	15
P.H.O.L. - Kingston	1021	0	0	0	0	0	1020	108	1019	0	0	0	0	129	1019	17	1016	2	1019	274	1016	75
UHN / Mount Sinai Hospital	10599	0	0	8	8	2	10599	84	332	0	0	0	0	0	332	0	332	0	332	10	332	2
P.H.O.L. - Toronto	6077	0	13	0	13	0	6063	257	6063	0	0	0	0	261	6065	73	6062	11	6063	837	6063	195
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	204	0	1	0	1	0	202	4	202	0	0	0	0	7	202	3	202	1	202	47	202	6
P.H.O.L. - Timmins	251	0	0	0	0	0	251	11	251	0	0	0	0	16	251	1	251	0	251	29	251	13
St. Joseph's - London	8000	0	0	14	14	0	8003	709	6446	0	0	7	0	83	6446	86	6446	9	6400	373	485	2
P.H.O.L. - London	2532	0	6	0	6	0	2525	443	2525	0	0	0	0	152	2525	57	2525	8	2525	394	2525	197
P.H.O.L. - Orillia	620	0	1	0	1	0	620	99	620	0	0	0	0	41	620	21	618	5	620	158	618	46
P.H.O.L. - Thunder Bay	208	0	0	0	0	0	208	17	208	0	0	0	0	19	208	0	208	0	208	49	208	19
P.H.O.L. - Sudbury	231	0	0	0	0	0	231	10	231	0	0	0	0	8	231	1	231	2	231	28	231	4
P.H.O.L. - Hamilton	1183	0	7	0	7	0	1176	65	1176	0	0	0	0	43	1177	9	1176	6	1176	198	1176	72
P.H.O.L. - Peterborough	486	0	0	0	0	0	486	44	485	0	0	0	0	11	485	1	483	0	485	83	483	32
St. Joseph's - Hamilton	13681	0	4	7	11	0	13675	1570	13675	2	0	646	0	0	13675	142	13675	24	13675	1529	0	0
Province of Ontario	56611	2	33	29	64	2	55713	5447	40946	2	4	740	1	1497	40949	743	40618	110	40900	6558	20960	938
Manitoba	39650	1	15	8	24	0	39650	584	1114	1	4	68	0	0	1114	16	2145	6	1114	189	1951	37
Province of Saskatchewan	17250	2	7	10	19	0	17270	241	2547	0	1	188	24	0	2546	45	2546	2	2546	389	2544	166
Province of Alberta	47174	0	8	29	37	2	18285	1948	18285	0	18	647	130	0	18285	164	18285	40	18285	2605	18285	1119
Prairies	104074	3	30	47	80	2	75205	2773	21946	1	23	903	154	0	21945	225	22976	48	21945	3183	22780	1322
British Columbia	116233	3	36	3	164	83	114410	7969	13468	5	7	1035	142	139	13468	240	13464	59	13154	2493	13203	269
Yukon	4258	0	1	0	4	7	4365	244	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	538	0	0	0	0	0	500	2	56	0	0	1	0	0	56	2	56	0	499	89	56	0
Nunavut	10386	0	0	0	0	0	10376	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	15182	0	1	0	4	7	15241	253	72	0	0	1	0	0	72	3	72	0	515	97	69	0
CANADA	364057	8	102	147	382	112	323008	24395	95600	14	44	3062	314	1790	95644	1635	95590	624	88890	14616	68915	2778

