

RESPIRATORY VIRUS DETECTION REPORT

April 10 to April 16, 2022
(Surveillance Week 2022-15)



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 since February 2022, with influenza accounting for most of the increase in recent weeks. Activity of all respiratory viruses is within or below expected levels for this time of year.

- Influenza is the most common seasonal respiratory virus detected in Canada.
 - A total of 492 influenza detections were reported (490 influenza A, 2 influenza B)
 - Activity of influenza A (3.8% positive) has increased in recent weeks, and is now within expected levels for this time of year.
- Activity of other respiratory viruses is low; however, activity of seasonal human coronavirus (142 detections; 5.1% positive) is increasing but within expected levels.
- The number of tests performed for all viruses were within or above 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

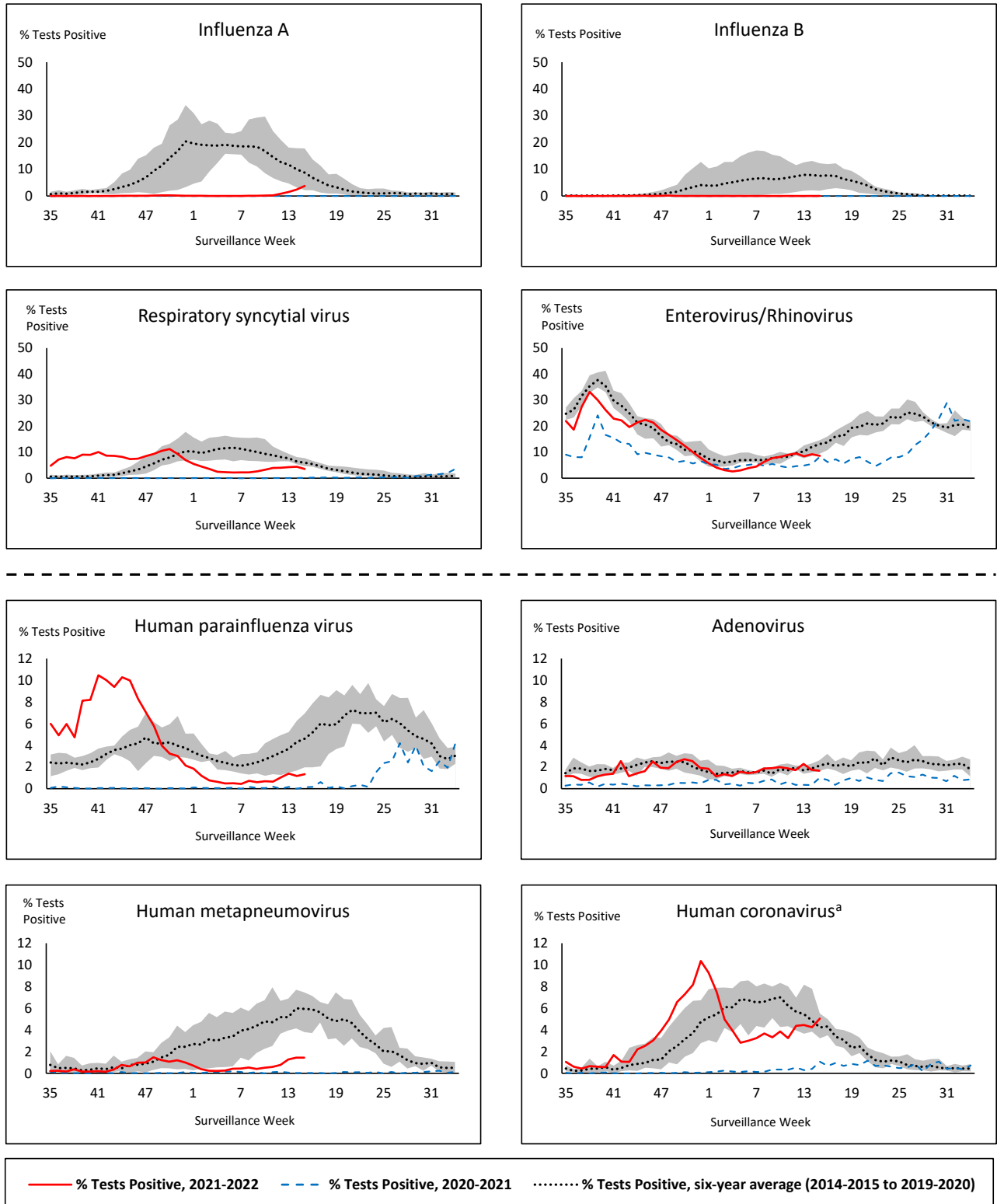
QC: Quebec

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 April 16, 2022 (surveillance week 2022-15)

