

RESPIRATORY VIRUS DETECTION REPORT

January 9 to January 15, 2022
(Surveillance Week 2022-02)



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 2 (January 9 to January 15, 2022), activity of 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 (819 detections; 4.2% 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

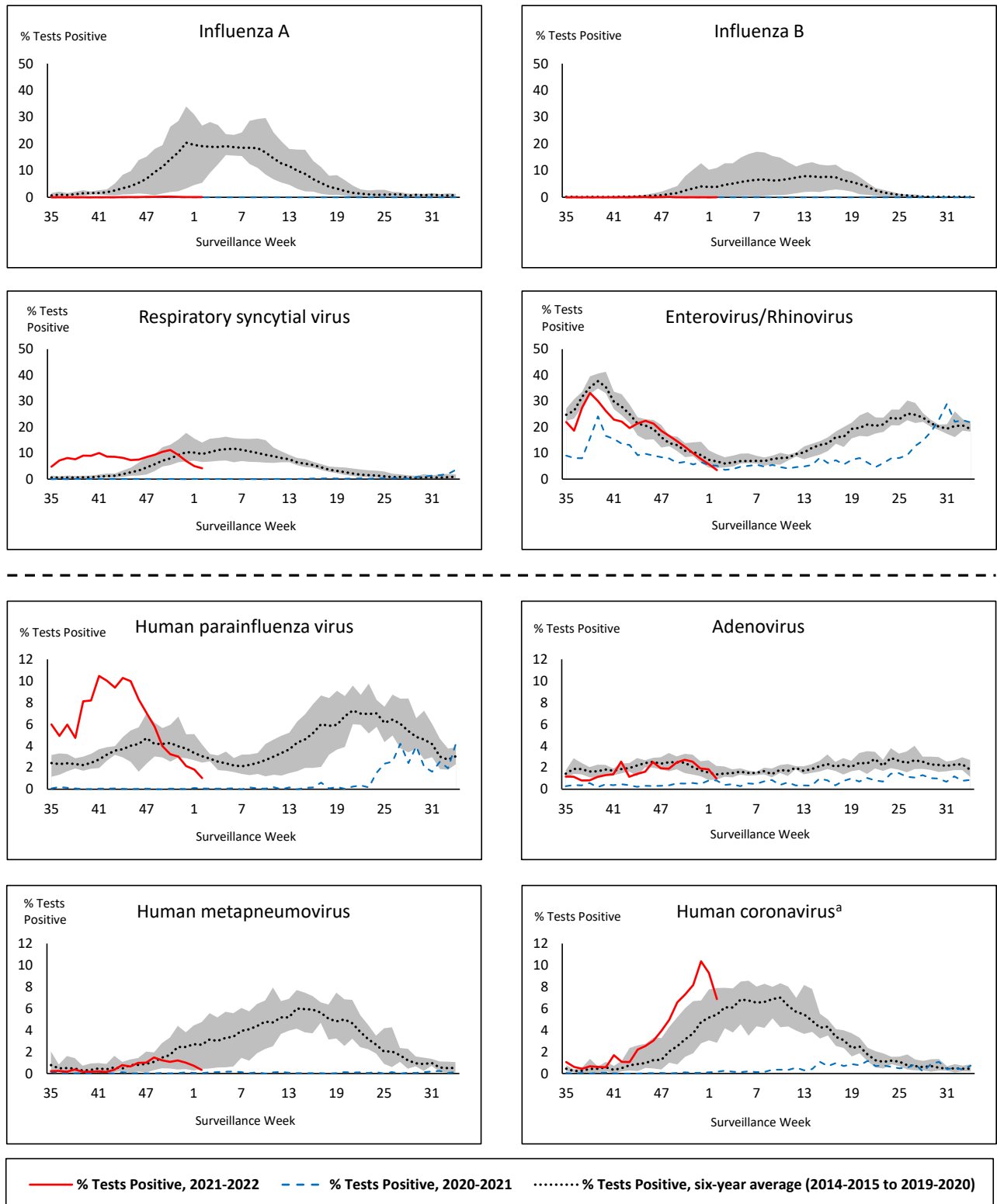
QC: Quebec

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 15, 2022 (surveillance week 2022-02)

