

RESPIRATORY VIRUS DETECTION REPORT

January 2 to January 8, 2022
(Surveillance Week 2022-01)



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

In week 1 (January 2 to January 8, 2022), activity of almost all respiratory viruses is within or below expected levels for this time of year. Total number of respiratory virus detections have decreased in recent weeks.

- Respiratory syncytial virus (1,071 detections; 4.6% positive) is the most common seasonal respiratory viruses detected in Canada. Activity has decreased in recent weeks and is now below expected levels.
- Detections of other respiratory viruses are low, but activity of seasonal human coronavirus (250 detections; 8.6% positive) is above expected levels.
- 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.
- 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

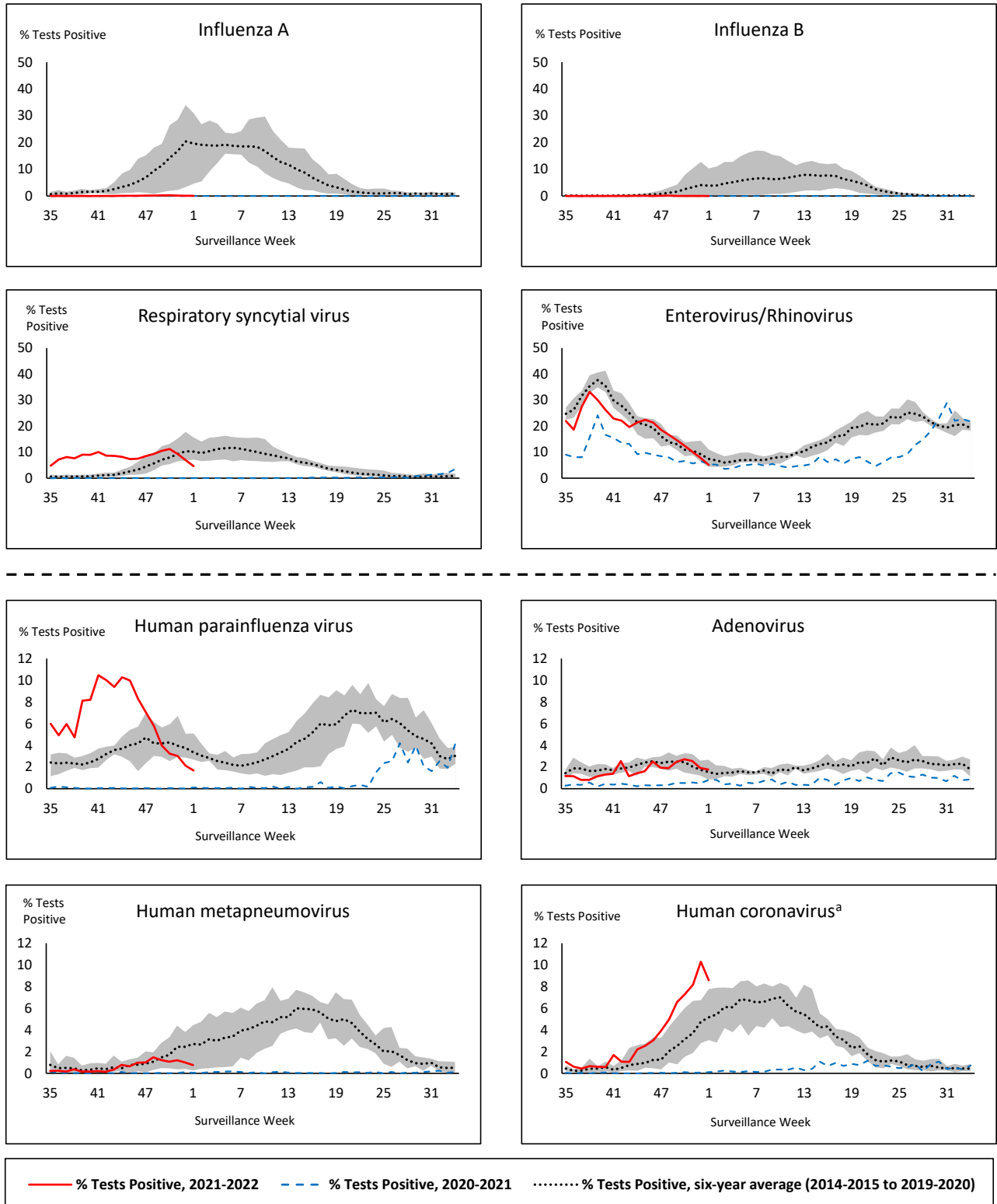
QC: Quebec

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 January 8, 2022 (surveillance week 2022-01)

