

RESPIRATORY VIRUS DETECTION REPORT

January 16 to January 22, 2022
(Surveillance Week 2022-03)



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 3 (January 16 to January 22, 2022), activity of all respiratory viruses is within or below expected levels for this time of year.

- Respiratory syncytial virus (609 detections; 3.5% 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.
- 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

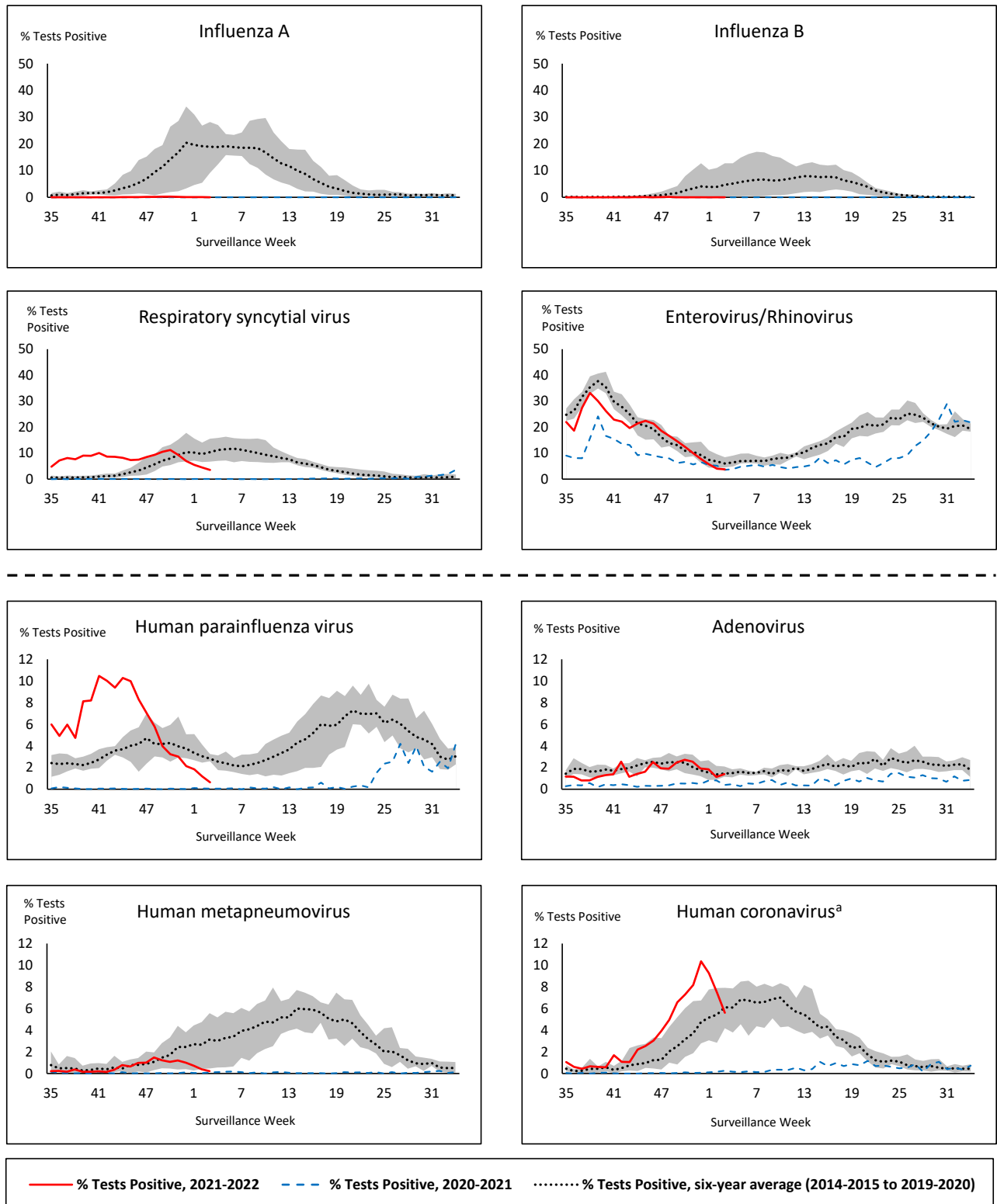
QC: Quebec

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 22, 2022 (surveillance week 2022-03)

