

RESPIRATORY VIRUS DETECTION REPORT

March 20 to March 26, 2022
(Surveillance Week 2022-12)



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 slightly since February 2022. Activity of all respiratory viruses is within or below expected levels for this time of year.

- Respiratory syncytial virus (302 detections; 3.7% positive) and enterovirus/rhinovirus (249 detections; 9.0% positive) are the most common seasonal respiratory viruses detected in Canada.
 - Respiratory syncytial virus activity remains below expected levels for this time of year.
 - Enterovirus/rhinovirus activity remains within expected levels for this time of year.
- A total of 81 influenza detections were reported (81 influenza A, 0 influenza B).
 - Detections of influenza have increased in recent weeks; however, the overall number of weekly detections remain low.
- Detections of other respiratory viruses are low.
- The number of tests performed for most viruses were within 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

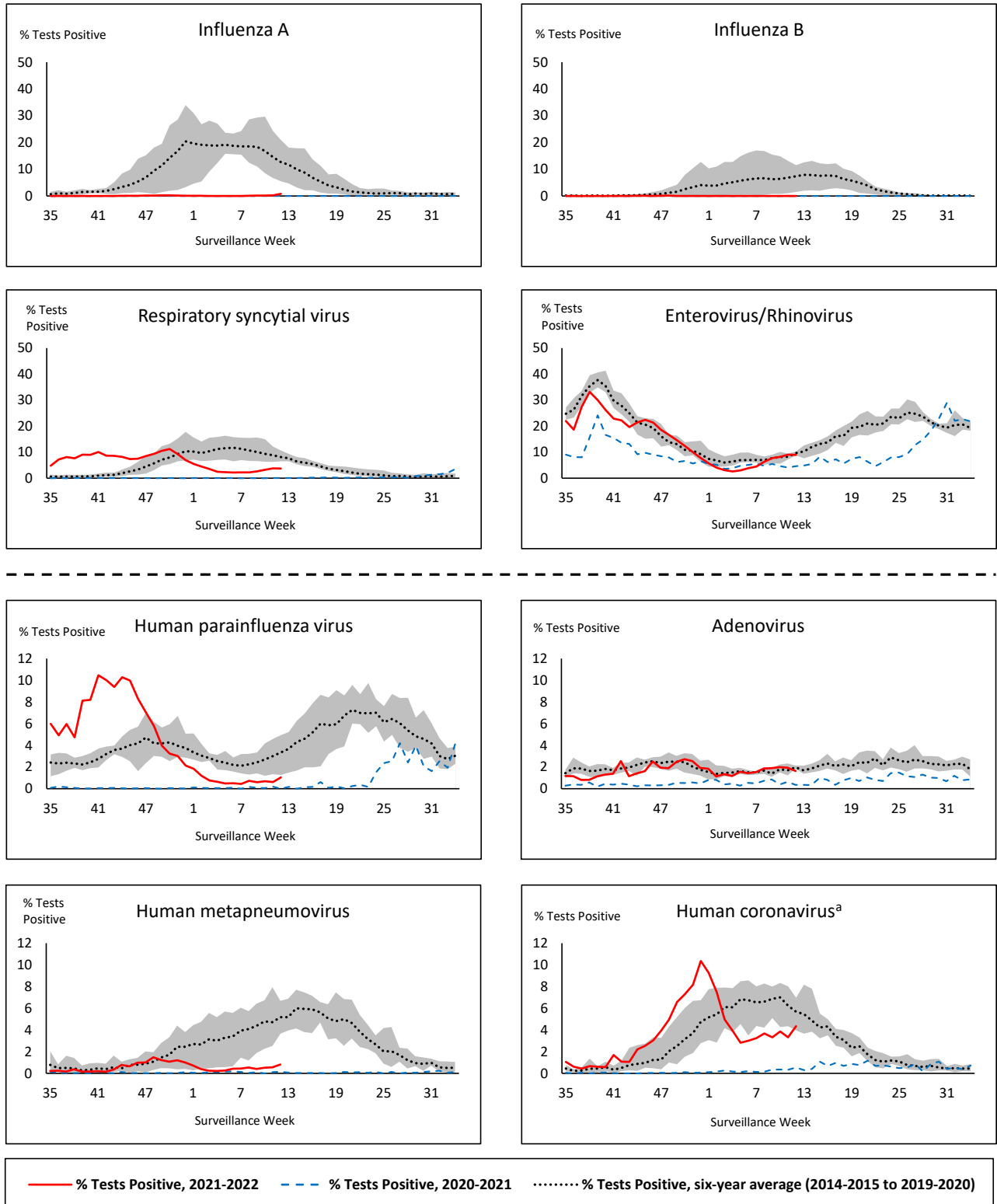
QC: Quebec

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 March 26, 2022 (surveillance week 2022-12)