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	101	0	0	0	0	0	101	4	101	0	0	0	0	0	101	0	101	0	101	5	N.C.	N.C.
Prince Edward Island	37	0	1	0	1	0	37	15	37	0	0	0	0	0	37	3	37	3	37	14	37	3
Nova Scotia	578	0	0	15	15	0	578	2	34	0	0	1	1	0	34	0	34	0	34	4	34	3
New Brunswick	375	0	0	0	0	0	345	0	34	0	0	0	1	0	34	2	34	0	34	3	34	1
Atlantic	1091	0	1	15	16	0	1061	21	206	0	0	1	2	0	206	5	206	3	206	26	105	7
Région Nord-Est	726	0	0	50	50	0	278	2	141	0	0	1	0	0	141	1	141	1	N.C.	N.C.	141	4
Québec-Chaudière-Appalaches	223	0	0	33	33	0	231	0	39	0	2	0	1	0	103	2	103	4	N.C.	N.C.	85	0
Centre-du-Québec	217	0	0	34	34	0	209	0	18	0	0	0	0	0	18	0	18	1	N.C.	N.C.	18	0
Montréal-Laval	471	0	0	73	73	1	468	1	213	0	7	1	0	0	213	9	213	3	N.C.	N.C.	213	10
Ouest du Québec	168	0	1	17	18	0	153	0	8	0	1	0	0	0	8	0	8	0	N.C.	N.C.	8	2
Montérégie	91	0	0	9	9	0	91	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	1896	0	1	216	217	1	1430	3	419	0	10	2	1	0	483	12	483	9	N.C.	N.C.	465	16
P.H.O.L. - Ottawa	33	0	7	0	7	0	33	0	33	0	0	0	0	1	33	0	33	0	33	4	33	3
EORLA	152	0	0	7	7	0	152	3	18	0	0	0	0	0	18	0	18	0	18	3	18	1
P.H.O.L. - Kingston	32	0	1	0	1	0	32	1	32	0	0	0	0	0	32	0	32	0	32	1	32	1
UHN / Mount Sinai Hospital	562	0	0	2	2	1	562	2	17	0	0	0	0	0	17	0	17	0	17	1	17	0
P.H.O.L. - Toronto	234	0	1	0	1	0	234	3	234	0	0	0	0	5	234	5	234	1	234	14	234	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	7	0	1	1	2	0	7	0	7	0	0	0	0	0	7	0	7	0	7	2	7	0
P.H.O.L. - Timmins	13	0	0	0	0	0	13	4	13	0	0	0	0	0	13	0	13	0	13	0	13	0
St. Joseph's - London	85	0	0	2	2	0	85	2	85	0	0	0	0	0	85	3	85	7	85	12	2	0
P.H.O.L. - London	64	0	2	1	3	0	64	0	64	0	0	0	0	0	64	1	64	1	64	7	64	9
P.H.O.L. - Orillia	16	0	0	0	0	0	16	3	16	0	0	0	0	0	16	0	16	0	16	4	16	2
P.H.O.L. - Thunder Bay	3	0	1	0	1	0	3	0	3	0	0	0	0	0	3	0	3	0	3	0	3	2
P.H.O.L. - Sudbury	2	0	1	0	1	0	2	0	2	0	0	0	0	0	2	0	2	0	2	0	2	0
P.H.O.L. - Hamilton	32	0	1	0	1	0	31	0	31	0	0	0	0	0	31	1	31	2	31	2	31	0
P.H.O.L. - Peterborough	12	0	0	0	0	0	12	0	12	0	0	0	0	0	12	0	12	0	12	0	12	1
St. Joseph's - Hamilton	658	0	0	12	12	0	658	5	658	0	0	0	0	0	658	6	658	10	658	28	0	0
Province of Ontario	1905	0	15	25	40	1	1904	23	1225	0	0	0	0	6	1225	16	1225	21	1225	78	484	31
Province of Manitoba	930	0	2	13	15	0	930	41	121	0	1	0	0	0	121	1	155	0	121	11	155	5
Province of Saskatchewan	586	0	5	33	38	0	585	118	170	0	1	0	2	0	170	3	170	0	170	25	169	8
Province of Alberta	2441	0	42	69	111	0	904	120	904	1	6	5	7	0	904	12	904	17	904	64	904	21
Prairies	3957	0	49	115	164	0	2419	279	1195	1	8	5	9	0	1195	16	1229	17	1195	100	1228	34
British Columbia	4047	0	22	0	44	0	3891	48	537	0	0	1	1	1	537	11	537	3	525	68	525	54
Yukon	67	0	1	0	1	0	67	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.
Northwest Territories	38	0	8	0	8	0	35	9	1	0	0	0	0	0	1	0	1	0	35	2	1	0
Nunavut	33	0	0	0	0	0	33	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	138	0	9	0	9	0	135	11	1	0	0	0	0	0	1	0	1	0	35	2	1	0
CANADA	13034	0	97	371	490	2	10840	385	3583	1	18	9	13	7	3647	60	3681	53	3186	274	2808	142