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	5	0	0	0	0	0	5	1	5	0	0	0	0	0	6	0	2	0	5	1	N.C.	N.C.
Prince Edward Island	55	0	0	0	0	0	55	10	10	0	0	1	0	0	55	3	55	2	55	4	55	2
Nova Scotia	462	0	0	0	0	0	462	16	24	0	0	0	0	0	24	1	24	0	24	2	24	2
New Brunswick	445	0	0	0	0	0	461	38	20	0	0	0	0	0	20	0	20	0	20	0	20	0
Atlantic	967	0	0	0	0	0	983	65	59	0	0	1	0	0	105	4	101	2	104	7	99	4
Région Nord-Est	874	0	0	1	1	0	363	13	1	0	0	0	0	0	1	0	0	0	N.C.	N.C.	1	0
Québec-Chaudière-Appalaches	208	0	0	0	0	0	201	8	28	0	2	0	0	0	96	5	96	10	N.C.	N.C.	96	20
Centre-du-Québec	302	0	0	0	0	0	290	8	20	0	0	0	0	0	20	2	20	3	N.C.	N.C.	20	1
Montréal-Laval	582	0	0	3	3	0	571	10	179	1	0	0	0	0	179	15	179	11	N.C.	N.C.	179	4
Ouest du Québec	202	0	0	0	0	0	202	9	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Montérégie	81	0	0	0	0	0	81	2	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	2249	0	0	4	4	0	1708	50	228	1	2	0	0	0	296	22	295	24	N.C.	N.C.	296	25
P.H.O.L. - Ottawa	36	0	0	0	0	0	36	7	36	0	0	0	0	0	36	0	36	0	36	1	36	2
EORLA	260	0	0	0	0	0	260	21	28	0	0	0	0	0	28	1	28	1	28	3	28	1
P.H.O.L. - Kingston	47	0	0	0	0	0	47	8	47	0	0	0	0	0	47	0	47	0	47	3	47	12
UHN / Mount Sinai Hospital	704	0	0	0	0	0	704	5	25	0	0	0	0	0	25	0	25	0	25	2	25	0
P.H.O.L. - Toronto	320	0	1	0	1	0	319	8	319	0	0	0	0	3	319	1	319	1	319	11	319	14
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	0	12	0	12	1	12	1
P.H.O.L. - Timmins	34	0	0	0	0	0	34	0	34	0	0	0	0	0	34	0	34	0	34	1	34	7
St. Joseph's - London	939	0	0	1	1	0	939	52	939	0	0	0	0	1	939	12	939	0	939	23	5	0
P.H.O.L. - London	203	0	1	0	1	0	202	40	202	0	0	0	0	4	202	10	202	0	202	4	202	34
P.H.O.L. - Orillia	35	0	0	0	0	0	35	8	35	0	0	0	0	0	35	2	35	0	35	1	35	5
P.H.O.L. - Thunder Bay	20	0	0	0	0	0	20	0	20	0	0	0	0	2	20	0	20	0	20	2	20	6
P.H.O.L. - Sudbury	14	0	0	0	0	0	14	1	14	0	0	0	0	2	14	0	14	0	14	0	14	0
P.H.O.L. - Hamilton	31	0	0	0	0	0	31	0	31	0	0	0	0	0	31	0	31	0	31	0	31	2
P.H.O.L. - Peterborough	8	0	0	0	0	0	8	0	8	0	0	0	0	0	8	0	8	0	8	0	8	2
St. Joseph's - Hamilton	857	0	0	0	0	0	857	56	857	0	0	5	0	0	857	9	857	0	857	20	0	0
Province of Ontario	3520	0	2	1	3	0	3518	206	2607	0	0	5	0	12	2607	35	2607	2	2607	72	816	86
Province of Manitoba	2723	0	6	2	8	0	2723	55	114	0	0	4	0	0	114	1	129	0	114	5	129	7
Province of Saskatchewan	1468	0	0	3	3	0	1468	34	177	0	0	13	5	0	177	4	177	0	177	15	177	27
Province of Alberta	2566	0	1	1	2	0	954	186	954	0	1	12	2	0	954	6	954	2	954	75	954	88
Prairies	6757	0	7	6	13	0	5145	275	1245	0	1	29	7	0	1245	11	1260	2	1245	95	1260	122
British Columbia	10148	0	1	0	6	1	9785	433	448	0	1	9	9	0	448	11	448	6	434	43	434	13
Yukon	215	0	0	0	0	0	215	41	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	56	1	6	0	0	0	0	0	6	0	6	0	56	9	6	0
Nunavut	1734	0	0	0	0	0	1734	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	2010	0	0	0	0	0	2005	42	6	0	0	0	0	0	6	0	6	0	56	9	6	0
CANADA	25651	0	10	11	26	1	23144	1071	4593	1	4	44	16	12	4707	83	4717	36	4446	226	2911	250

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 8, 2022 (surveillance week 2021-35 to 2022-01)