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	122	0	0	0	0	0	122	3	122	0	0	0	0	0	122	0	122	0	122	1	N.C.	N.C.
Prince Edward Island	33	0	0	0	0	0	33	8	33	0	0	0	0	0	33	1	33	2	33	3	33	1
Nova Scotia	537	0	0	1	1	0	537	2	21	0	0	0	3	0	21	0	21	1	21	3	21	0
New Brunswick	555	0	0	0	0	0	335	0	29	0	0	0	0	0	29	0	29	0	29	0	29	0
Atlantic	1247	0	0	1	1	0	1027	13	205	0	0	0	3	0	205	1	205	3	205	7	83	1
Région Nord-Est	488	0	0	0	0	0	129	1	0	0	0	0	0	0	0	0	77	2	N.C.	N.C.	77	1
Québec-Chaudière-Appalaches	71	0	0	0	0	0	76	0	15	0	1	0	1	0	47	0	47	2	N.C.	N.C.	43	0
Centre-du-Québec	110	0	0	3	3	0	111	0	27	0	0	1	0	0	27	2	27	0	N.C.	N.C.	27	4
Montréal-Laval	390	0	0	7	7	0	385	2	213	0	0	0	0	0	213	8	213	0	N.C.	N.C.	213	2
Ouest du Québec	77	0	0	1	1	0	77	0	3	0	0	0	0	0	3	0	3	0	N.C.	N.C.	3	0
Montérégie	50	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	1186	0	0	11	11	0	828	3	258	0	1	1	1	0	290	10	367	4	N.C.	N.C.	363	7
P.H.O.L. - Ottawa	17	0	0	0	0	0	17	1	17	0	0	0	0	1	17	0	16	0	17	3	16	1
EORLA	120	0	0	0	0	0	120	0	25	0	0	0	0	0	25	0	25	0	25	3	25	0
P.H.O.L. - Kingston	23	0	0	0	0	0	23	1	23	0	0	0	0	0	23	0	23	0	23	3	23	1
UHN / Mount Sinai Hospital	393	0	0	2	2	0	393	2	11	0	0	0	0	0	11	0	11	0	11	0	11	1
P.H.O.L. - Toronto	209	1	3	0	4	0	205	3	205	0	0	0	0	4	205	4	205	0	205	19	205	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	13	0	0	0	0	0	13	0	13	0	0	0	0	0	13	0	13	0	13	0	13	1
P.H.O.L. - Timmins	6	0	0	0	0	0	6	1	6	0	0	0	0	0	6	0	6	0	6	0	6	0
St. Joseph's - London	398	0	0	2	2	0	398	4	398	0	0	0	0	2	398	6	398	2	398	19	2	0
P.H.O.L. - London	52	0	1	0	1	0	51	0	51	0	0	0	0	0	51	3	51	0	51	6	51	3
P.H.O.L. - Orillia	11	0	0	0	0	0	11	1	11	0	0	0	0	0	11	0	11	0	11	3	11	1
P.H.O.L. - Thunder Bay	7	0	0	0	0	0	7	0	7	0	0	0	0	0	7	1	7	0	7	1	7	2
P.H.O.L. - Sudbury	12	0	0	0	0	0	12	1	12	0	0	0	0	0	12	0	12	0	12	0	12	1
P.H.O.L. - Hamilton	39	0	0	0	0	0	39	0	39	0	0	0	0	1	39	1	39	0	39	2	39	2
P.H.O.L. - Peterborough	10	0	0	0	0	0	10	1	10	0	0	0	0	0	10	0	10	0	10	2	10	4
St. Joseph's - Hamilton	460	0	0	0	0	0	460	2	460	0	0	2	0	0	460	3	460	1	460	26	0	0
Province of Ontario	1770	1	4	4	9	0	1765	17	1288	0	0	2	0	8	1288	18	1287	3	1288	87	431	24
Province of Manitoba	535	0	0	1	1	0	535	59	97	0	0	2	0	0	97	3	105	0	97	9	105	3
Province of Saskatchewan	500	0	0	15	15	0	500	88	155	0	0	0	0	0	155	4	155	4	155	19	155	8
Province of Alberta	1543	0	4	31	35	0	578	79	578	0	1	0	1	0	578	6	578	5	578	67	578	17
Prairies	2578	0	4	47	51	0	1613	226	830	0	1	2	1	0	830	13	838	9	830	95	838	28
British Columbia	2716	1	5	0	9	0	2568	24	381	0	0	1	10	0	381	7	381	6	373	56	373	30
Yukon	74	0	0	0	0	0	74	2	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	74	0	0	0	0	0	71	16	4	0	0	0	0	0	4	0	4	0	71	4	4	1
Nunavut	227	0	0	0	0	0	227	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.
Territories	375	0	0	0	0	0	372	19	5	0	0	0	0	0	5	0	5	0	72	4	5	1
CANADA	9872	2	13	63	81	0	8173	302	2967	0	2	6	15	8	2999	49	3083	25	2768	249	2093	91

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 March 26, 2022 (surveillance week 2021-35 to 2022-12)