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

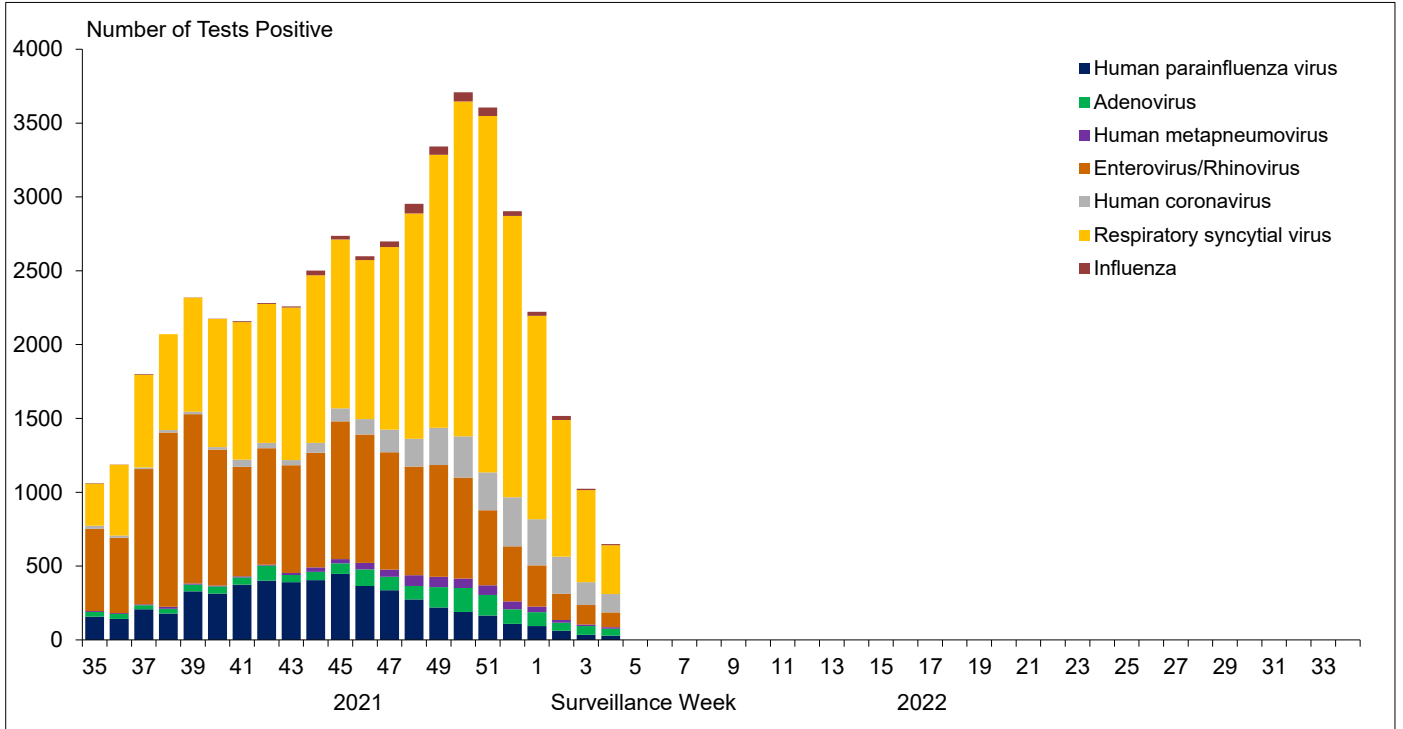