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	7057	0	0	0	0	0	7056	72	7059	1	3	116	0	154	7066	21	7053	23	7060	1725	N.C.	N.C.
Prince Edward Island	1561	0	0	0	0	0	1561	88	1516	0	0	152	0	0	1561	36	1561	3	1561	426	1561	98
Nova Scotia	8973	0	1	10	11	4	8973	208	1026	0	2	37	3	0	1040	9	1040	1	1040	93	1040	27
New Brunswick	7739	0	0	6	6	0	4704	228	2303	0	0	21	0	0	2296	6	2303	3	2303	32	2212	4
Atlantic	25330	0	1	16	17	4	22294	596	11904	1	5	326	3	154	11963	72	11957	30	11964	2276	4813	129
Région Nord-Est	11537	0	0	1	1	2	5673	1410	586	0	0	6	1	0	597	12	23	0	N.C.	N.C.	597	6
Québec-Chaudière-Appalaches	3904	0	0	2	2	4	4454	983	618	0	3	6	4	0	919	34	831	41	N.C.	N.C.	743	35
Centre-du-Québec	4554	0	0	3	3	4	4712	1071	361	0	0	19	0	0	361	14	369	15	N.C.	N.C.	354	8
Montréal-Laval	13903	0	0	28	28	4	13860	2411	4170	4	2	20	4	0	4170	259	4167	302	N.C.	N.C.	4167	48
Ouest du Québec	3513	0	1	6	7	0	3470	922	22	0	0	2	0	0	8	1	11	1	N.C.	N.C.	11	1
Montérégie	2206	0	0	2	2	0	2199	386	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	39617	0	1	42	43	14	34368	7183	5757	4	5	53	9	0	6055	320	5401	359	N.C.	N.C.	5872	98
P.H.O.L. - Ottawa	6152	2	1	0	3	0	6152	1425	6152	0	0	0	0	727	6152	309	6151	38	6152	2202	6151	235
EORLA	3830	0	0	0	0	0	3805	570	505	0	1	17	0	0	505	9	186	3	505	108	182	12
P.H.O.L. - Kingston	936	0	0	0	0	0	935	97	934	0	0	0	0	129	934	16	933	2	934	274	933	68
UHN / Mount Sinai Hospital	9071	0	0	8	8	0	9071	78	281	0	0	0	0	0	281	0	281	0	281	10	281	2
P.H.O.L. - Toronto	5415	0	12	0	12	0	5401	239	5401	0	0	0	0	260	5402	65	5400	10	5401	825	5401	160
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	173	0	1	0	1	0	171	4	171	0	0	0	0	7	171	1	171	0	171	47	171	2
P.H.O.L. - Timmins	211	0	0	0	0	0	211	6	211	0	0	0	0	15	211	1	211	0	211	29	211	12
St. Joseph's - London	6103	0	0	14	14	0	6106	624	4549	0	0	7	0	82	4549	75	4549	8	4503	344	467	1
P.H.O.L. - London	2082	0	6	0	6	0	2075	409	2075	0	0	0	0	142	2075	54	2075	7	2075	383	2075	142
P.H.O.L. - Orillia	558	0	1	0	1	0	558	91	558	0	0	0	0	41	558	21	556	5	558	154	556	34
P.H.O.L. - Thunder Bay	184	0	0	0	0	0	184	15	184	0	0	0	0	19	184	0	184	0	184	48	184	13
P.H.O.L. - Sudbury	211	0	0	0	0	0	211	8	211	0	0	0	0	8	211	1	211	2	211	27	211	4
P.H.O.L. - Hamilton	895	0	7	0	7	0	888	58	888	0	0	0	0	43	888	7	888	5	888	194	888	45
P.H.O.L. - Peterborough	462	0	0	0	0	0	462	44	461	0	0	0	0	11	461	1	459	0	461	79	459	29
St. Joseph's - Hamilton	11456	0	4	7	11	0	11450	1501	11450	2	0	644	0	0	11450	113	11450	23	11450	1508	0	0
Province of Ontario	48578	2	32	29	63	0	47680	5169	34870	2	3	736	1	1484	34871	685	34544	104	34824	6465	19009	769
Manitoba	35180	1	14	5	20	0	35180	526	740	1	3	66	0	0	740	13	1704	4	740	183	1510	20
Province of Saskatchewan	12545	0	0	7	7	0	12522	123	2055	0	0	167	19	0	2055	39	2055	1	2055	365	2054	96
Province of Alberta	38516	0	8	26	34	2	14583	1548	14583	0	16	634	119	0	14583	136	14583	30	14583	2447	14583	888
Prairies	86241	1	22	38	61	2	62285	2197	17378	1	19	867	138	0	17378	188	18342	35	17378	2995	18147	1004
British Columbia	89805	0	35	3	153	80	89415	6847	11364	3	5	1005	129	130	11364	193	11360	56	11093	2322	11142	181
Yukon	3939	0	1	0	4	7	4004	204	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	50	2	50	0	418	83	50	0
Northwest Territories	461	0	0	0	0	0	419	2	50	0	0	0	0	0	50	2	50	0	418	83	50	0
Nunavut	8081	0	0	0	0	0	8074	7	11	0	0	0	0	0	11	1	11	0	11	7	11	0
Territories	12481	0	1	0	4	7	12497	213	61	0	0	0	0	0	61	3	61	0	429	90	61	0
CANADA	302052	3	92	128	341	107	268539	22205	81334	11	37	2987	280	1768	81692	1461	81665	584	75688	14148	59044	2181