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	16	0	0	0	0	0	16	3	16	0	0	0	0	0	14	0	16	0	16	1	N.C.	N.C.
Prince Edward Island	46	0	0	0	0	0	46	11	46	0	0	0	0	0	46	1	46	0	46	3	46	2
Nova Scotia	662	0	0	0	0	0	662	20	38	0	0	0	1	0	38	0	38	0	38	0	38	0
New Brunswick	469	0	0	0	0	0	461	8	102	0	0	0	0	0	102	0	102	0	102	2	102	0
Atlantic	1193	0	0	0	0	0	1185	42	202	0	0	0	1	0	200	1	202	0	202	6	186	2
Région Nord-Est	482	0	0	0	0	0	214	5	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Québec-Chaudière-Appalaches	105	0	0	1	1	0	109	3	22	0	0	0	0	0	53	1	53	5	N.C.	N.C.	52	4
Centre-du-Québec	129	0	0	0	0	0	129	0	19	0	0	0	0	0	19	2	19	0	N.C.	N.C.	19	0
Montréal-Laval	348	0	0	0	0	0	336	4	154	1	0	1	0	0	154	9	154	2	N.C.	N.C.	154	2
Ouest du Québec	102	0	0	1	1	0	102	1	1	0	0	0	0	0	8	2	1	0	N.C.	N.C.	1	0
Montérégie	57	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	1223	0	0	2	2	0	947	13	196	1	0	1	0	0	234	14	227	7	N.C.	N.C.	226	6
P.H.O.L. - Ottawa	60	0	0	0	0	0	60	5	60	0	0	0	0	0	60	1	60	0	60	2	60	0
EORLA	179	0	0	0	0	0	179	9	21	0	0	1	0	0	21	1	21	0	21	2	21	0
P.H.O.L. - Kingston	23	0	0	0	0	0	23	4	23	0	0	0	0	0	23	0	21	0	23	0	21	2
UHN / Mount Sinai Hospital	558	0	0	0	0	2	558	2	17	0	0	0	0	0	17	0	17	0	17	0	17	0
P.H.O.L. - Toronto	147	0	0	0	0	0	147	2	147	0	0	0	0	0	147	2	147	0	147	1	147	5
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	10	0	0	0	0	0	10	0	10	0	0	0	0	0	10	0	10	0	10	0	10	2
P.H.O.L. - Timmins	15	0	0	0	0	0	15	3	15	0	0	0	0	1	15	0	15	0	15	0	15	1
St. Joseph's - London	618	0	0	0	0	0	618	26	618	0	0	0	0	0	618	6	618	0	618	11	5	1
P.H.O.L. - London	118	0	0	0	0	0	118	8	118	0	0	0	0	3	118	1	118	0	118	3	118	11
P.H.O.L. - Orillia	24	0	0	0	0	0	24	2	24	0	0	0	0	0	24	0	24	0	24	0	24	4
P.H.O.L. - Thunder Bay	6	0	0	0	0	0	6	0	6	0	0	0	0	0	6	0	6	0	6	0	6	1
P.H.O.L. - Sudbury	12	0	0	0	0	0	12	0	12	0	0	0	0	0	12	0	12	0	12	0	12	0
P.H.O.L. - Hamilton	65	0	0	0	0	0	65	1	65	0	0	0	0	0	65	1	65	0	65	1	65	5
P.H.O.L. - Peterborough	9	0	0	0	0	0	9	0	9	0	0	0	0	0	9	0	9	0	9	0	9	2
St. Joseph's - Hamilton	748	0	0	0	0	0	748	22	748	0	0	0	0	0	748	10	748	0	748	8	0	0
Province of Ontario	2592	0	0	0	0	2	2592	84	1893	0	0	1	0	4	1893	22	1891	0	1893	28	530	34
Province of Manitoba	1420	0	0	0	0	0	1420	10	141	0	0	1	0	0	141	2	154	0	141	3	154	7
Province of Saskatchewan	1659	0	0	4	4	0	1659	36	172	0	0	10	1	0	171	0	171	0	171	13	170	18
Province of Alberta	2156	0	0	0	0	0	939	106	939	0	0	2	0	0	939	5	939	1	939	51	939	57
Prairies	5235	0	0	4	4	0	4018	152	1252	0	0	13	1	0	1251	7	1264	1	1251	67	1263	82
British Columbia	8201	0	0	0	1	0	7740	303	383	0	0	1	1	1	383	11	383	1	362	38	362	20
Yukon	105	0	0	0	0	0	105	15	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	38	0	0	0	0	0	35	0	1	0	0	0	0	0	1	0	1	0	35	2	1	0
Nunavut	563	0	0	0	0	0	562	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	706	0	0	0	0	0	702	15	2	0	0	0	0	0	2	0	2	0	36	2	2	0
CANADA	19150	0	0	6	7	2	17184	609	3928	1	0	16	3	5	3963	55	3969	9	3744	141	2569	144

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 22, 2022 (surveillance week 2021-35 to 2022-03)