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	7	0	0	0	0	0	7	1	7	0	0	0	0	0	7	0	7	1	7	0	N.C.	N.C.
Prince Edward Island	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.
Nova Scotia	528	0	0	2	2	0	527	36	41	0	0	0	0	0	41	1	41	1	41	0	41	2
New Brunswick	510	0	0	0	0	0	290	18	18	0	0	2	0	0	18	0	18	1	18	1	18	0
Atlantic	1045	0	0	2	2	0	824	55	66	0	0	2	0	0	66	1	66	3	66	1	59	2
Région Nord-Est	458	0	0	0	0	0	226	6	2	0	0	0	0	0	2	0	2	0	N.C.	N.C.	94	2
Québec-Chaudière-Appalaches	131	0	0	1	1	0	132	3	515	0	0	1	1	0	59	1	59	2	N.C.	N.C.	59	1
Centre-du-Québec	181	0	0	0	0	0	176	6	24	0	0	0	0	0	24	0	24	0	N.C.	N.C.	24	0
Montréal-Laval	466	0	0	2	2	0	444	6	226	0	0	0	0	0	226	6	226	1	N.C.	N.C.	226	2
Ouest du Québec	119	0	0	0	0	0	119	3	9	0	0	0	0	0	9	0	9	0	N.C.	N.C.	9	0
Montérégie	45	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	1400	0	0	3	3	0	1142	24	776	0	0	1	1	0	320	7	320	3	N.C.	N.C.	412	5
P.H.O.L. - Ottawa	64	0	0	0	0	0	64	5	64	0	0	0	0	0	64	0	64	0	64	1	64	11
EORLA	210	0	0	0	0	0	210	11	15	0	1	1	0	0	15	0	15	0	15	1	15	3
P.H.O.L. - Kingston	42	0	0	0	0	0	42	6	42	0	0	0	0	0	42	0	42	0	42	0	42	5
UHN / Mount Sinai Hospital	562	0	0	0	0	0	562	4	20	0	0	0	0	0	20	0	20	0	20	0	20	0
P.H.O.L. - Toronto	202	0	1	0	1	0	202	2	202	0	0	0	0	0	202	2	202	1	202	4	202	8
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	9	0	0	0	0	0	9	0	9	0	0	0	0	0	9	1	9	0	9	0	9	1
P.H.O.L. - Timmins	12	0	0	0	0	0	12	0	12	0	0	0	0	0	12	0	12	0	12	0	12	0
St. Joseph's - London	688	0	0	0	0	0	688	43	688	0	0	0	0	0	688	2	688	0	688	10	3	0
P.H.O.L. - London	172	0	0	0	0	0	172	21	172	0	0	0	0	3	172	1	172	1	172	7	172	31
P.H.O.L. - Orillia	21	0	0	0	0	0	21	5	21	0	0	0	0	0	21	0	21	0	21	0	21	5
P.H.O.L. - Thunder Bay	14	0	0	0	0	0	14	2	14	0	0	0	0	0	14	0	14	0	14	1	14	4
P.H.O.L. - Sudbury	7	0	0	0	0	0	7	2	7	0	0	0	0	0	7	0	7	0	7	1	7	0
P.H.O.L. - Hamilton	25	0	0	0	0	0	25	0	25	0	0	0	0	0	25	0	25	0	25	0	25	0
P.H.O.L. - Peterborough	13	0	0	0	0	0	13	0	13	0	0	0	0	0	13	0	13	0	13	4	13	0
St. Joseph's - Hamilton	824	0	0	0	0	0	824	37	824	0	0	2	0	0	824	5	824	1	824	11	0	0
Province of Ontario	2865	0	1	0	1	0	2865	138	2128	0	1	3	0	3	2128	11	2128	3	2128	40	619	68
Province of Manitoba	2026	0	0	3	3	0	2026	31	130	0	1	1	0	0	130	1	167	1	130	2	167	7
Province of Saskatchewan	1496	0	0	5	5	0	1495	45	184	0	1	7	4	0	184	4	184	0	184	7	184	31
Province of Alberta	2904	0	0	3	3	0	1144	142	1144	0	2	5	1	0	1144	13	1144	4	1144	59	1144	96
Prairies	6426	0	0	11	11	0	4665	218	1458	0	4	13	5	0	1458	18	1495	5	1458	68	1495	134
British Columbia	9368	2	0	0	6	2	8690	363	597	1	0	11	3	4	597	8	597	1	588	37	588	9
Yukon	158	0	0	0	0	0	158	21	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	43	0	0	0	0	0	42	0	1	0	0	0	0	0	1	0	1	0	41	3	1	0
Nunavut	1277	0	0	0	0	0	1276	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	1478	0	0	0	0	0	1476	21	2	0	0	0	0	0	2	0	2	0	42	3	2	0
CANADA	22582	2	1	16	23	2	19662	819	5027	1	5	30	9	7	4571	45	4608	15	4282	149	3175	218

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 15, 2022 (surveillance week 2021-35 to 2022-02)