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

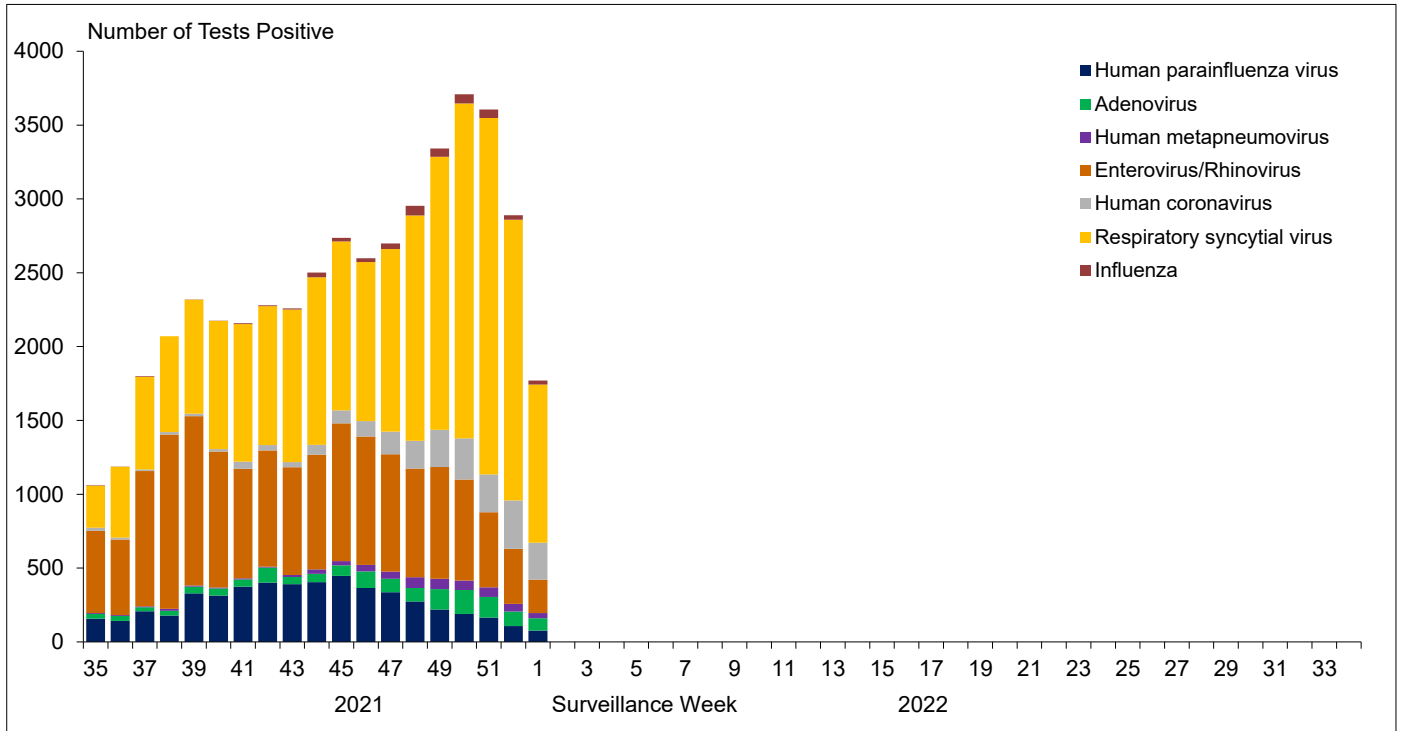


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