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	7080	0	0	0	0	0	7079	76	7082	1	3	116	0	154	7087	21	7076	24	7083	1726	N.C.	N.C.
Prince Edward Island	1607	0	0	0	0	0	1607	99	1562	0	0	152	0	0	1607	37	1607	3	1607	429	1607	100
Nova Scotia	10163	0	1	12	13	4	10162	264	1105	0	2	37	4	0	1119	10	1119	2	1119	93	1119	29
New Brunswick	8718	0	0	6	6	0	5455	254	2423	0	0	23	0	0	2416	6	2423	4	2423	35	2332	4
Atlantic	27568	0	1	18	19	4	24303	693	12172	1	5	328	4	154	12229	74	12225	33	12232	2283	5058	133
Région Nord-Est	12477	0	0	1	1	2	6113	1421	588	0	0	6	1	0	599	12	25	0	N.C.	N.C.	691	8
Québec-Chaudière-Appalaches	4140	0	0	4	4	4	4695	989	1155	0	3	7	5	0	1031	36	943	48	N.C.	N.C.	854	40
Centre-du-Québec	4864	0	0	3	3	4	5017	1077	404	0	0	19	0	0	404	16	412	15	N.C.	N.C.	397	8
Montréal-Laval	14717	0	0	30	30	4	14640	2421	4550	5	2	21	4	0	4550	274	4547	305	N.C.	N.C.	4547	52
Ouest du Québec	3734	0	1	7	8	0	3691	926	32	0	0	2	0	0	25	3	21	1	N.C.	N.C.	21	1
Montérégie	2308	0	0	2	2	0	2301	386	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	42240	0	1	47	48	14	36457	7220	6729	5	5	55	10	0	6609	341	5948	369	N.C.	N.C.	6510	109
P.H.O.L. - Ottawa	6276	2	1	0	3	0	6276	1435	6276	0	0	0	0	727	6276	310	6275	38	6276	2205	6275	246
EORLA	4219	0	0	0	0	0	4194	590	541	0	2	19	0	0	541	10	222	3	541	111	218	15
P.H.O.L. - Kingston	1001	0	0	0	0	0	1000	107	999	0	0	0	0	129	999	16	996	2	999	274	996	75
UHN / Mount Sinai Hospital	10191	0	0	8	8	2	10191	84	318	0	0	0	0	0	318	0	318	0	318	10	318	2
P.H.O.L. - Toronto	5828	0	13	0	13	0	5814	257	5814	0	0	0	0	261	5816	72	5813	11	5814	833	5814	183
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	192	0	1	0	1	0	190	4	190	0	0	0	0	7	190	2	190	0	190	47	190	5
P.H.O.L. - Timmins	238	0	0	0	0	0	238	9	238	0	0	0	0	16	238	1	238	0	238	29	238	13
St. Joseph's - London	7409	0	0	14	14	0	7412	693	5855	0	0	7	0	82	5855	83	5855	8	5809	365	475	2
P.H.O.L. - London	2373	0	6	0	6	0	2366	438	2366	0	0	0	0	148	2366	56	2366	8	2366	393	2366	184
P.H.O.L. - Orillia	603	0	1	0	1	0	603	98	603	0	0	0	0	41	603	21	601	5	603	154	601	43
P.H.O.L. - Thunder Bay	204	0	0	0	0	0	204	17	204	0	0	0	0	19	204	0	204	0	204	49	204	18
P.H.O.L. - Sudbury	230	0	0	0	0	0	230	10	230	0	0	0	0	8	230	1	230	2	230	28	230	4
P.H.O.L. - Hamilton	1133	0	7	0	7	0	1126	64	1126	0	0	0	0	43	1127	9	1126	5	1126	197	1126	70
P.H.O.L. - Peterborough	484	0	0	0	0	0	484	44	483	0	0	0	0	11	483	1	481	0	483	83	481	31
St. Joseph's - Hamilton	13028	0	4	7	11	0	13022	1560	13022	2	0	646	0	0	13022	128	13022	24	13022	1527	0	0
Province of Ontario	54248	2	33	29	64	2	53350	5410	39104	2	4	740	1	1492	39107	722	38776	107	39058	6538	20371	901
Manitoba	38626	1	14	8	23	0	38626	567	1011	1	4	68	0	0	1011	16	2025	5	1011	188	1831	34
Province of Saskatchewan	15835	2	4	11	17	0	15811	212	2411	0	1	184	24	0	2410	43	2410	1	2410	385	2408	145
Province of Alberta	44801	0	8	29	37	2	17010	1855	17010	0	18	642	123	0	17010	157	17010	38	17010	2571	17010	1067
Prairies	99262	3	26	48	77	2	71447	2634	20432	1	23	894	147	0	20431	216	21445	44	20431	3144	21249	1246
British Columbia	109645	3	36	3	162	83	108104	7840	12454	5	5	1027	139	139	12454	227	12450	59	12153	2461	12202	255
Yukon	4223	0	1	0	4	7	4288	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	544	0	0	0	0	0	498	2	54	0	0	1	0	0	54	2	54	0	497	89	54	0
Nunavut	9921	0	0	0	0	0	9912	7	13	0	0	0	0	0	13	1	13	0	13	7	13	0
Territories	14688	0	1	0	4	7	14698	253	67	0	0	1	0	0	67	3	67	0	510	96	67	0
CANADA	347651	8	98	145	374	112	308359	24050	90958	14	42	3045	301	1785	90897	1583	90911	612	84384	14522	65457	2644