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	8109	0	0	0	0	0	8108	97	8111	1	5	116	0	154	8118	28	8105	33	8112	1734	N.C.	N.C.
Prince Edward Island	2011	0	0	0	0	0	2011	187	1966	0	0	152	0	0	2011	53	2011	10	2011	471	2011	105
Nova Scotia	14860	0	1	13	14	4	14859	310	1349	0	2	38	11	0	1363	11	1363	5	1363	103	1363	31
New Brunswick	12629	0	0	6	6	0	7951	265	2656	0	0	23	1	0	2649	14	2656	6	2656	40	2655	5
Atlantic	37609	0	1	19	20	4	32929	859	14082	1	7	329	12	154	14141	106	14135	54	14142	2348	5939	141
Région Nord-Est	15901	1	0	2	3	3	7115	1437	591	0	0	6	1	0	690	15	193	4	N.C.	N.C.	1036	16
Québec-Chaudière-Appalaches	4714	0	0	6	6	4	5291	994	1337	0	4	7	7	0	1377	58	1288	57	N.C.	N.C.	1174	44
Centre-du-Québec	5687	0	0	6	6	4	5819	1081	527	0	2	20	0	0	527	25	535	18	N.C.	N.C.	520	13
Montréal-Laval	17572	0	0	46	46	4	17568	2445	6008	6	4	21	5	0	6007	356	6005	331	N.C.	N.C.	6004	72
Ouest du Québec	4398	0	1	8	9	0	4355	929	86	0	0	3	3	0	79	6	75	1	N.C.	N.C.	75	1
Montérégie	2679	0	0	4	4	0	2662	387	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	50951	1	1	72	74	15	42810	7273	8549	6	10	57	16	0	8680	460	8096	411	N.C.	N.C.	8809	146
P.H.O.L. - Ottawa	6459	2	1	0	3	0	6459	1439	6459	0	0	0	0	729	6459	311	6457	38	6459	2208	6457	264
EORLA	5392	0	0	1	1	0	5367	605	745	0	2	19	1	0	745	13	426	3	745	135	403	16
P.H.O.L. - Kingston	1175	0	0	0	0	0	1174	121	1173	0	0	0	0	129	1173	19	1167	2	1173	287	1167	81
UHN / Mount Sinai Hospital	13801	0	0	13	13	2	13801	93	438	0	0	0	0	0	438	0	438	0	438	11	438	3
P.H.O.L. - Toronto	7441	2	22	1	25	0	7413	269	7413	0	0	0	0	271	7416	94	7412	13	7413	919	7413	227
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	278	0	1	0	1	0	276	5	276	0	0	0	0	7	276	3	276	1	276	48	276	18
P.H.O.L. - Timmins	332	0	0	0	0	0	332	17	332	0	0	0	0	18	332	1	332	0	332	31	332	26
St. Joseph's - London	11799	0	0	20	20	0	11802	758	10245	0	0	7	0	86	10245	122	10245	11	10199	514	509	2
P.H.O.L. - London	2944	0	7	0	7	0	2936	452	2936	0	0	0	0	154	2936	67	2935	10	2936	410	2935	219
P.H.O.L. - Orillia	742	0	1	0	1	0	742	104	742	0	0	0	0	41	742	25	739	6	742	186	739	52
P.H.O.L. - Thunder Bay	265	0	0	0	0	0	265	18	265	0	0	0	0	21	265	1	265	0	265	50	265	32
P.H.O.L. - Sudbury	286	0	0	0	0	0	286	11	286	0	0	0	0	9	286	1	286	2	286	30	286	9
P.H.O.L. - Hamilton	1431	0	7	0	7	0	1423	68	1423	0	0	0	0	44	1424	11	1423	6	1423	205	1423	84
P.H.O.L. - Peterborough	538	0	0	0	0	0	538	45	531	0	0	0	0	11	531	1	529	0	531	87	529	39
St. Joseph's - Hamilton	17710	0	4	8	12	1	17704	1612	17704	2	0	650	0	0	17704	182	17704	28	17704	1715	0	0
Province of Ontario	71432	4	43	43	90	3	70518	5617	51807	2	4	744	2	1520	51811	863	51473	121	51761	7069	24011	1082
Manitoba	45732	1	15	9	25	0	45732	857	1868	2	6	74	0	0	1868	28	2988	6	1868	219	2794	60
Province of Saskatchewan	21657	2	22	31	55	0	21629	617	3454	0	1	195	28	0	3453	62	3453	11	3453	477	3451	206
Province of Alberta	59612	0	17	76	93	2	23967	2543	23967	0	23	656	143	0	23967	232	23967	72	23967	3001	23967	1288
Prairies	127001	3	54	116	173	2	91328	4017	29289	2	30	925	171	0	29288	322	30408	89	29288	3697	30212	1554
British Columbia	153119	5	46	5	184	86	150235	8581	17852	6	7	1052	184	143	17852	332	17848	74	17472	2922	17521	451
Yukon	5039	0	1	0	4	7	5054	293	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	860	0	0	0	0	0	809	53	78	0	0	1	0	0	78	2	78	0	808	102	78	1
Nunavut	14995	0	0	0	0	0	14981	9	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	20894	0	1	0	4	7	20844	355	100	0	0	2	0	0	100	3	100	0	830	110	97	1
CANADA	461006	13	146	255	545	117	408664	26702	121679	17	58	3109	385	1817	121872	2086	122060	749	113493	16146	86589	3375