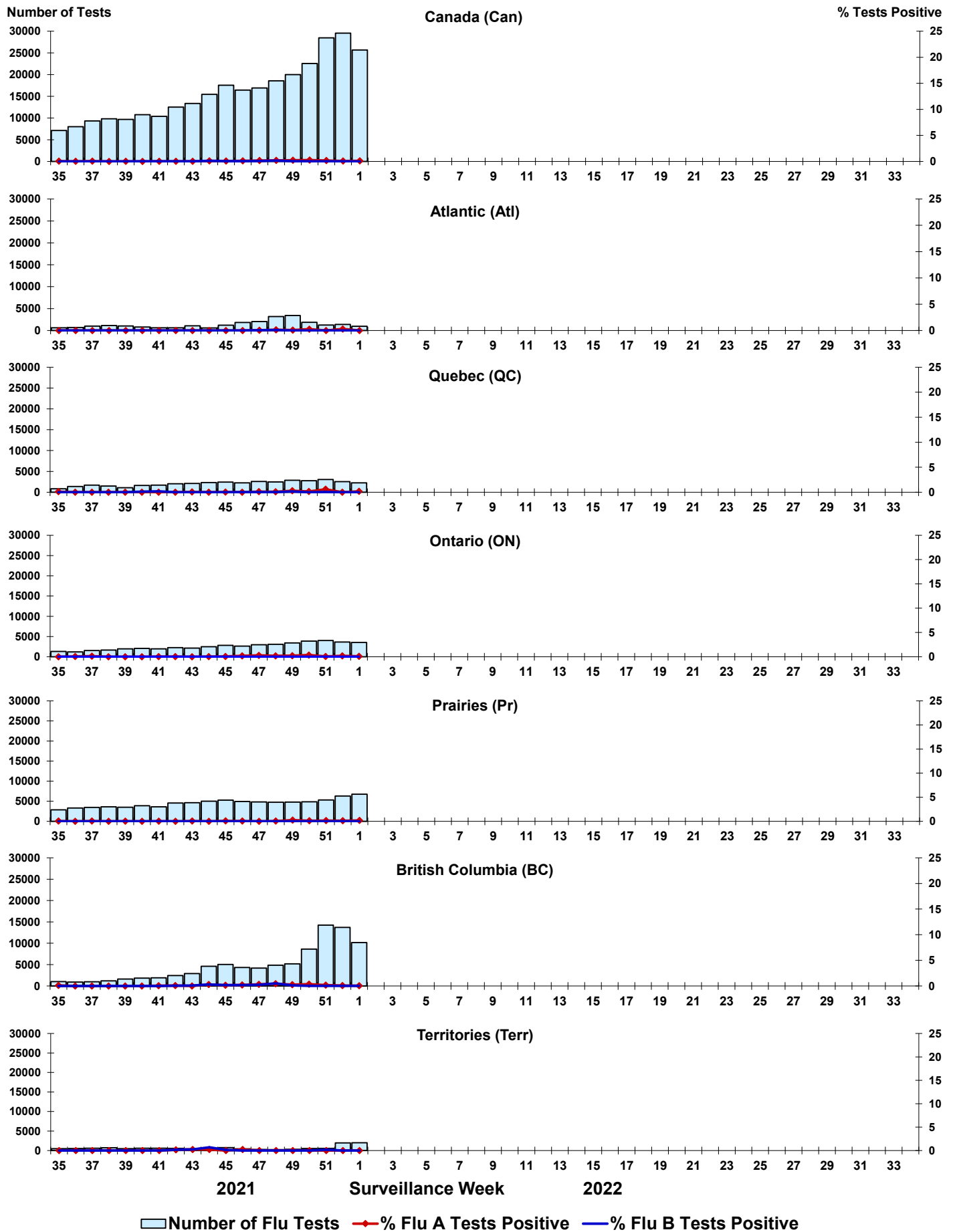


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

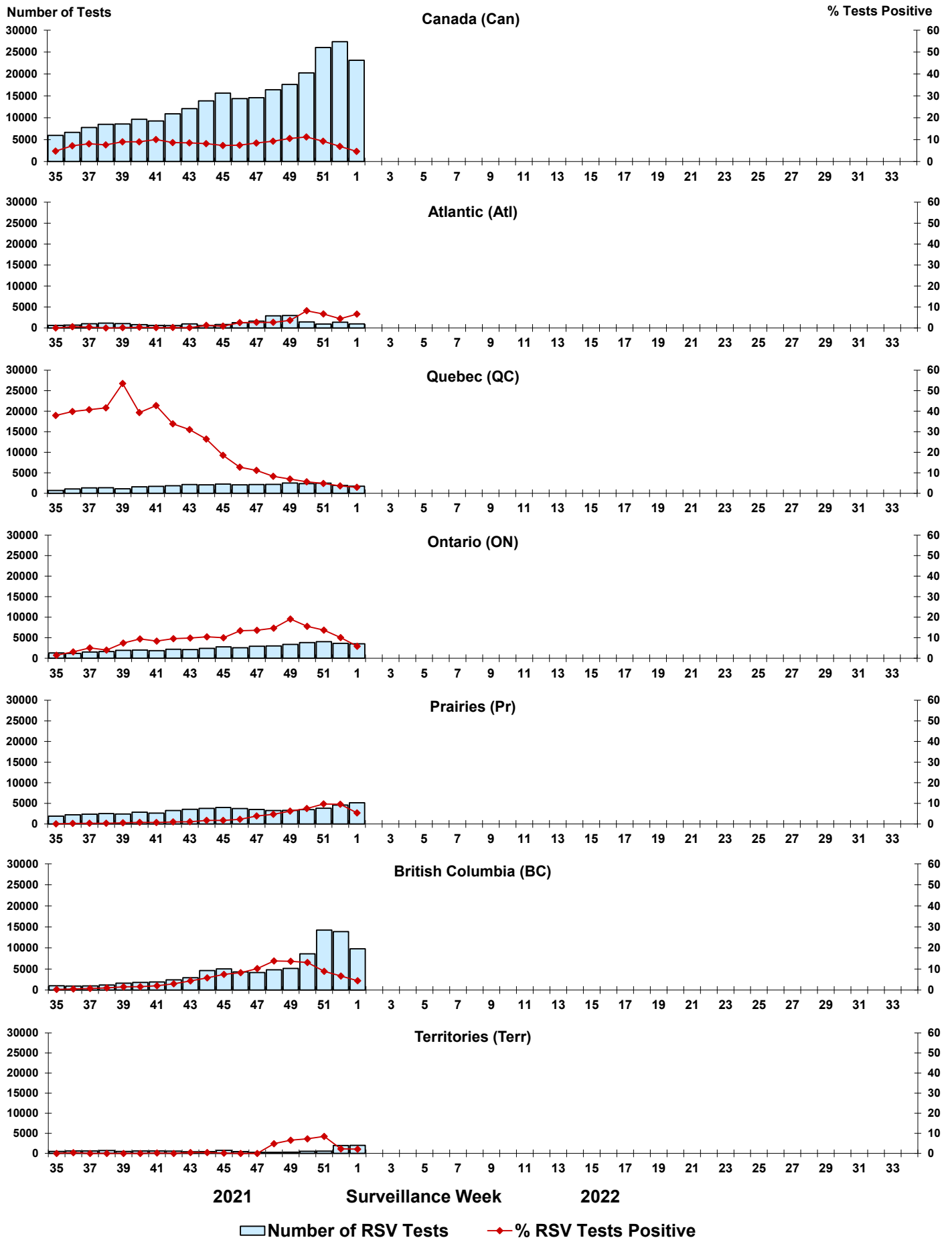