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

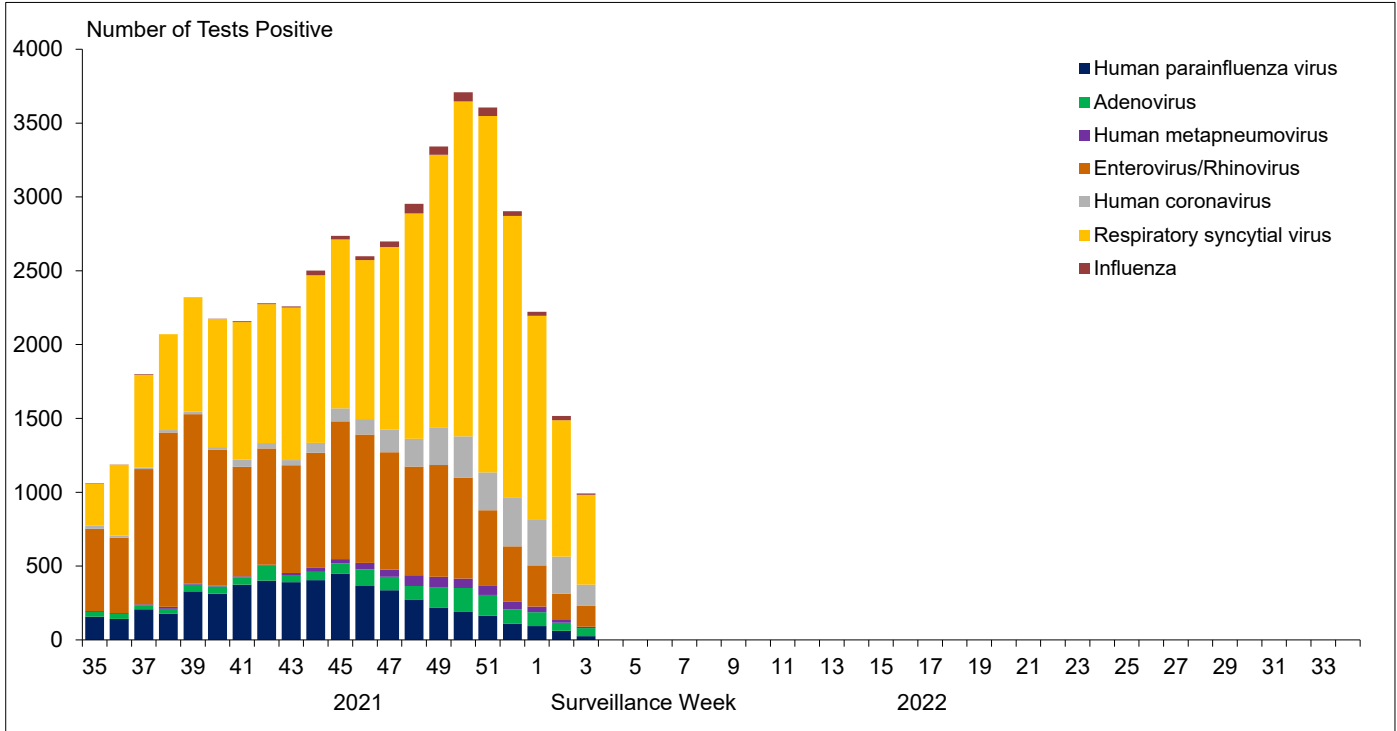


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