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

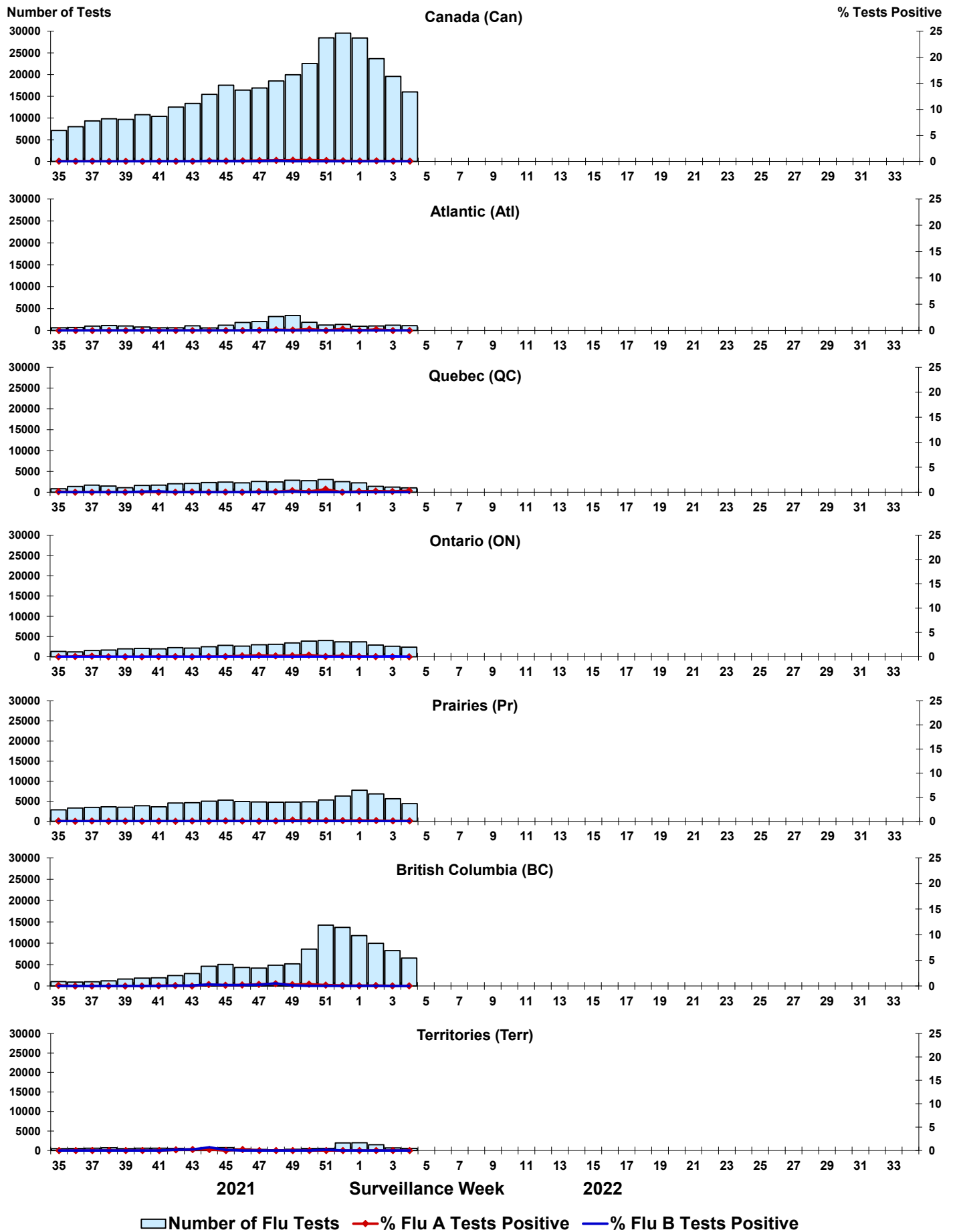


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