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	7064	0	0	0	0	0	7063	73	7066	1	3	116	0	154	7073	21	7060	24	7067	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	9501	0	1	12	13	4	9500	244	1067	0	2	37	3	0	1081	10	1081	2	1081	93	1081	29
New Brunswick	8249	0	0	6	6	0	4994	246	2321	0	0	23	0	0	2314	6	2321	4	2321	33	2230	4
Atlantic	26375	0	1	18	19	4	23118	651	11970	1	5	328	3	154	12029	73	12023	33	12030	2277	4872	131
Région Nord-Est	11995	0	0	1	1	2	5899	1416	588	0	0	6	1	0	599	12	25	0	N.C.	N.C.	691	8
Québec-Chaudière-Appalaches	4035	0	0	3	3	4	4586	986	1133	0	3	7	5	0	978	35	890	43	N.C.	N.C.	802	36
Centre-du-Québec	4735	0	0	3	3	4	4888	1077	385	0	0	19	0	0	385	14	393	15	N.C.	N.C.	378	8
Montréal-Laval	14369	0	0	30	30	4	14304	2417	4396	4	2	20	4	0	4396	265	4393	303	N.C.	N.C.	4393	50
Ouest du Québec	3632	0	1	6	7	0	3589	925	31	0	0	2	0	0	17	1	20	1	N.C.	N.C.	20	1
Montérégie	2251	0	0	2	2	0	2244	386	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	41017	0	1	45	46	14	35510	7207	6533	4	5	54	10	0	6375	327	5721	362	N.C.	N.C.	6284	103
P.H.O.L. - Ottawa	6216	2	1	0	3	0	6216	1430	6216	0	0	0	0	727	6216	309	6215	38	6216	2203	6215	246
EORLA	4040	0	0	0	0	0	4015	581	520	0	2	18	0	0	520	9	201	3	520	109	197	15
P.H.O.L. - Kingston	978	0	0	0	0	0	977	103	976	0	0	0	0	129	976	16	975	2	976	274	975	73
UHN / Mount Sinai Hospital	9633	0	0	8	8	0	9633	82	301	0	0	0	0	0	301	0	301	0	301	10	301	2
P.H.O.L. - Toronto	5681	0	13	0	13	0	5667	255	5667	0	0	0	0	261	5669	70	5666	11	5667	832	5667	178
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	182	0	1	0	1	0	180	4	180	0	0	0	0	7	180	2	180	0	180	47	180	3
P.H.O.L. - Timmins	223	0	0	0	0	0	223	6	223	0	0	0	0	15	223	1	223	0	223	29	223	12
St. Joseph's - London	6791	0	0	14	14	0	6794	667	5237	0	0	7	0	82	5237	77	5237	8	5191	354	470	1
P.H.O.L. - London	2255	0	6	0	6	0	2248	430	2248	0	0	0	0	145	2248	55	2248	8	2248	390	2248	173
P.H.O.L. - Orillia	579	0	1	0	1	0	579	96	579	0	0	0	0	41	579	21	577	5	579	154	577	39
P.H.O.L. - Thunder Bay	198	0	0	0	0	0	198	17	198	0	0	0	0	19	198	0	198	0	198	49	198	17
P.H.O.L. - Sudbury	218	0	0	0	0	0	218	10	218	0	0	0	0	7	218	1	218	2	218	28	218	4
P.H.O.L. - Hamilton	1027	0	7	0	7	0	1020	62	1020	0	0	0	0	43	1020	8	1020	5	1020	196	1020	59
P.H.O.L. - Peterborough	475	0	0	0	0	0	475	44	474	0	0	0	0	11	474	1	472	0	474	83	472	29
St. Joseph's - Hamilton	12280	0	4	7	11	0	12274	1538	12274	2	0	646	0	0	12274	118	12274	24	12274	1519	0	0
Province of Ontario	51615	2	33	29	64	0	50717	5325	37170	2	4	739	1	1487	37172	700	36844	107	37124	6510	19800	861
Manitoba	37206	1	14	8	23	0	37206	557	870	1	4	67	0	0	870	14	1871	5	870	185	1677	27
Province of Saskatchewan	14083	2	4	7	13	0	14059	170	2239	0	1	174	23	0	2239	43	2239	1	2239	372	2238	127
Province of Alberta	42350	0	8	29	37	2	15920	1739	15920	0	18	639	121	0	15920	150	15920	35	15920	2515	15920	999
Prairies	93639	3	26	44	73	2	67185	2466	19029	1	23	880	144	0	19029	207	20030	41	19029	3072	19835	1153
British Columbia	100816	3	35	3	159	82	99748	7340	12071	4	5	1021	137	138	12071	209	12067	57	11791	2399	11840	218
Yukon	4097	0	1	0	4	7	4162	227	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	506	0	0	0	0	0	463	2	53	0	0	1	0	0	53	2	53	0	461	87	53	0
Nunavut	9358	0	0	0	0	0	9350	7	12	0	0	0	0	0	12	1	12	0	12	7	12	0
Territories	13961	0	1	0	4	7	13975	236	65	0	0	1	0	0	65	3	65	0	473	94	65	0
CANADA	327423	8	97	139	365	109	290253	23225	86838	12	42	3023	295	1779	86741	1519	86750	600	80447	14352	62696	2466