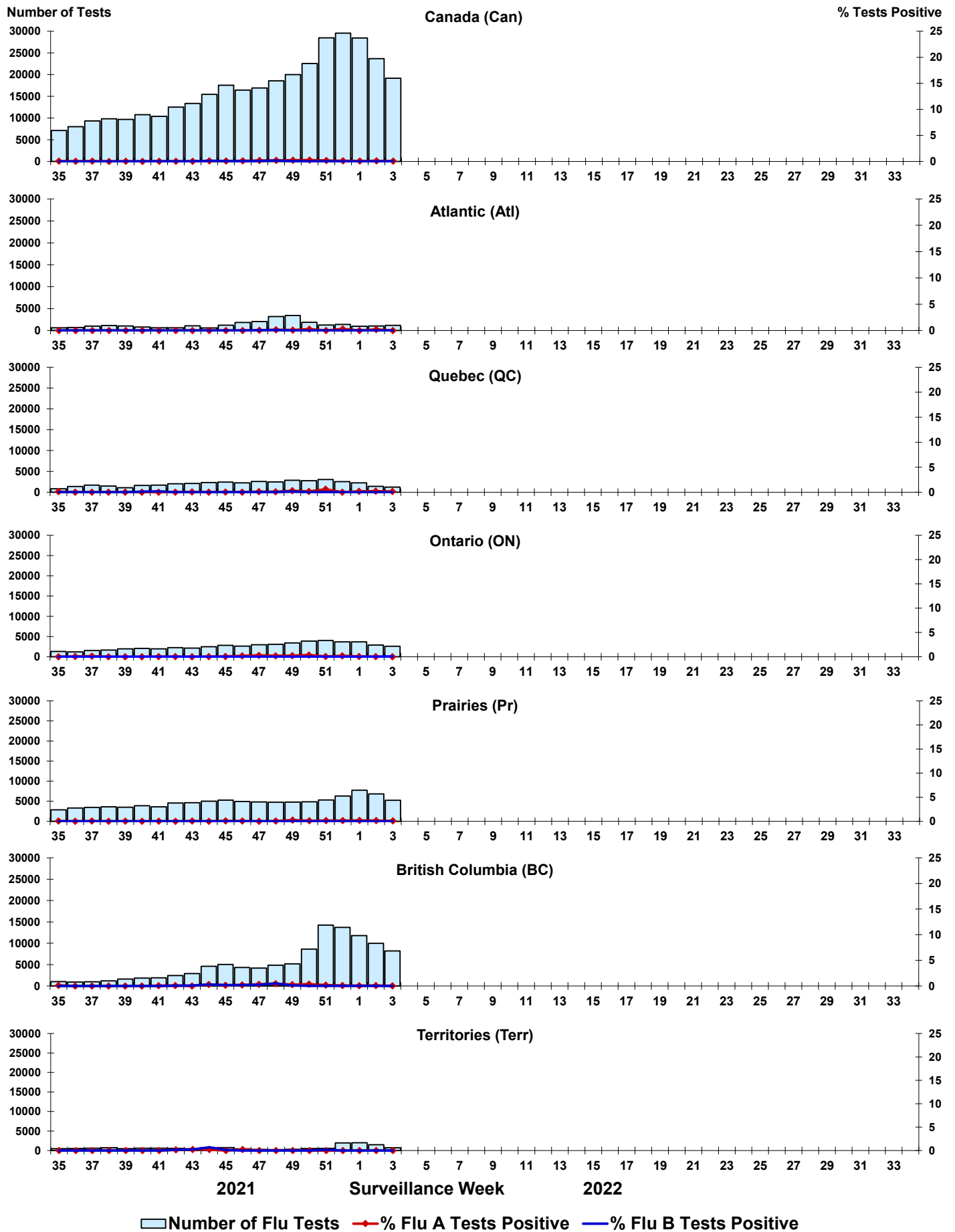


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

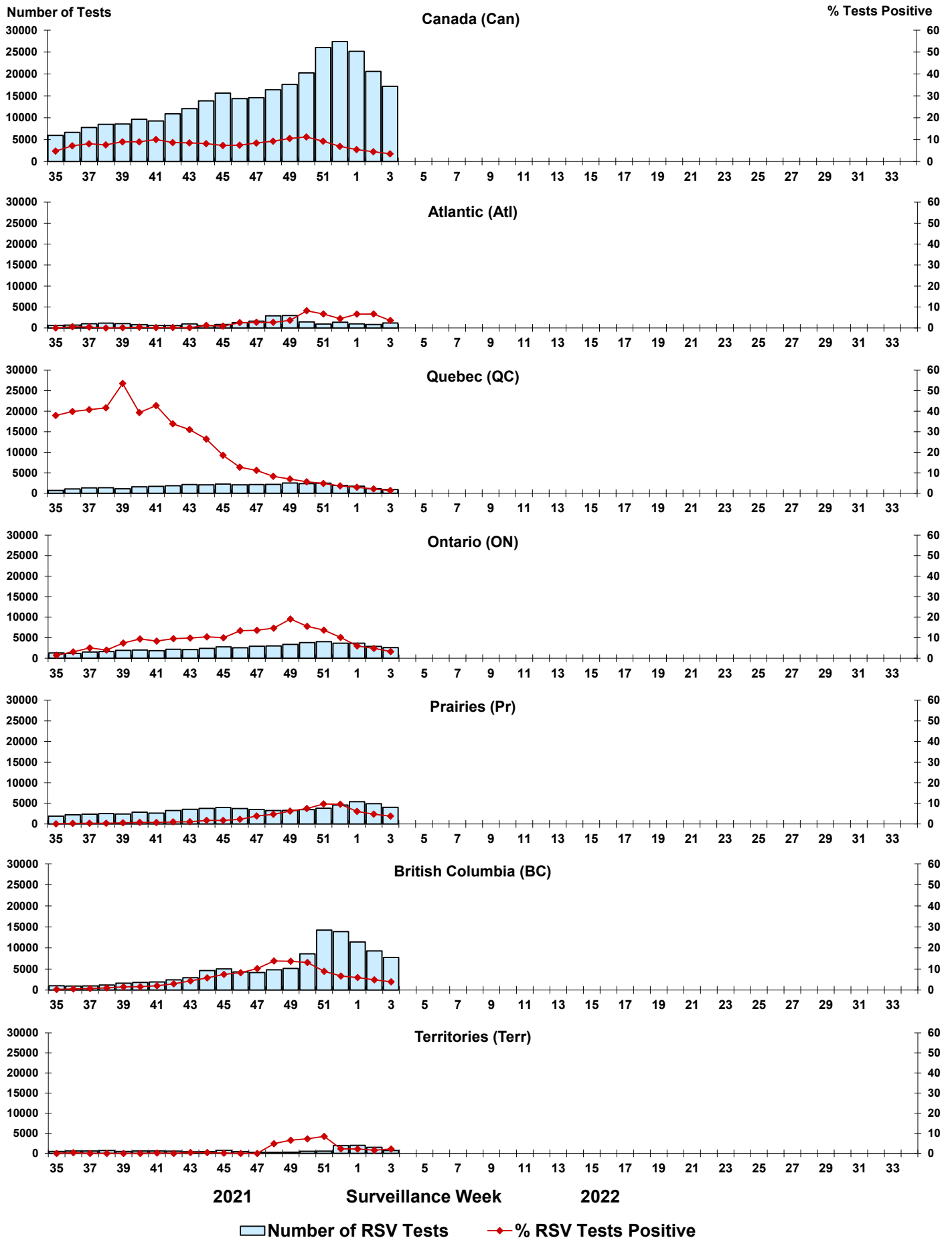