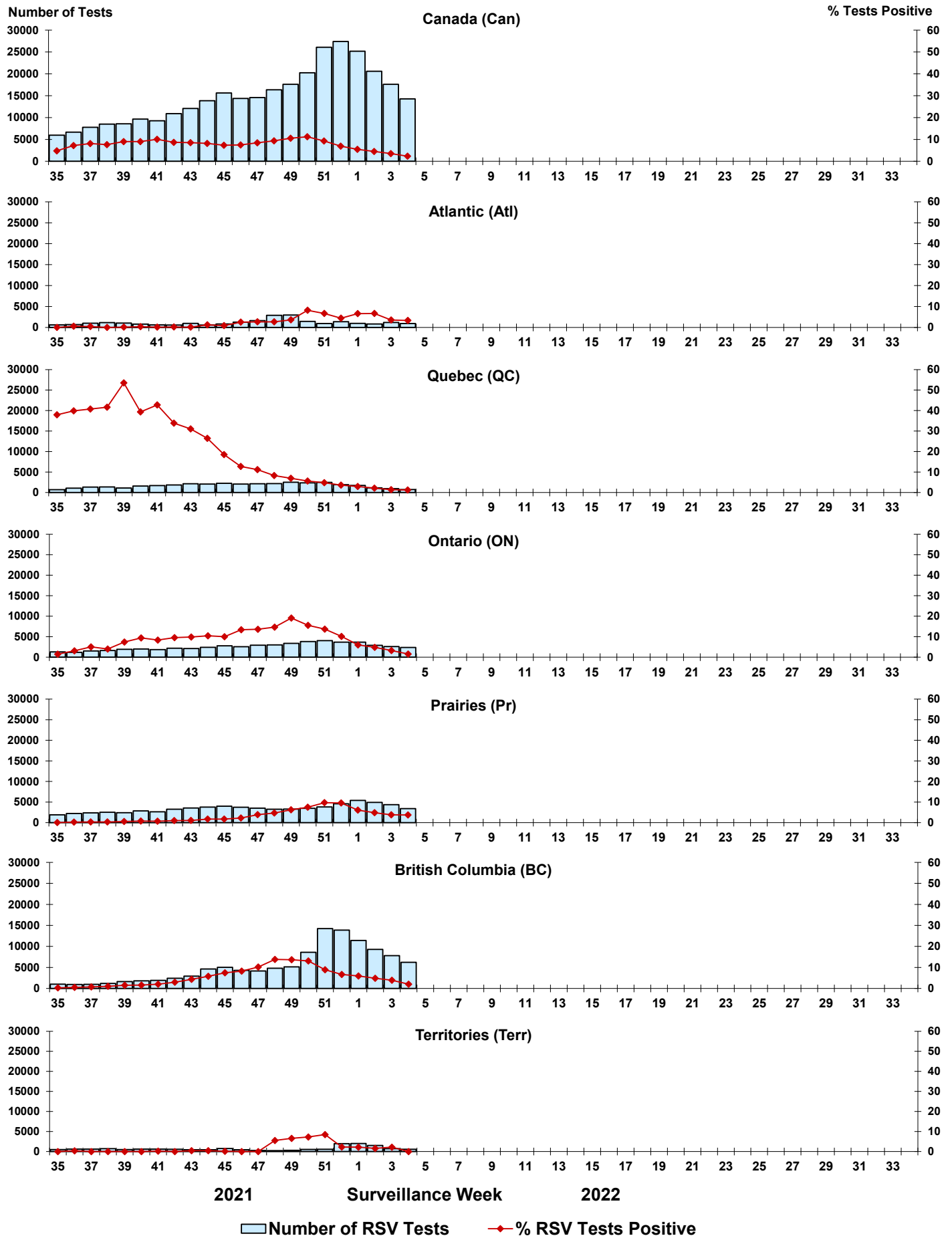


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

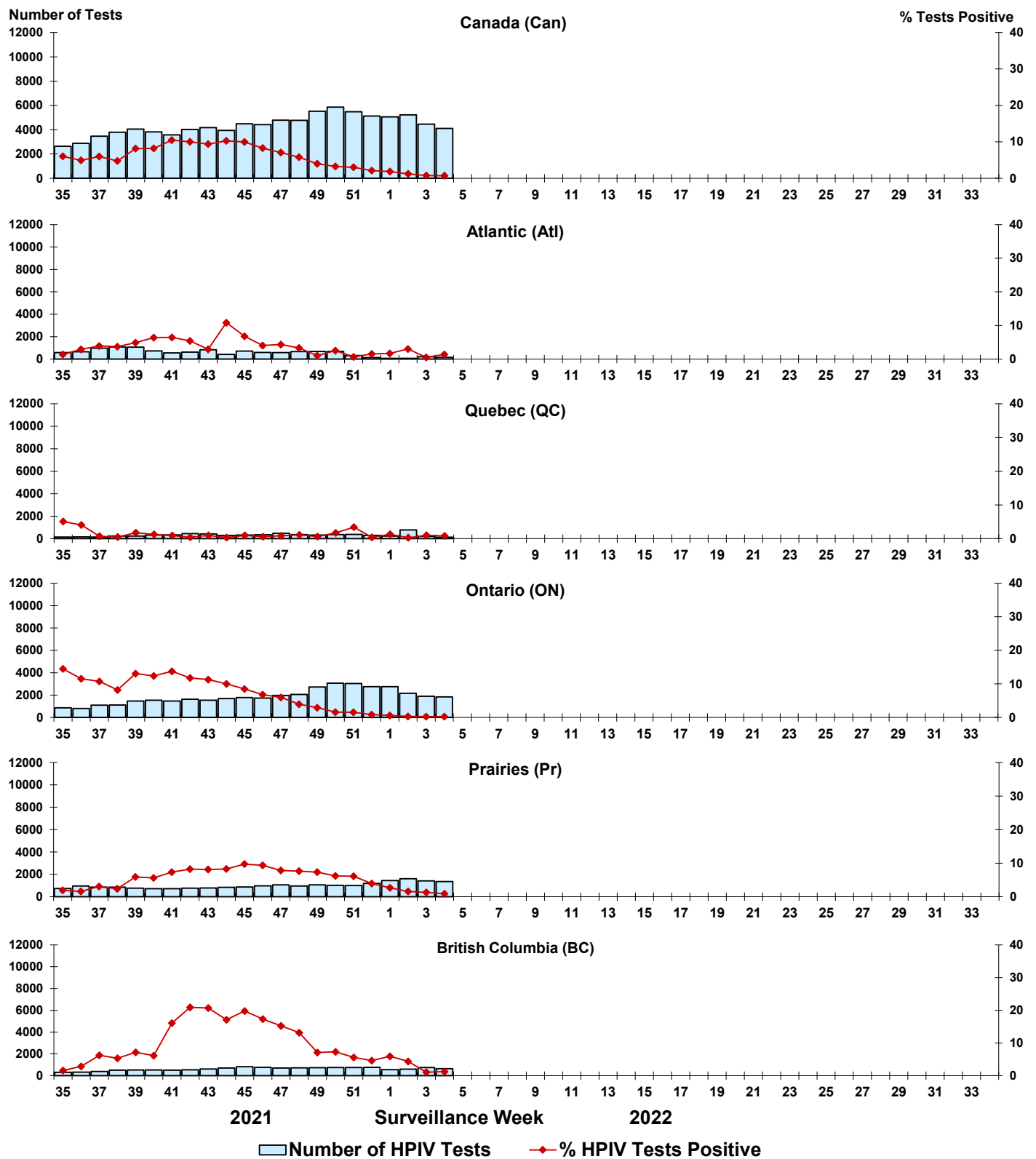