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

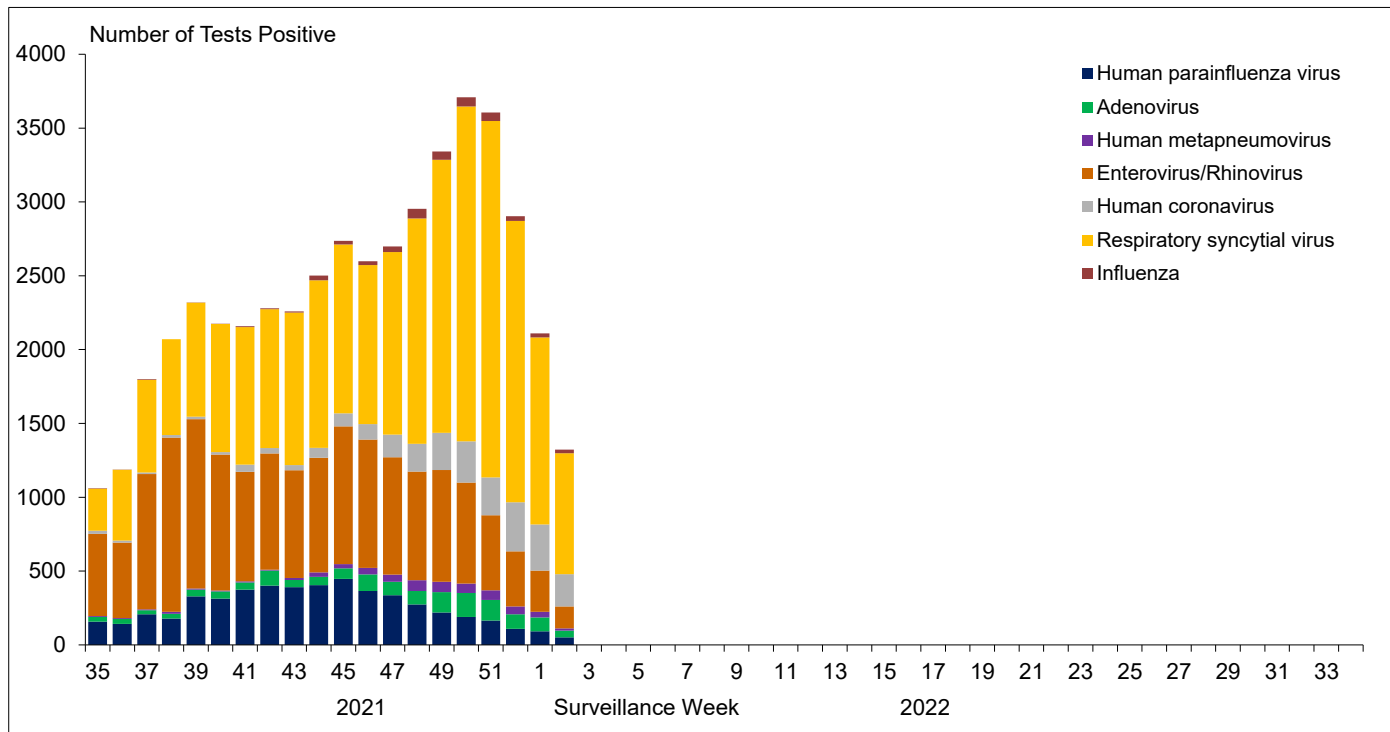


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