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 April 16, 2022 (surveillance week 2021-35 to 2022-15)

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	8467	0	0	0	0	0	8466	102	8469	1	7	116	0	154	8476	29	8463	33	8470	1753	N.C.	N.C.
Prince Edward Island	2103	0	1	0	1	0	2103	216	2058	0	0	154	0	0	2103	56	2103	24	2103	497	2103	111
Nova Scotia	16736	0	1	38	39	5	16735	312	1436	0	2	39	12	0	1450	13	1450	6	1450	113	1450	36
New Brunswick	13990	0	0	8	8	0	8690	268	2748	0	0	23	4	0	2741	17	2748	6	2748	48	2657	7
Atlantic	41296	0	2	46	48	5	35994	898	14711	1	9	332	16	154	14770	115	14764	69	14771	2411	6210	154
Région Nord-Est	17830	1	0	90	91	3	7633	1439	790	0	0	9	1	0	889	17	392	7	N.C.	N.C.	1228	21
Québec-Chaudière-Appalaches	5153	0	0	57	57	4	5741	994	1439	0	7	7	10	0	1623	68	1534	68	N.C.	N.C.	1392	46
Centre-du-Québec	6196	0	0	64	64	4	6300	1081	584	0	3	21	0	0	584	31	592	20	N.C.	N.C.	577	13
Montréal-Laval	19110	0	2	185	187	5	19092	2449	6635	6	18	25	5	0	6634	393	6632	336	N.C.	N.C.	6631	99
Ouest du Québec	4794	0	2	31	33	0	4736	929	103	0	2	3	4	0	96	7	92	1	N.C.	N.C.	92	3
Montérégie	2892	0	0	24	24	0	2855	387	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	55975	1	4	451	456	16	46357	7279	9551	6	30	65	20	0	9826	516	9242	432	N.C.	N.C.	9920	182
P.H.O.L. - Ottawa	6564	2	8	0	10	0	6564	1439	6564	0	0	0	0	732	6564	311	6562	40	6564	2224	6562	269
EORLA	5788	0	0	10	10	0	5763	608	829	0	2	19	1	0	829	15	510	4	829	145	487	17
P.H.O.L. - Kingston	1260	0	3	0	3	0	1259	124	1258	0	0	0	0	129	1258	19	1252	2	1258	294	1252	87
UHN / Mount Sinai Hospital	15335	0	0	21	21	3	15335	98	487	0	0	0	0	0	487	0	487	1	487	13	487	4
P.H.O.L. - Toronto	8088	2	6	1	9	0	8077	274	8077	0	0	0	0	280	8080	108	8075	16	8077	972	8076	256
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	293	0	2	1	3	0	292	5	292	0	0	0	0	7	292	3	292	1	292	50	292	18
P.H.O.L. - Timmins	371	0	0	0	0	0	371	25	371	0	0	0	0	18	371	1	371	0	371	31	371	26
St. Joseph's - London	12400	0	0	36	36	0	12403	766	10846	0	0	7	0	86	10846	133	10846	30	10800	555	516	2
P.H.O.L. - London	3114	0	4	2	6	0	3113	452	3113	0	0	0	0	157	3113	73	3112	13	3113	433	3112	241
P.H.O.L. - Orillia	781	0	1	0	1	0	781	108	781	0	0	0	0	41	781	25	778	6	781	199	778	55
P.H.O.L. - Thunder Bay	279	0	1	0	1	0	279	18	279	0	0	0	0	21	279	1	279	0	279	50	279	35
P.H.O.L. - Sudbury	297	0	1	0	1	0	297	11	297	0	0	0	0	9	297	1	297	2	297	31	297	9
P.H.O.L. - Hamilton	1517	0	5	0	5	0	1512	68	1512	0	0	0	0	44	1513	13	1512	9	1512	214	1512	87
P.H.O.L. - Peterborough	562	0	0	0	0	0	562	45	555	0	0	0	0	11	555	1	553	1	555	88	553	41
St. Joseph's - Hamilton	19587	0	4	34	38	1	19581	1623	19581	2	0	650	0	0	19581	194	19581	45	19581	1812	0	0
Province of Ontario	77075	4	35	105	144	4	76189	5664	55681	2	4	744	2	1535	55685	910	55346	171	55635	7344	25413	1157
Manitoba	48597	1	21	30	52	0	48597	1037	2211	2	8	74	2	0	2211	34	3431	6	2211	256	3237	76
Province of Saskatchewan	23575	2	75	76	153	0	23544	1036	4024	0	2	196	35	0	4023	72	4023	16	4023	569	4020	225
Province of Alberta	66329	1	102	238	341	2	26640	2900	26640	1	37	662	167	0	26640	272	26640	123	26640	3210	26640	1361
Prairies	138501	4	198	344	546	2	98781	4973	32875	3	47	932	204	0	32874	378	34094	145	32874	4035	33897	1662
British Columbia	166050	5	112	5	300	86	162586	8839	19844	6	8	1058	198	152	19844	376	19840	87	19423	3141	19471	603
Yukon	5202	1	2	2	6	7	5214	299	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	1039	0	15	0	15	0	982	97	84	0	0	1	0	0	84	2	84	0	981	112	84	1
Nunavut	15128	0	0	0	0	0	15113	12	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	21369	1	17	2	21	7	21309	408	110	0	0	2	0	0	110	3	110	0	1007	121	107	1
CANADA	500266	15	368	953	1515	120	441216	28061	132772	18	98	3133	440	1841	133109	2298	133396	904	123710	17052	95018	3759