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

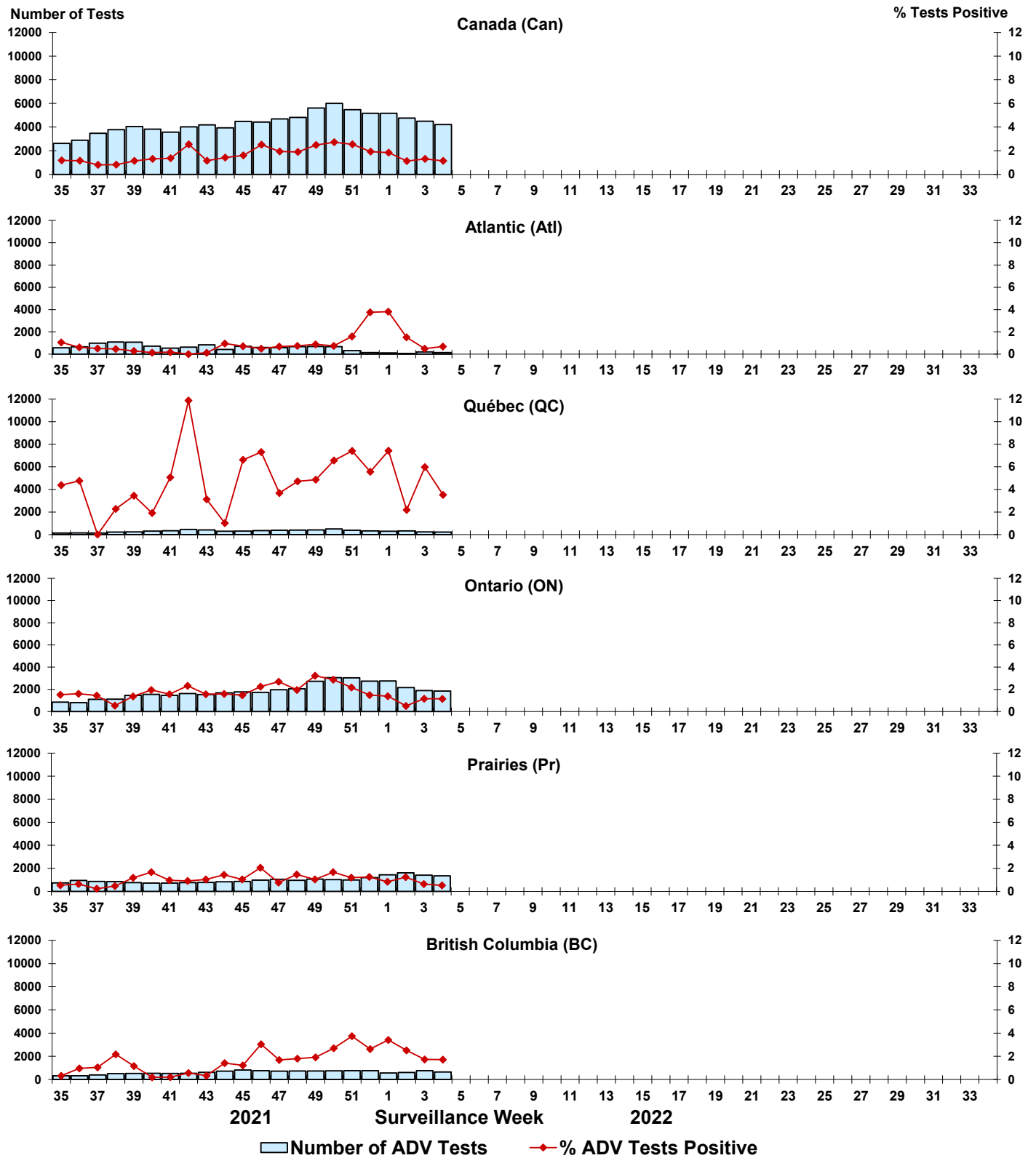