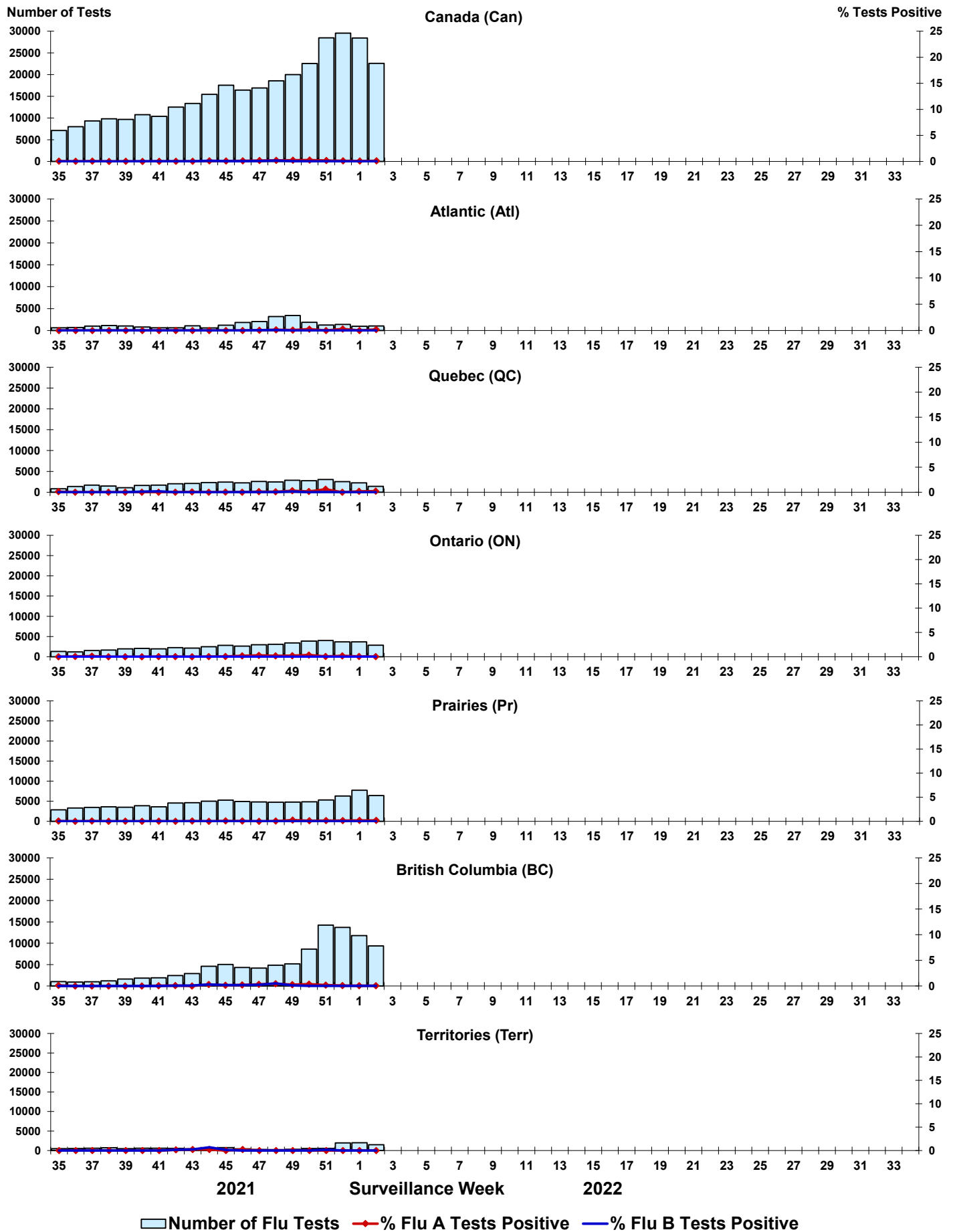


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

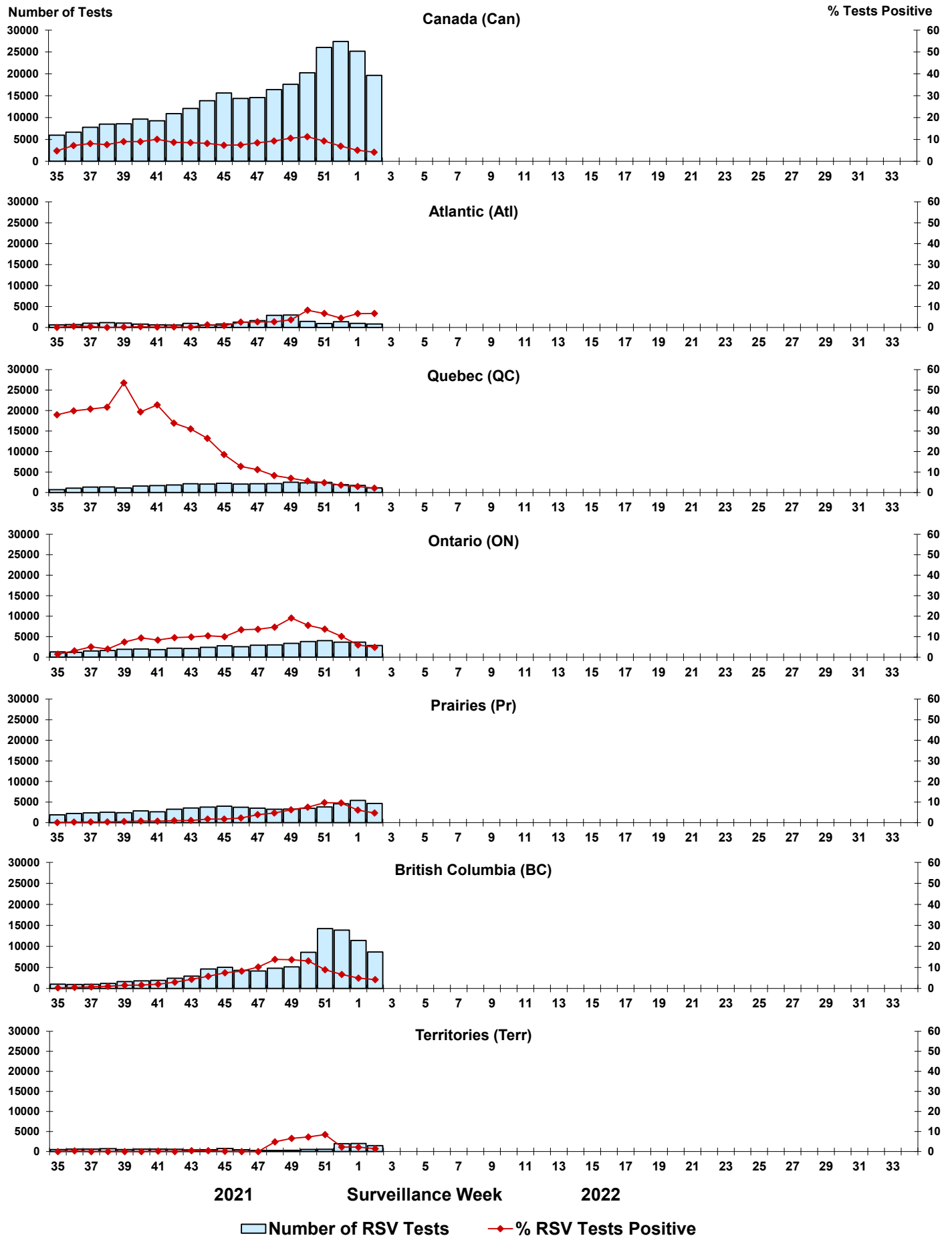