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

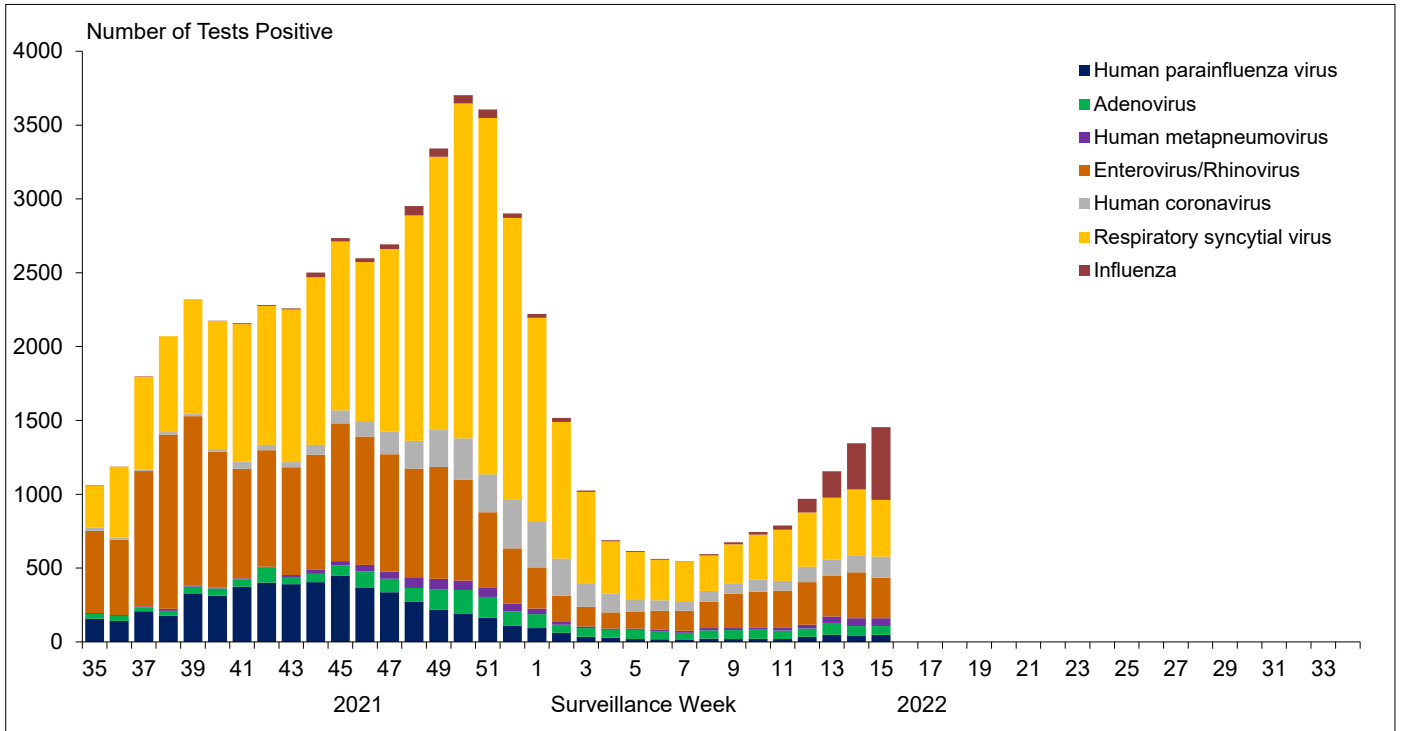