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

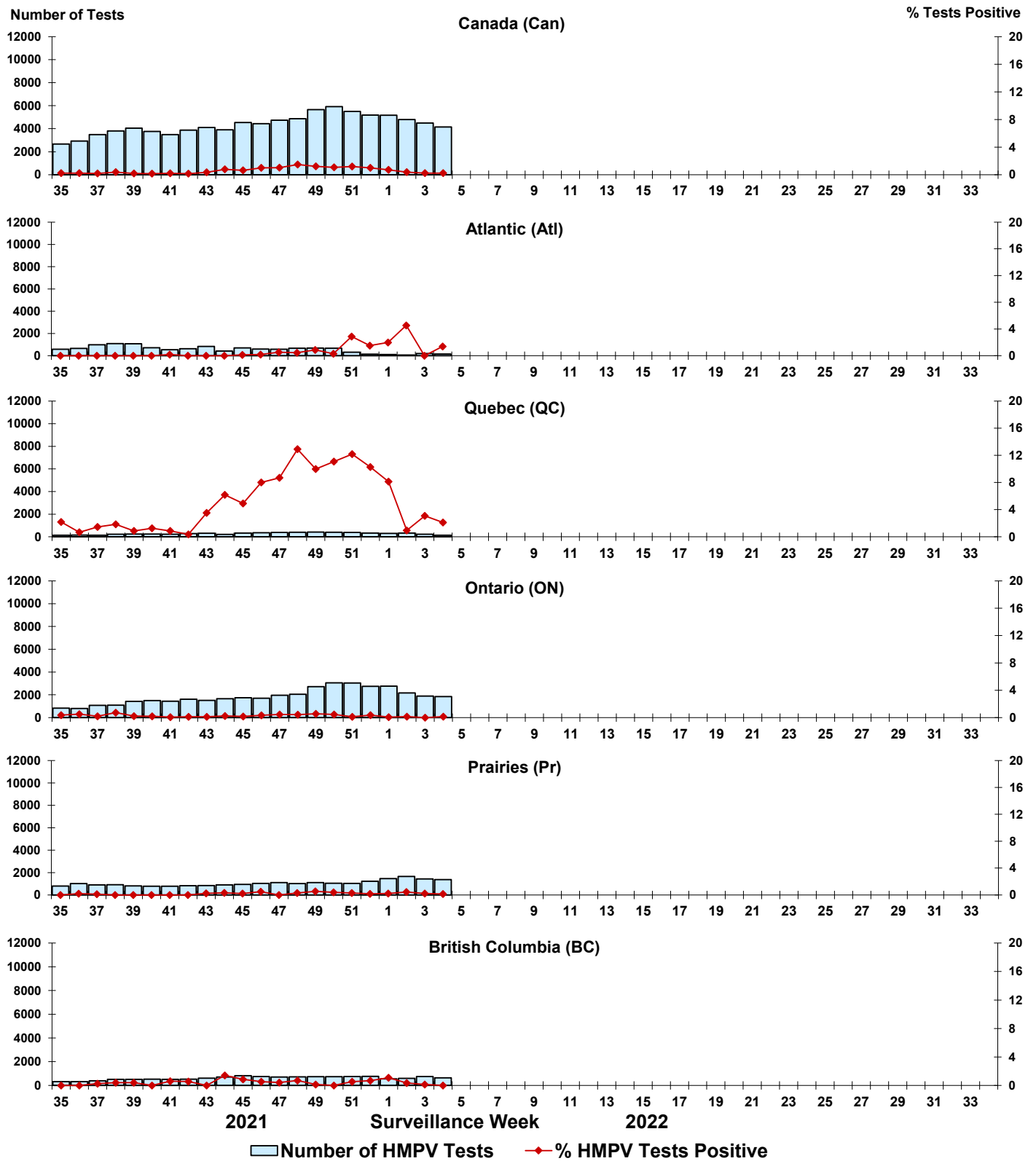


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