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

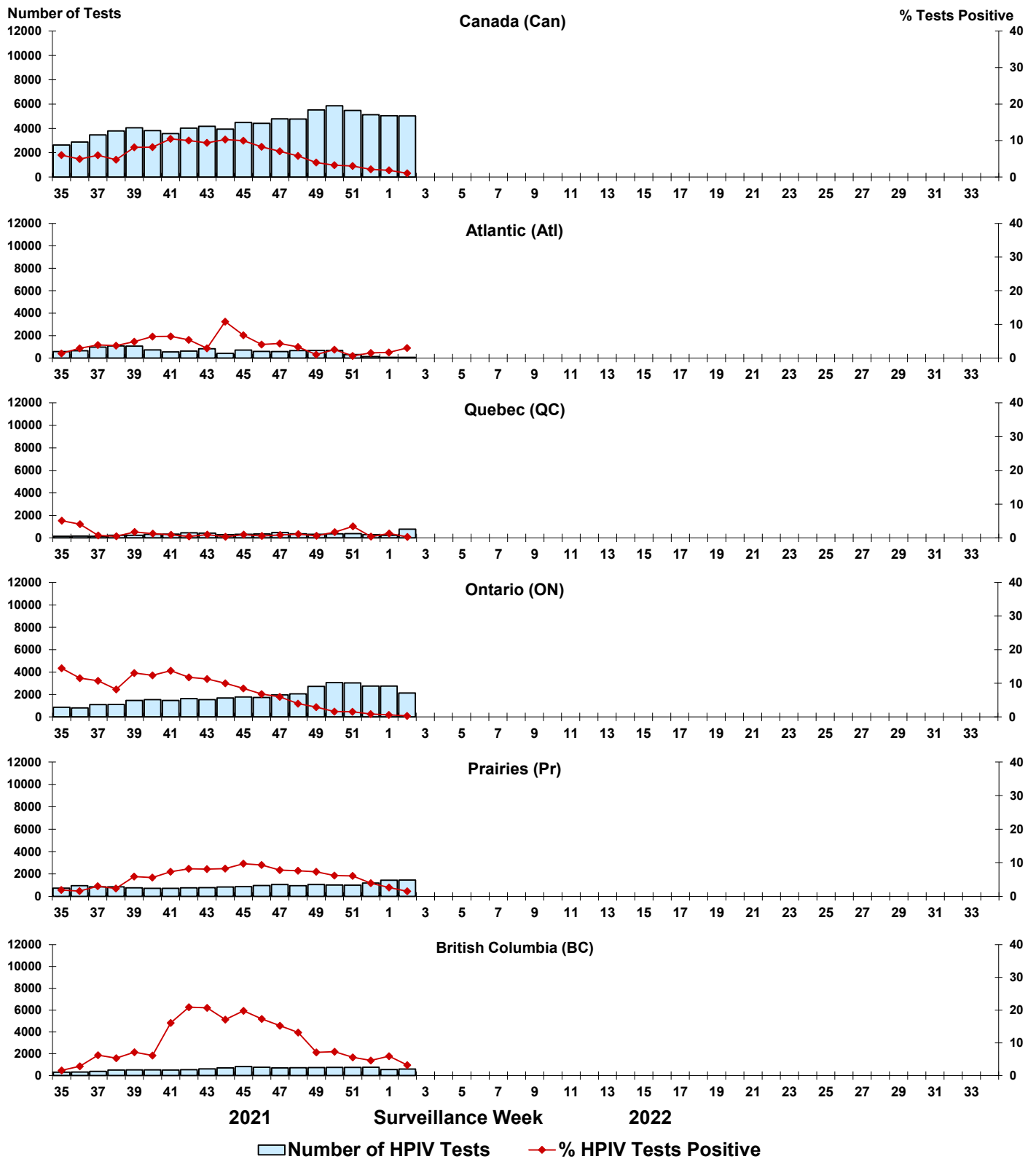


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