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

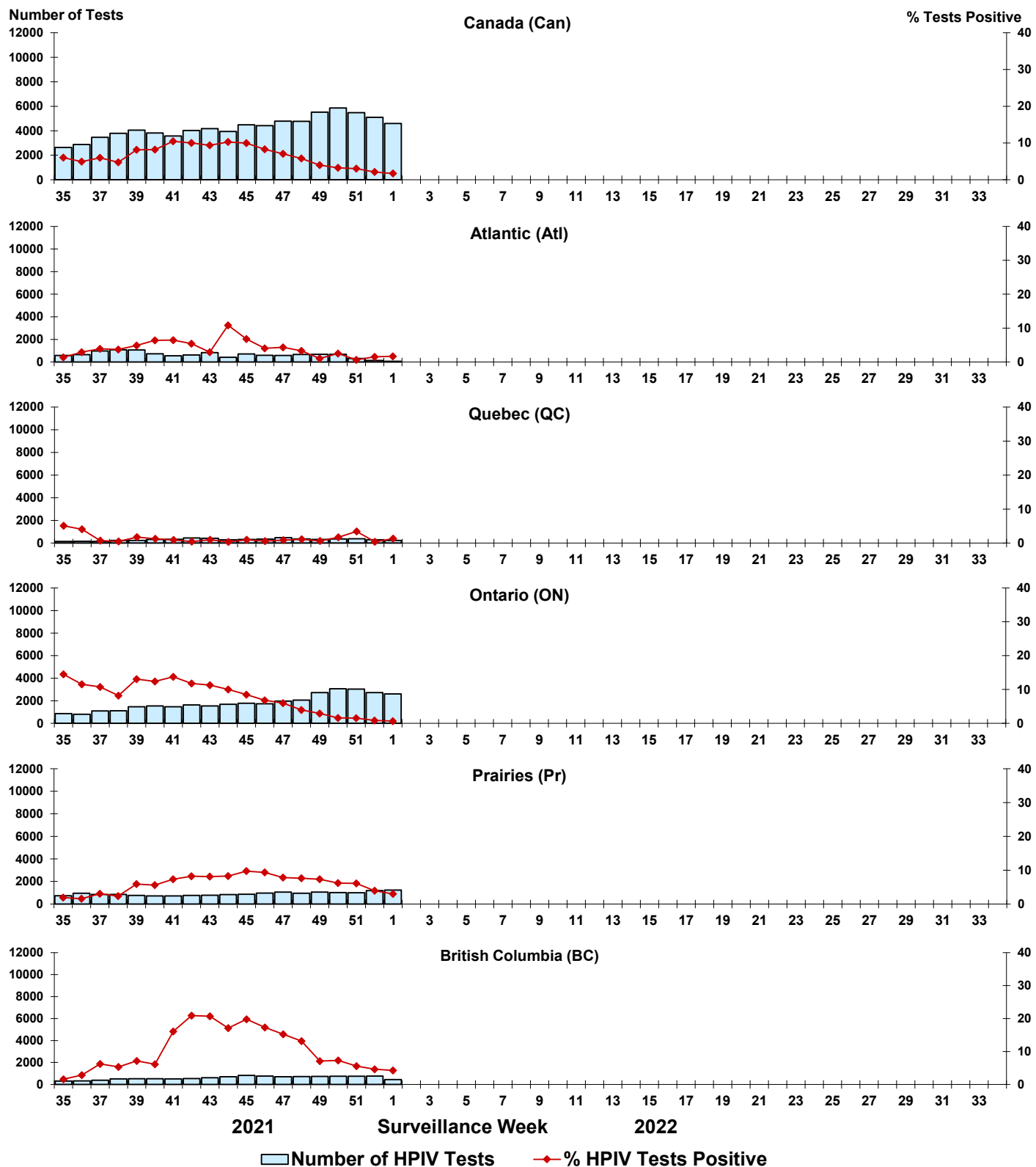


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