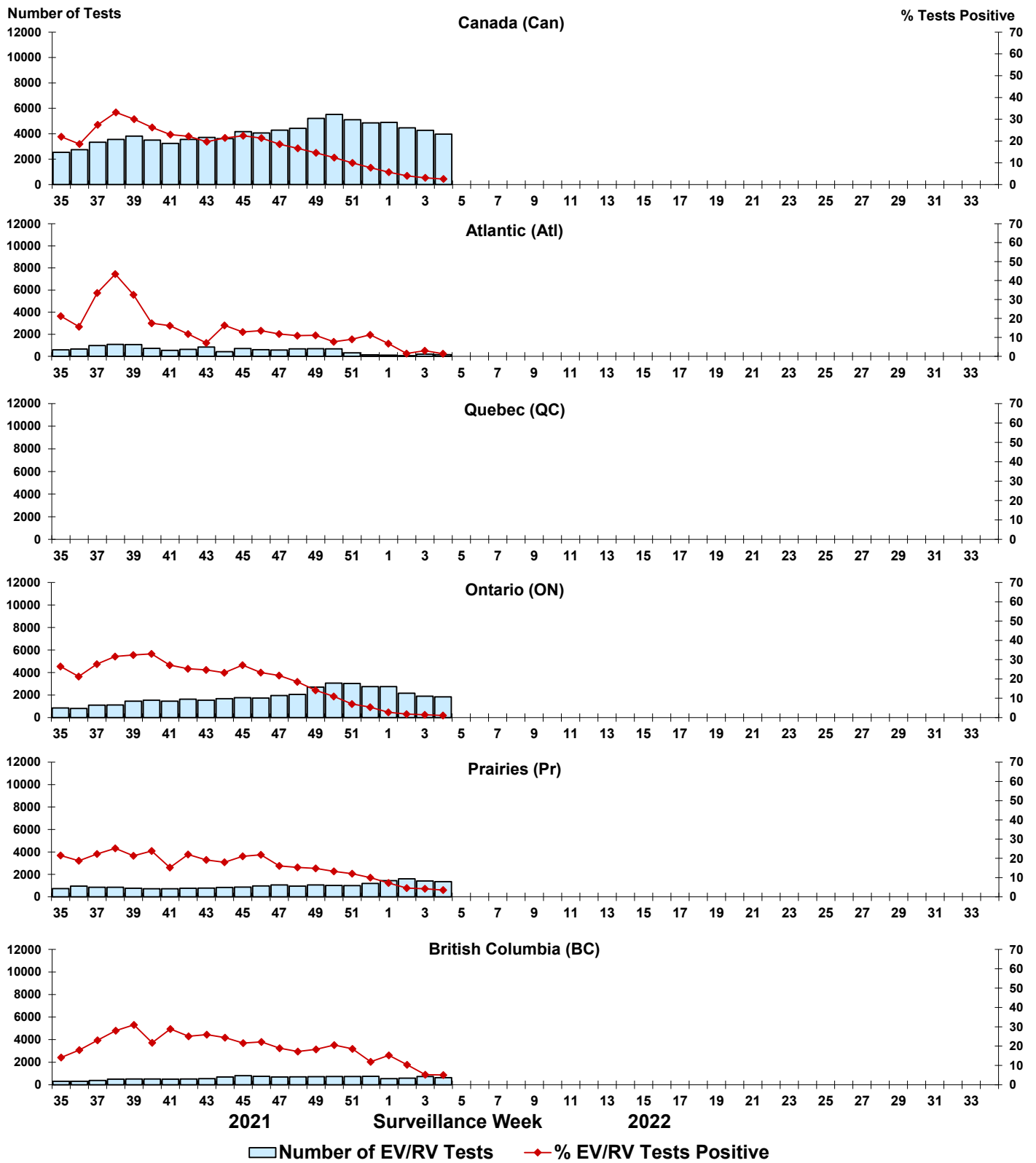


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