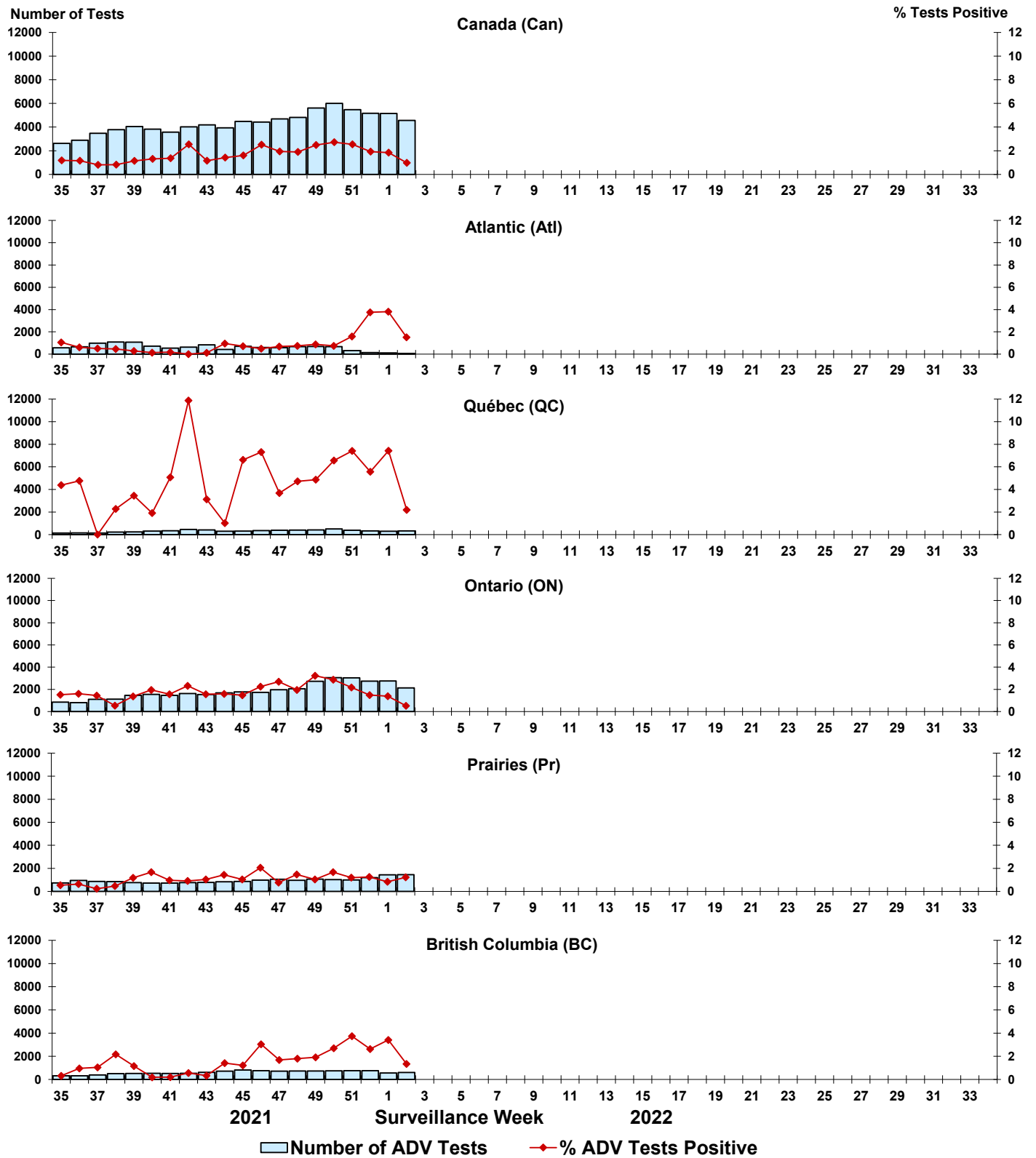


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

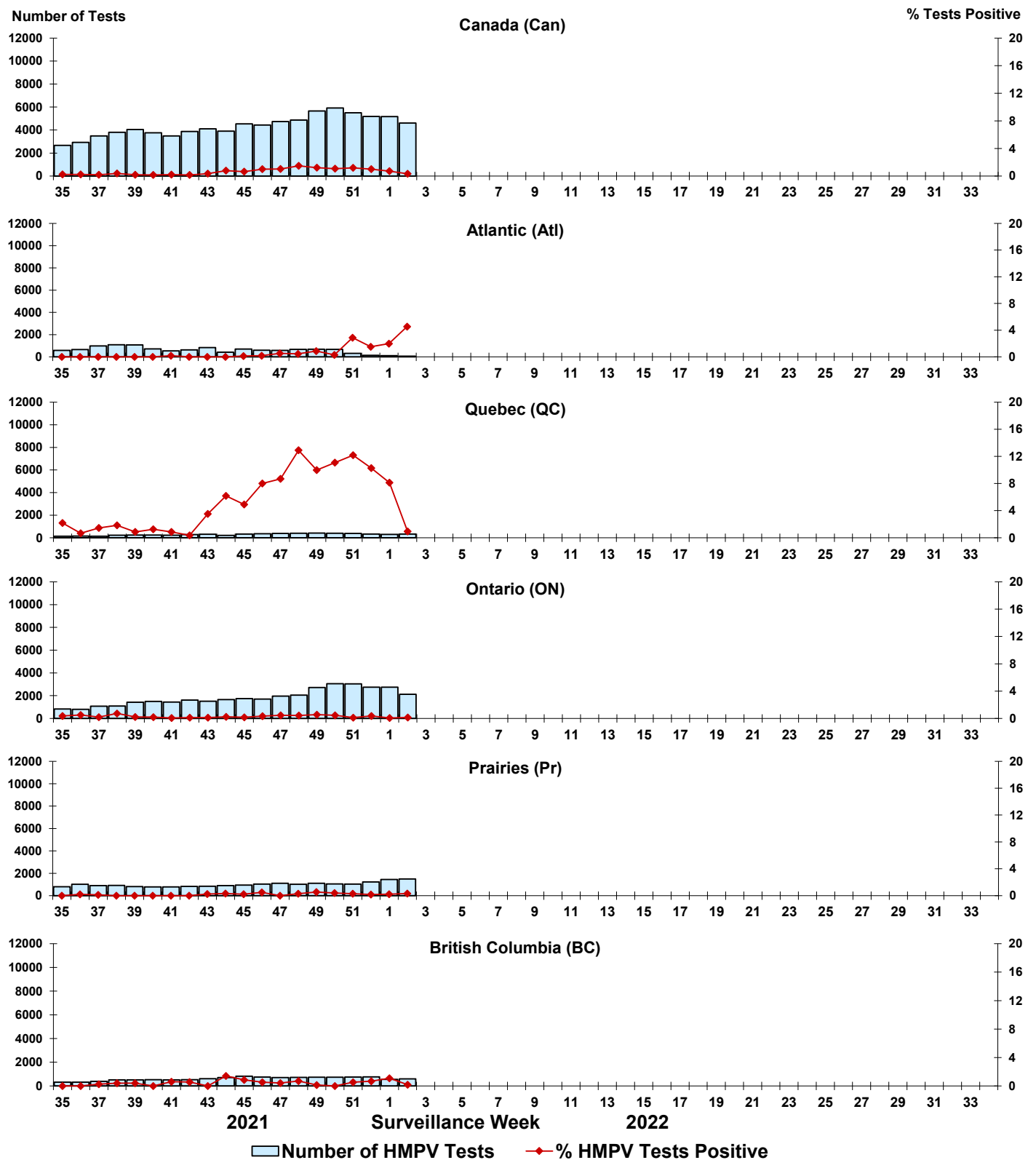