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

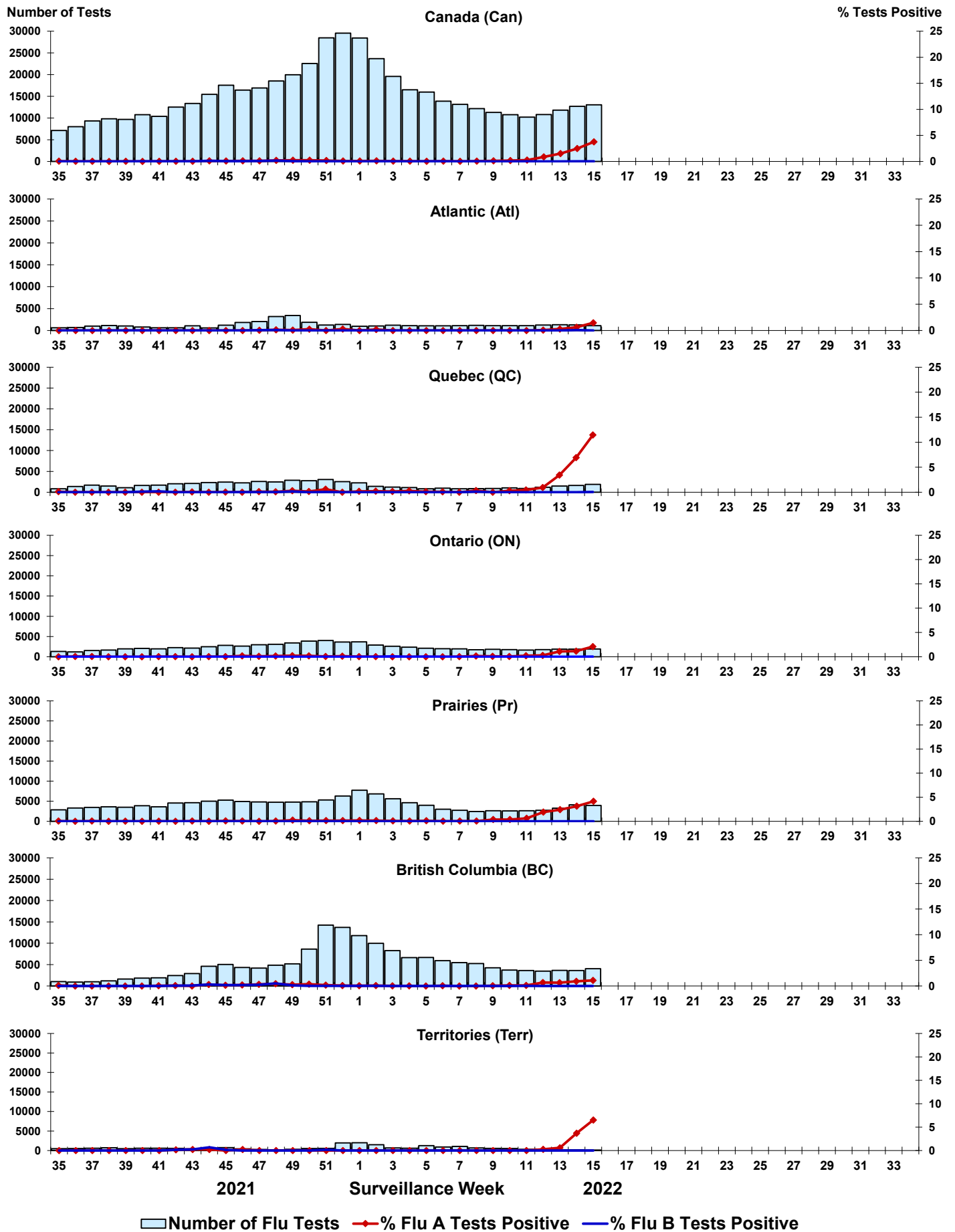


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