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

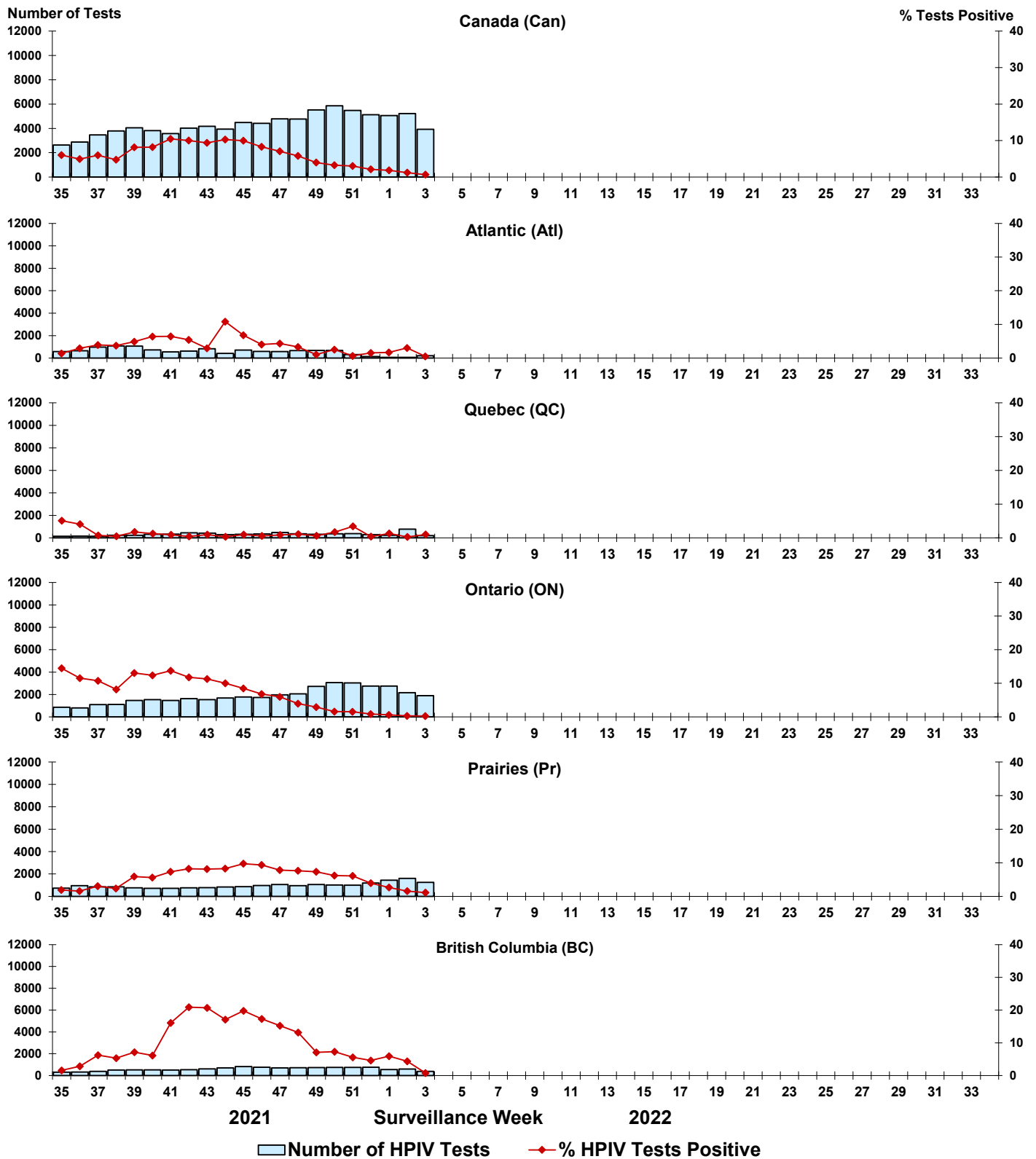


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