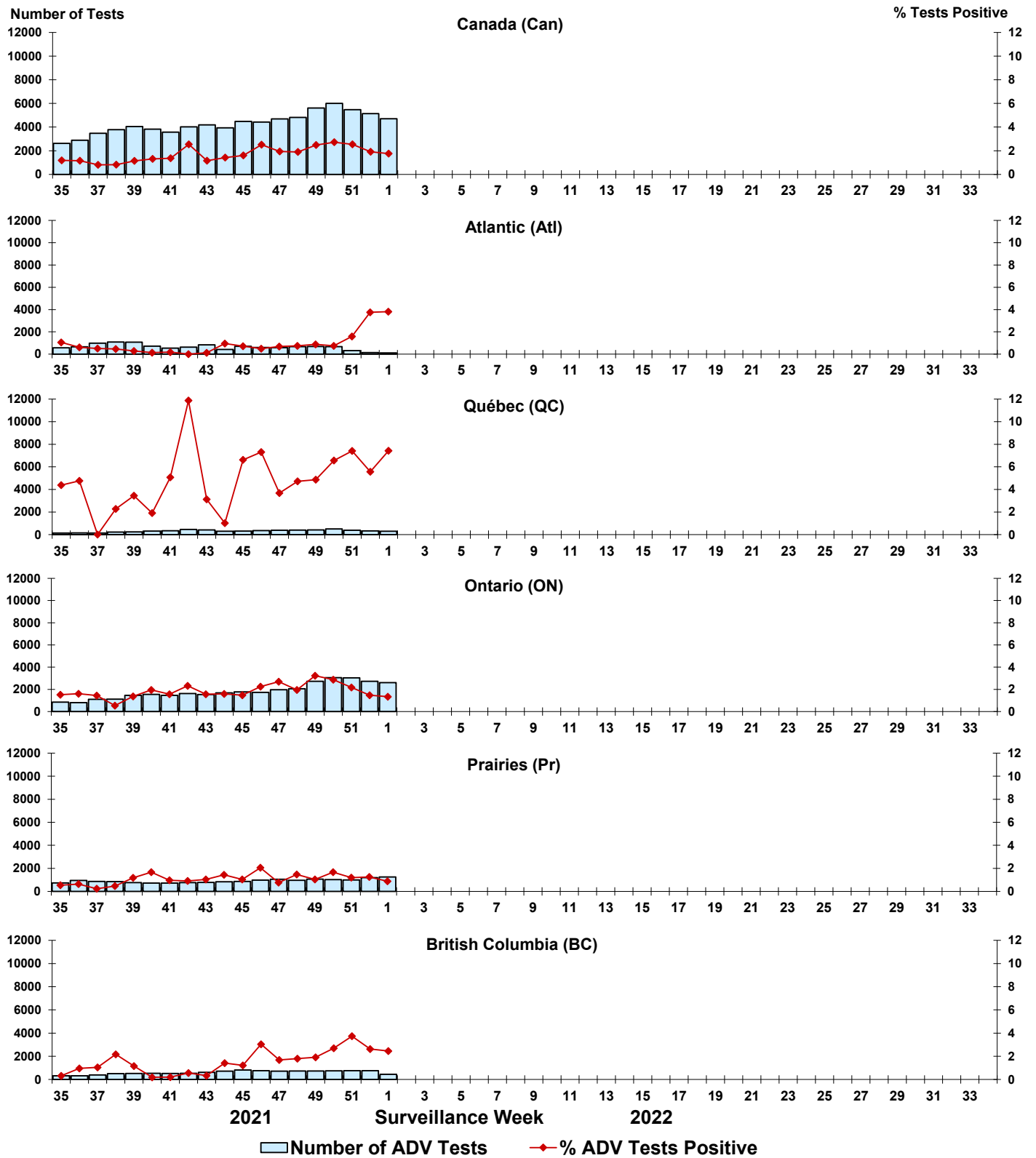


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

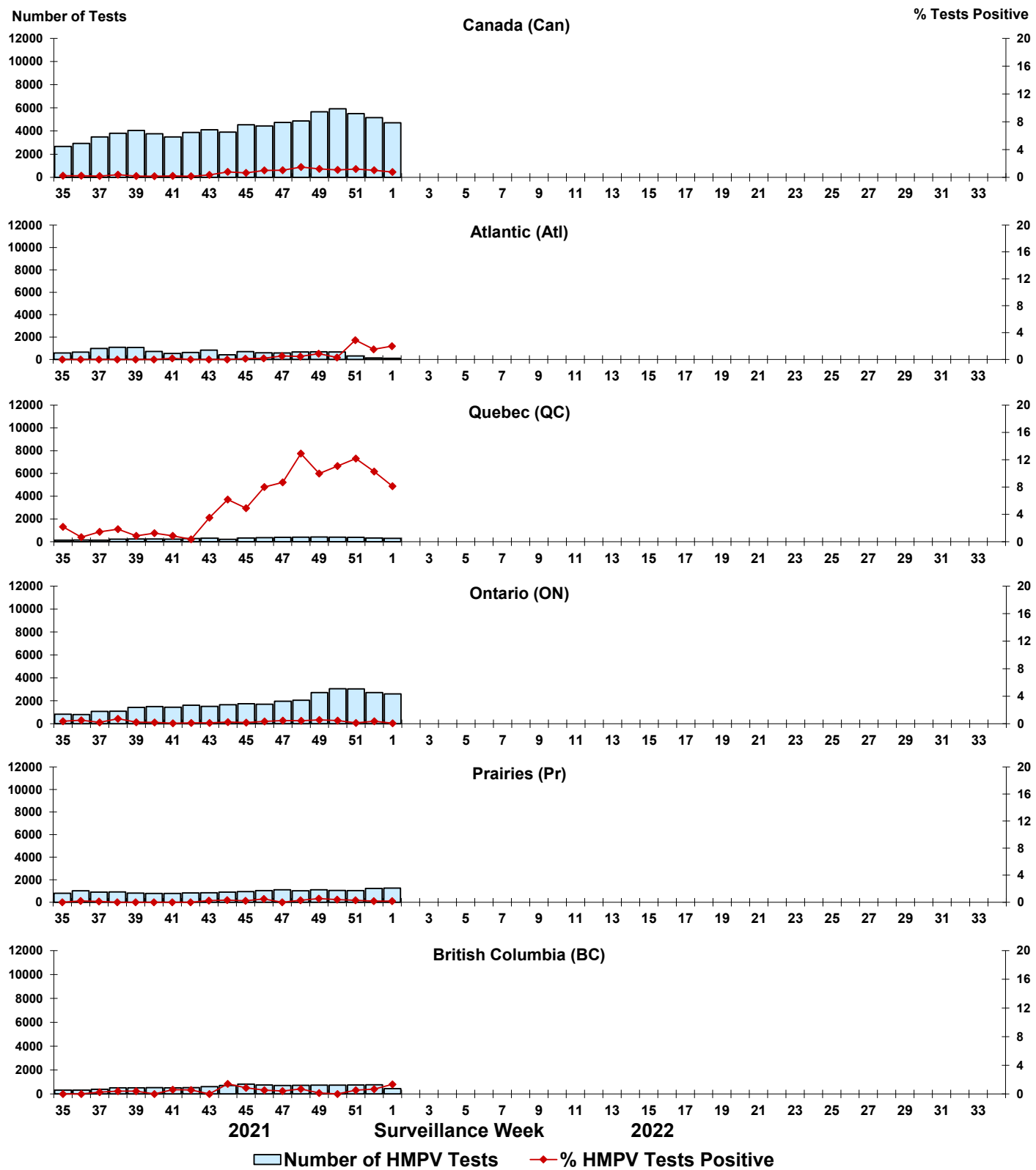