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

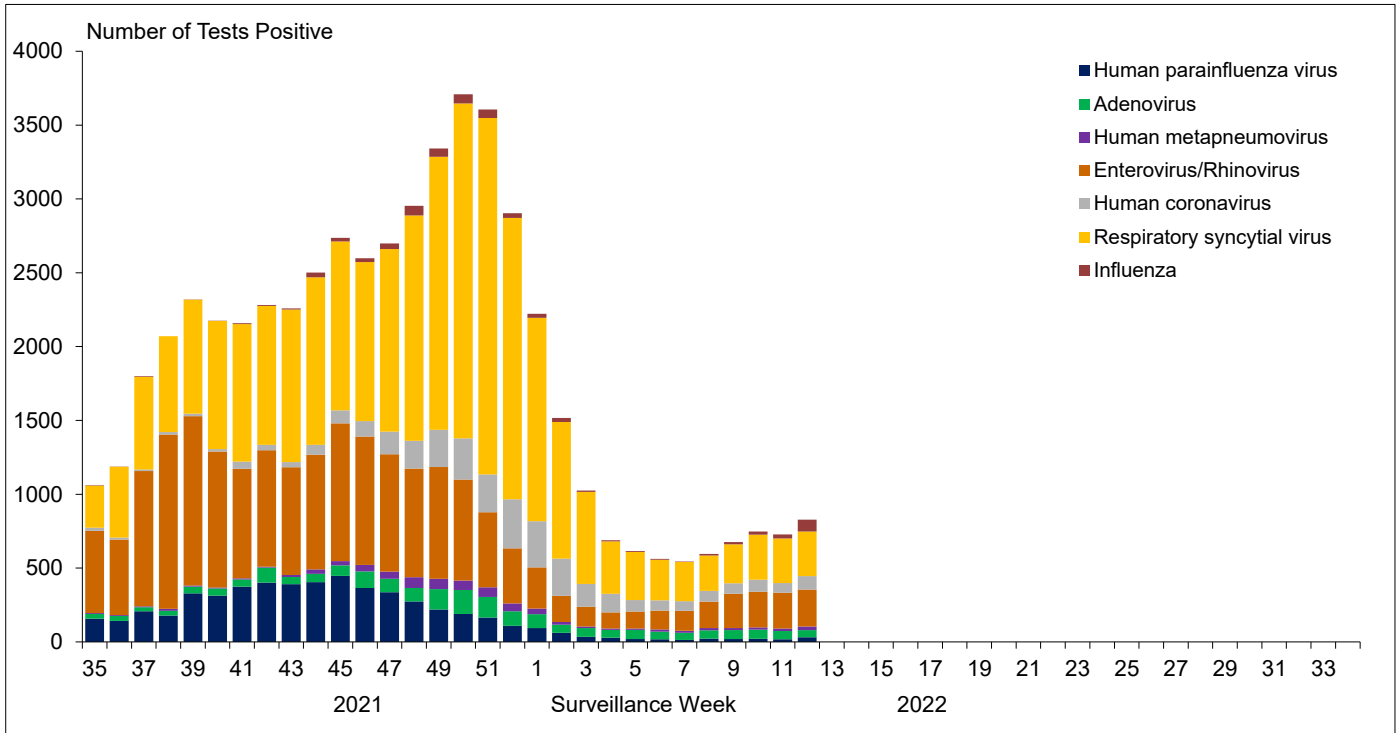


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