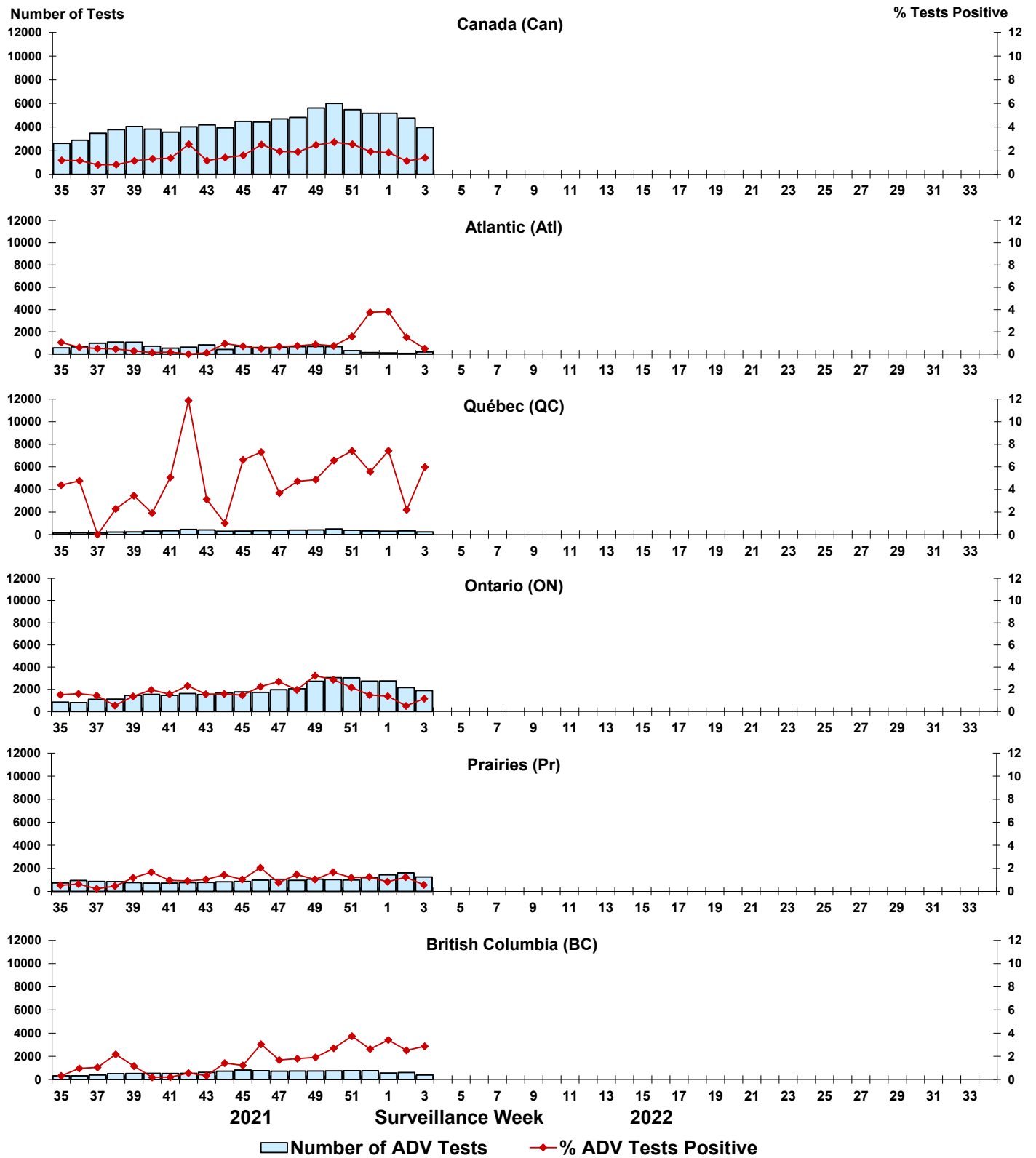


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

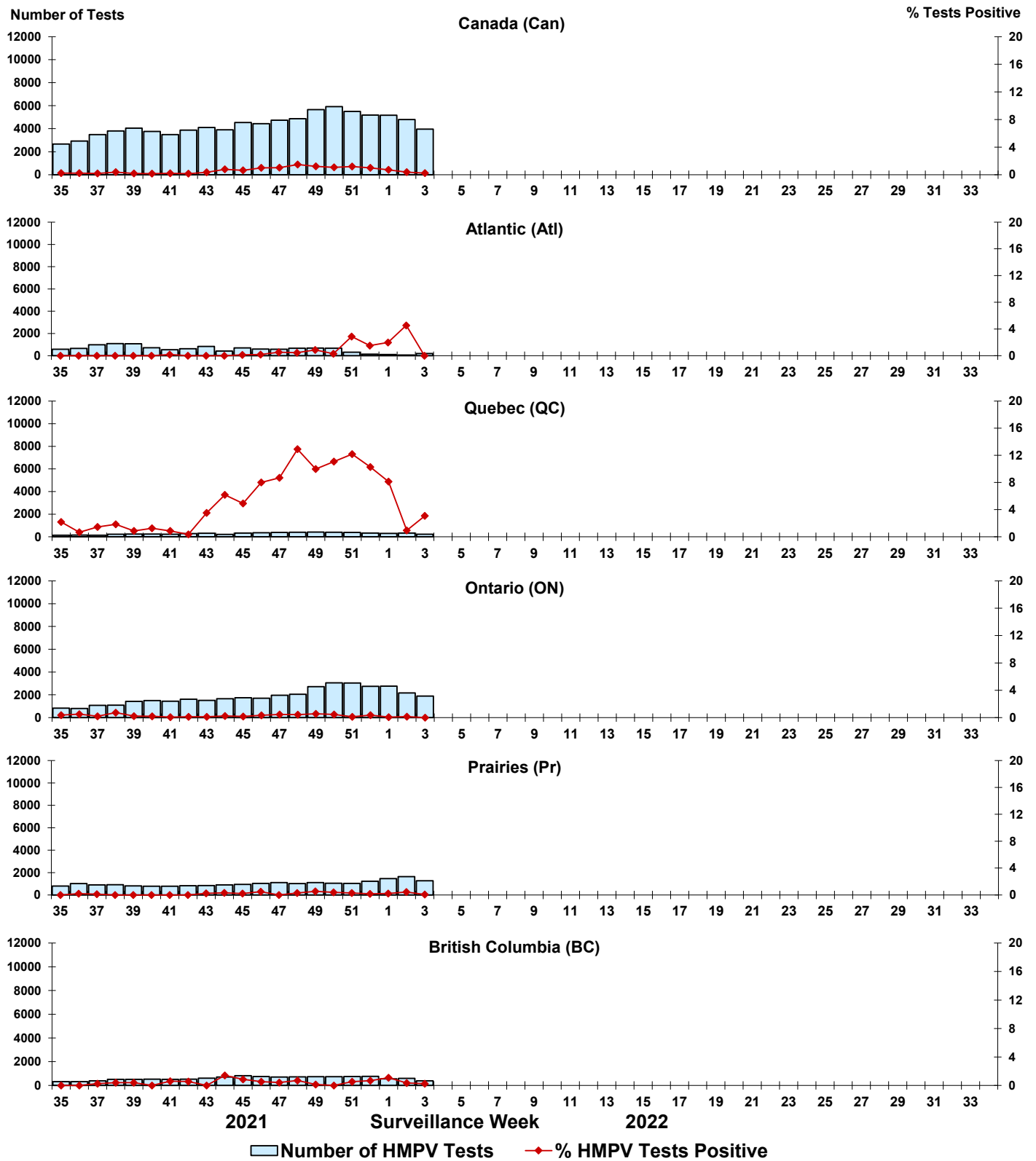