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

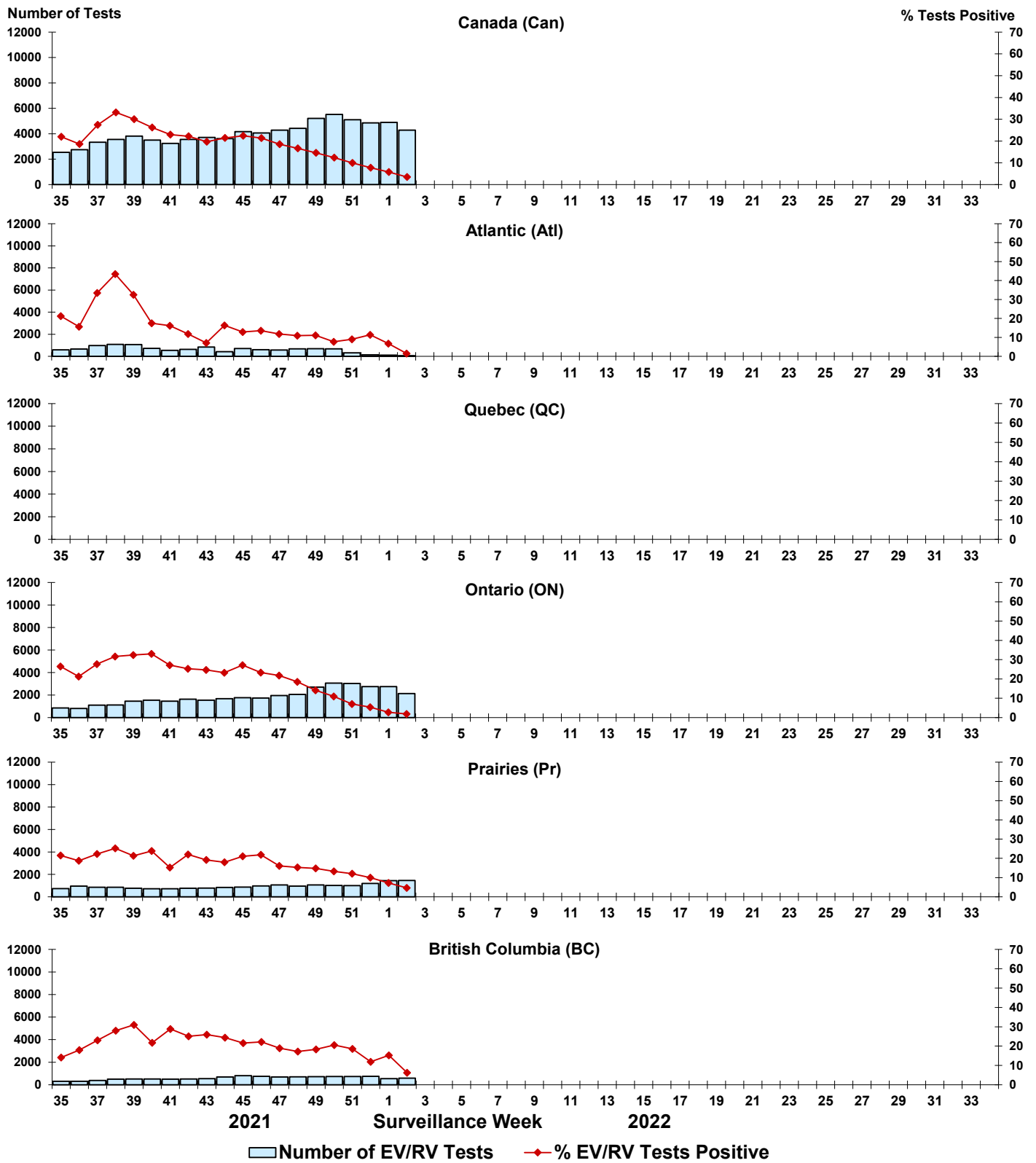


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