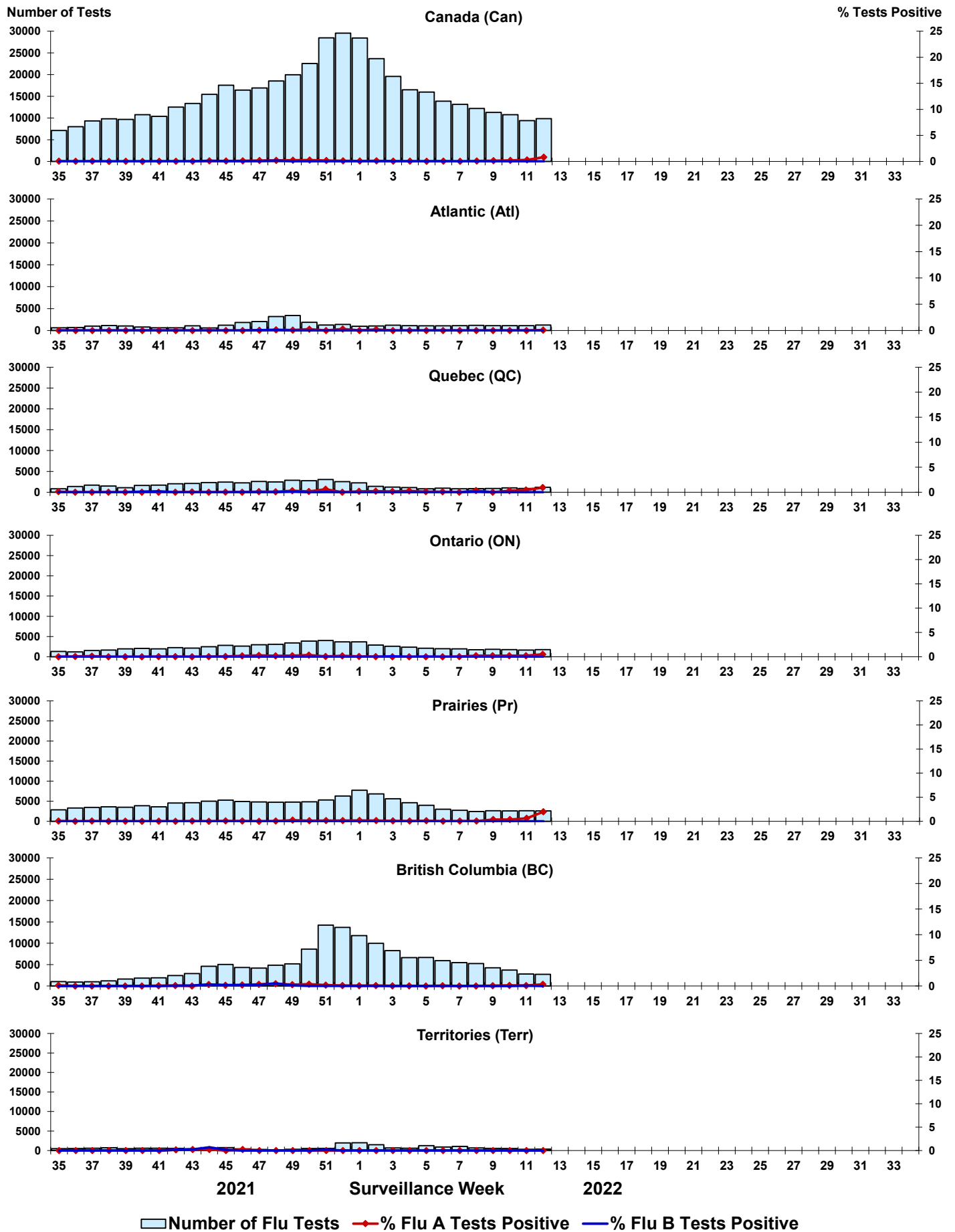


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

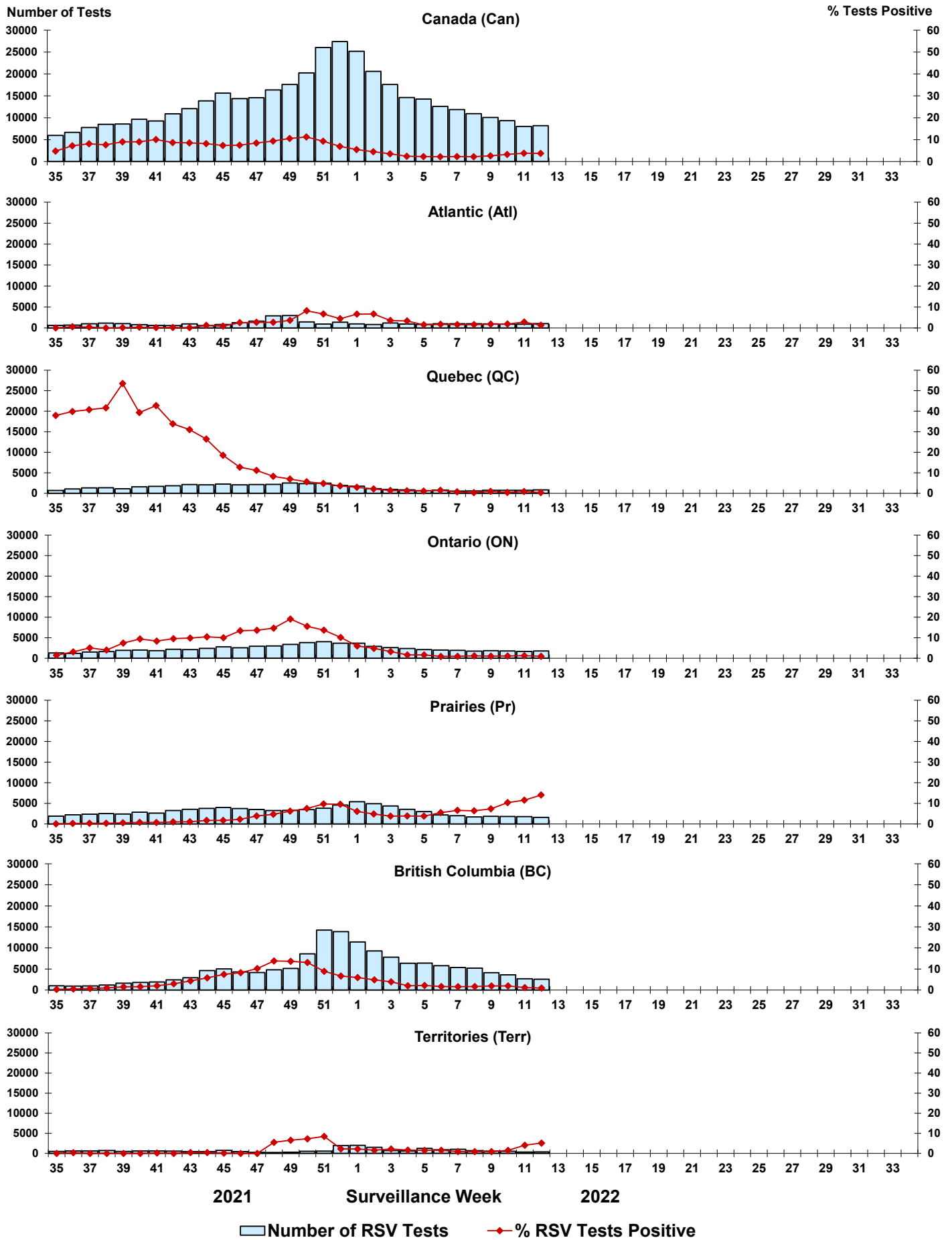