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

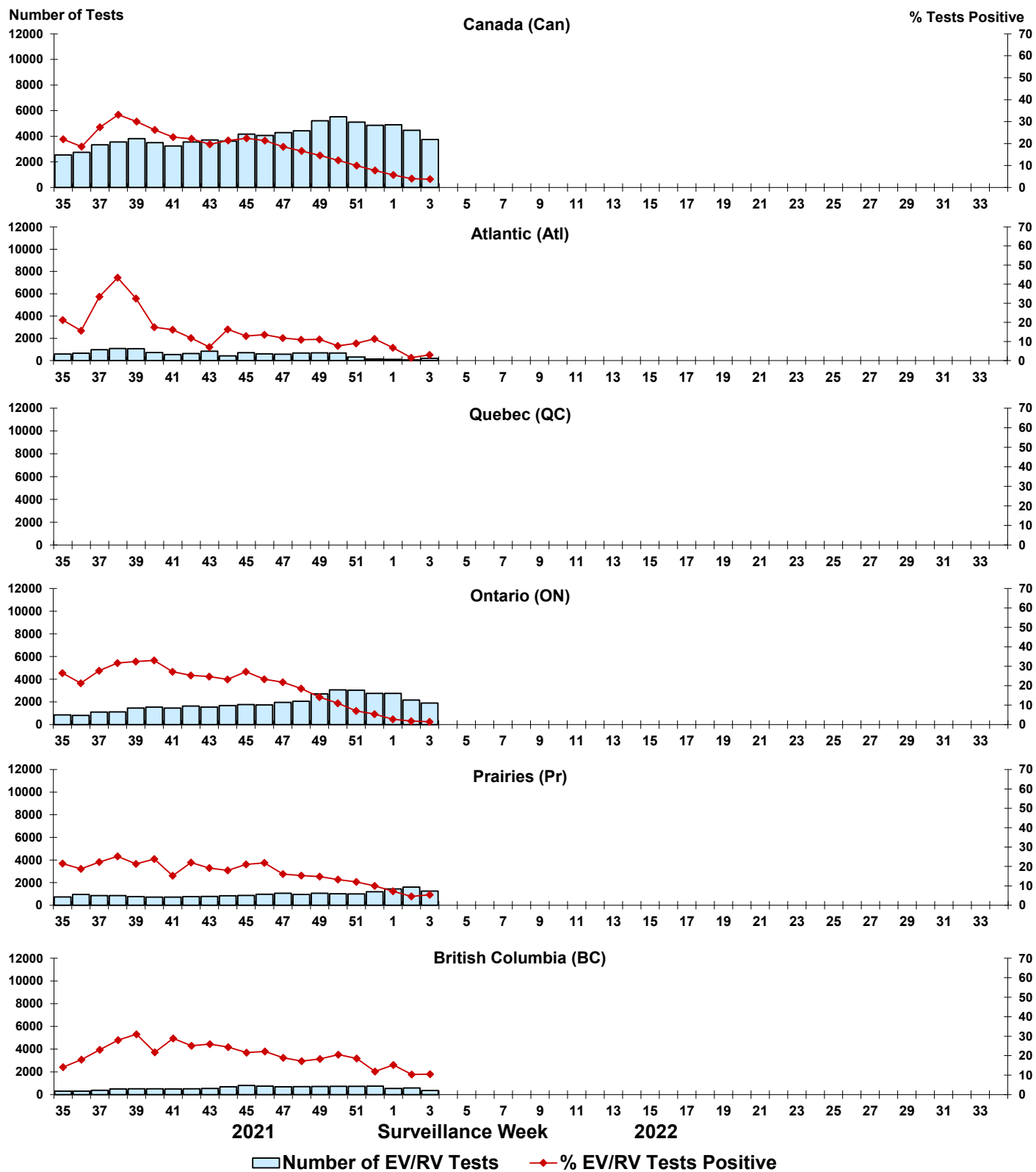


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