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

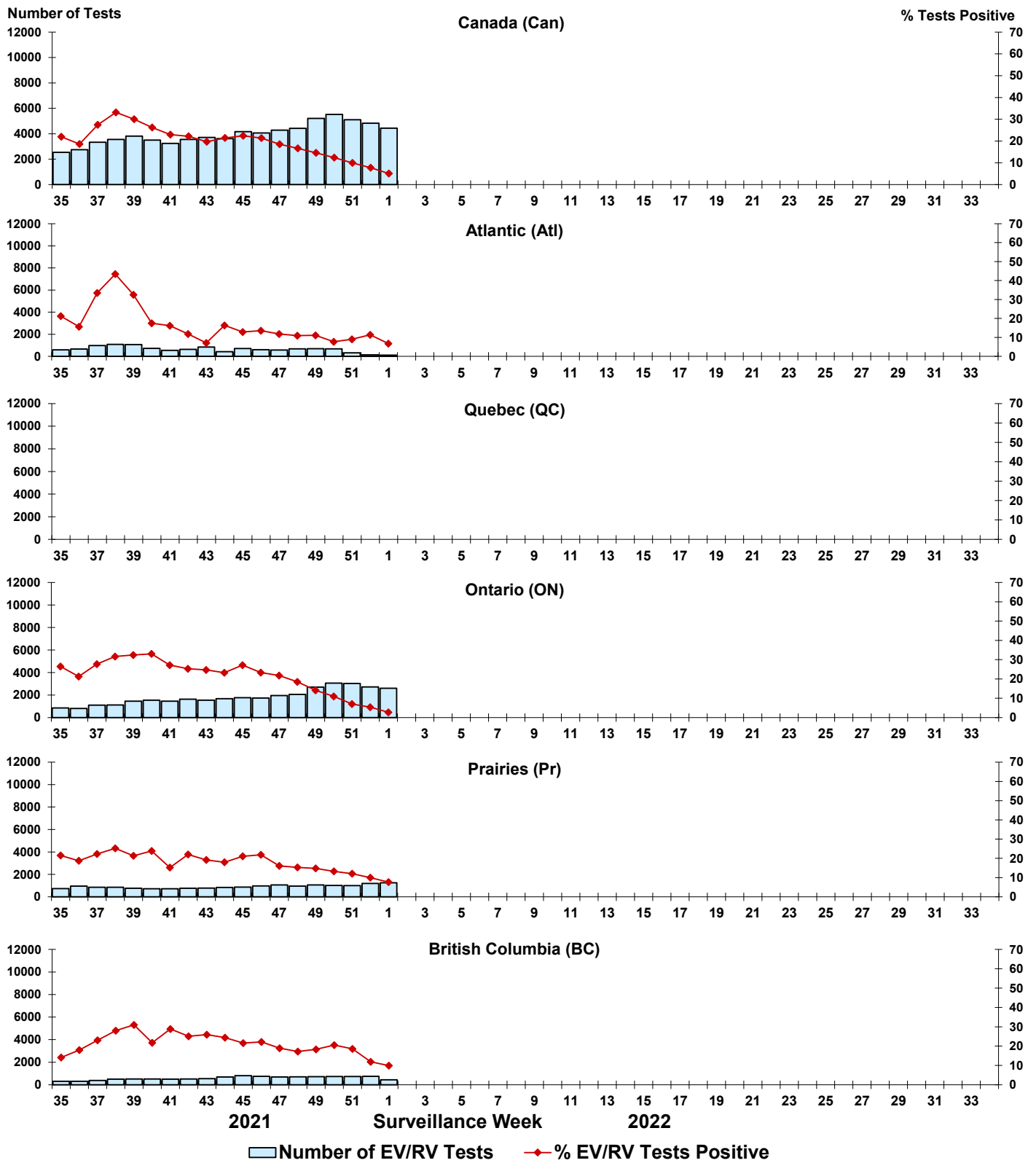


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