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

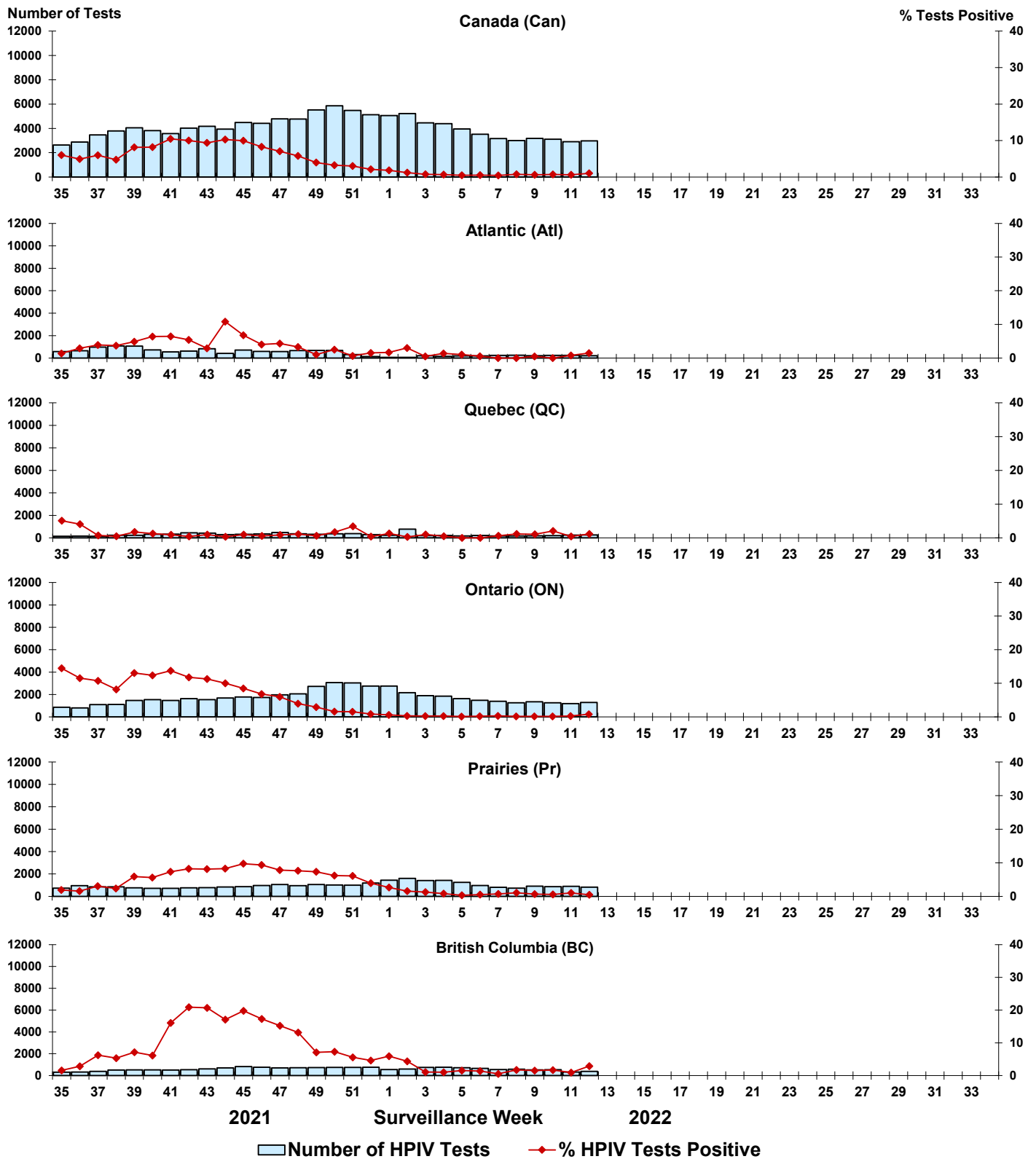


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

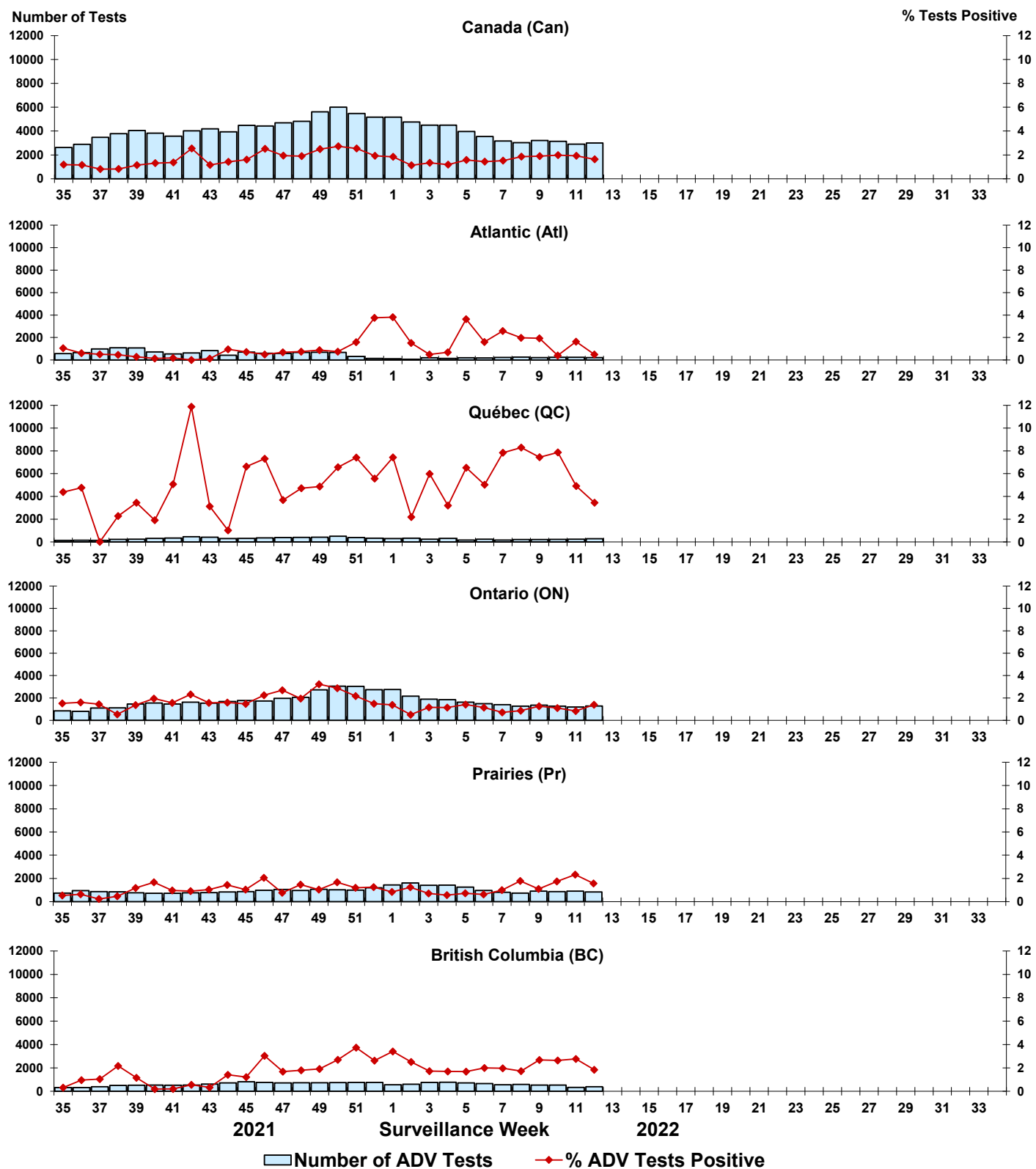


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

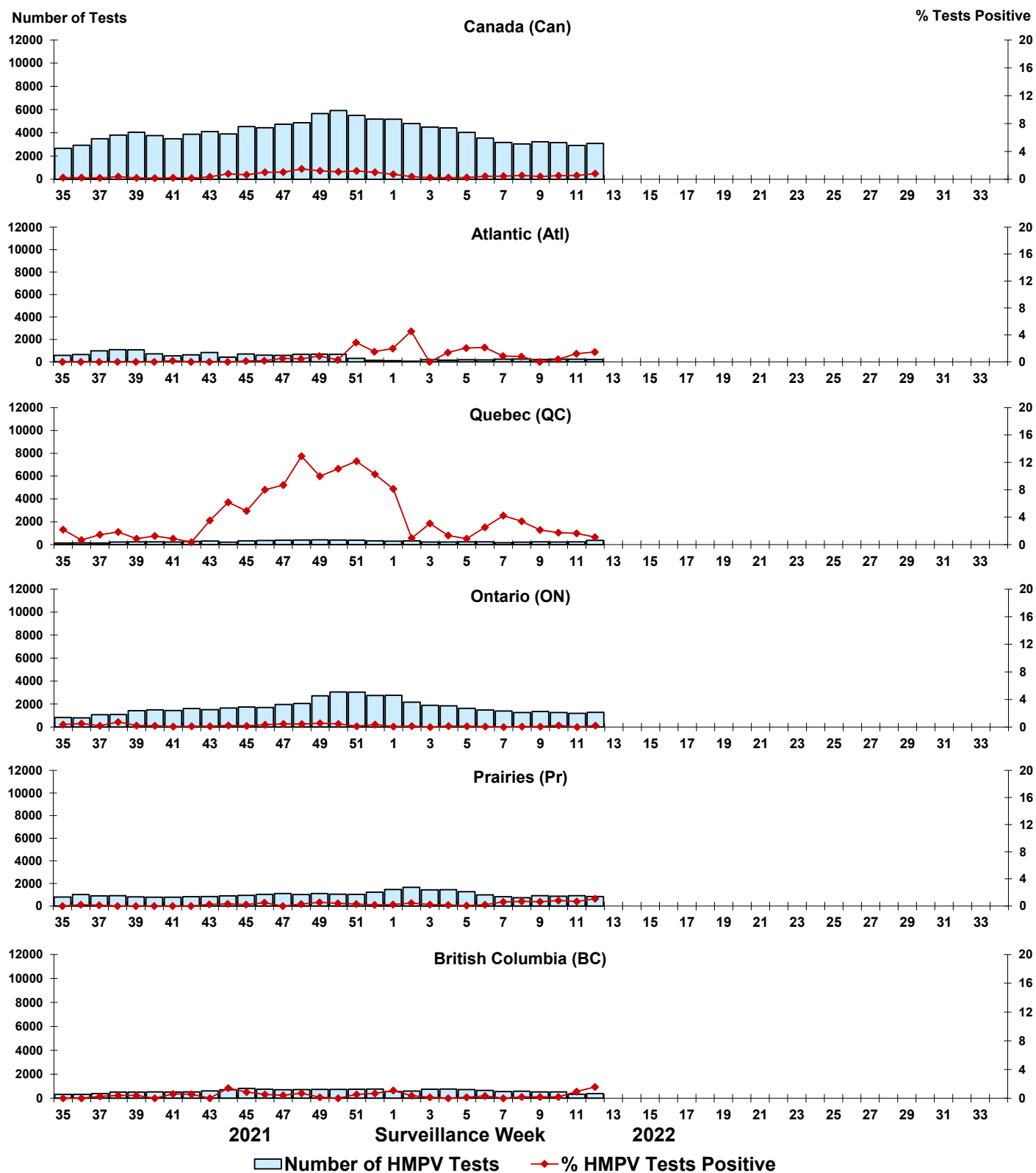


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

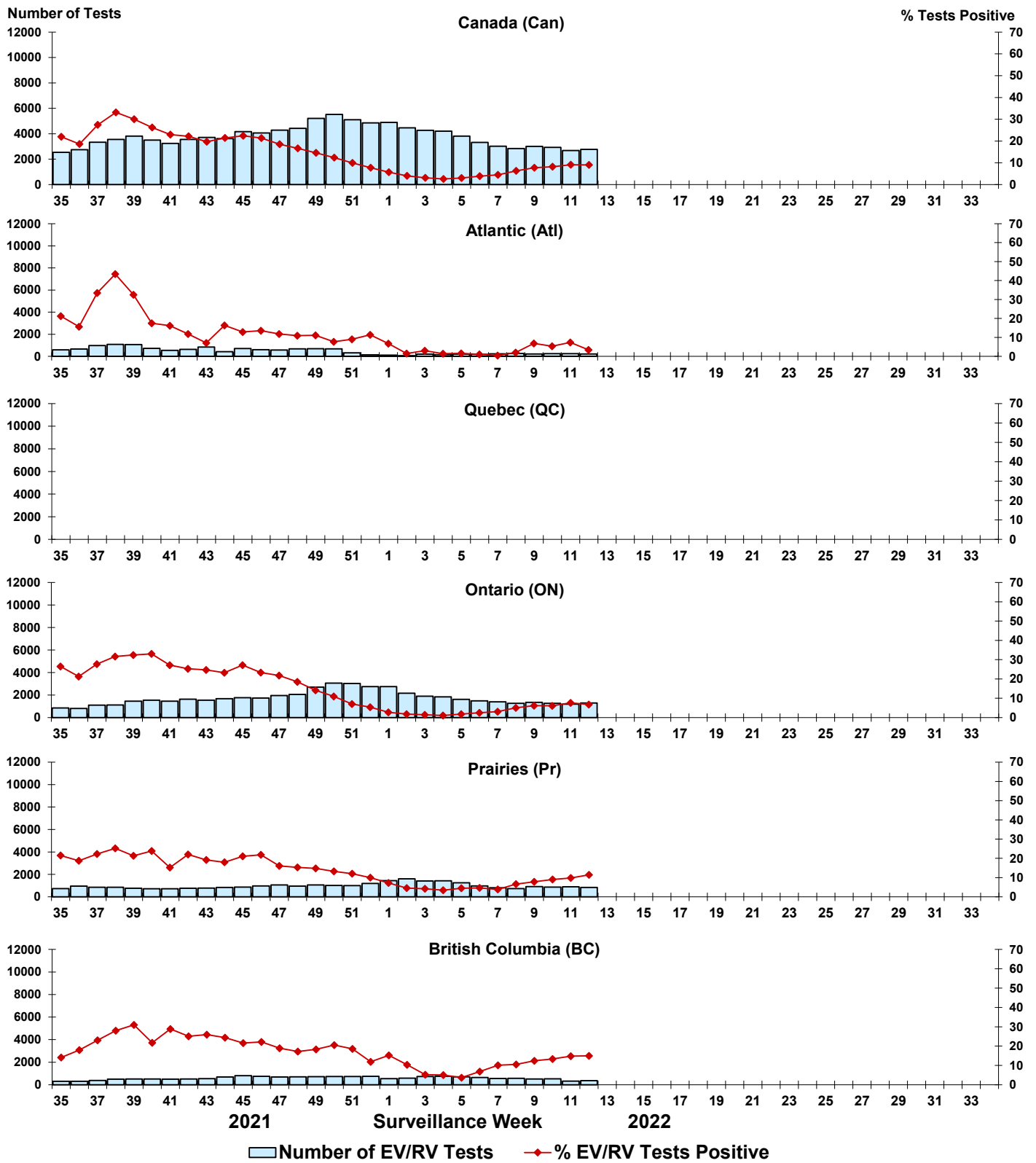


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