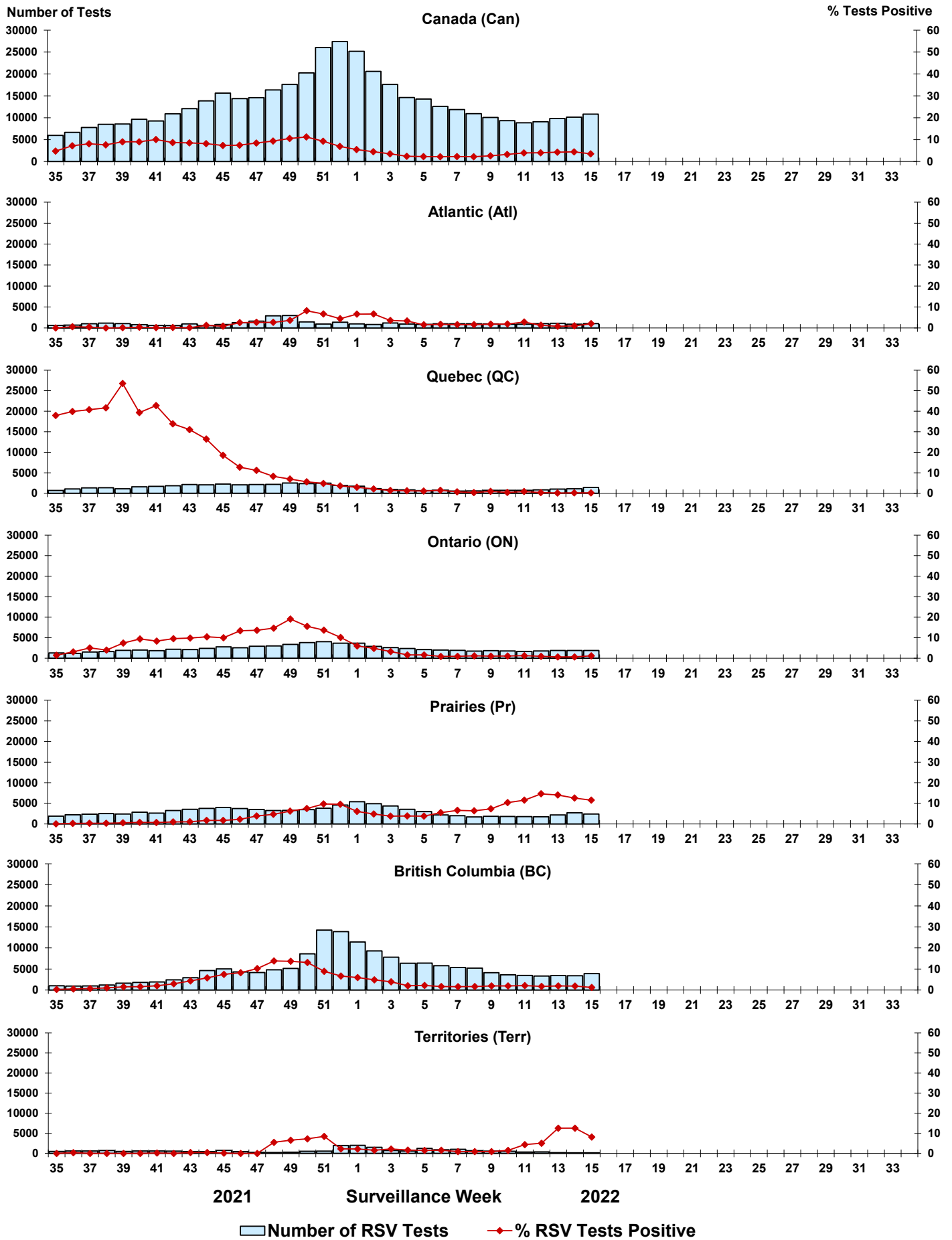


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

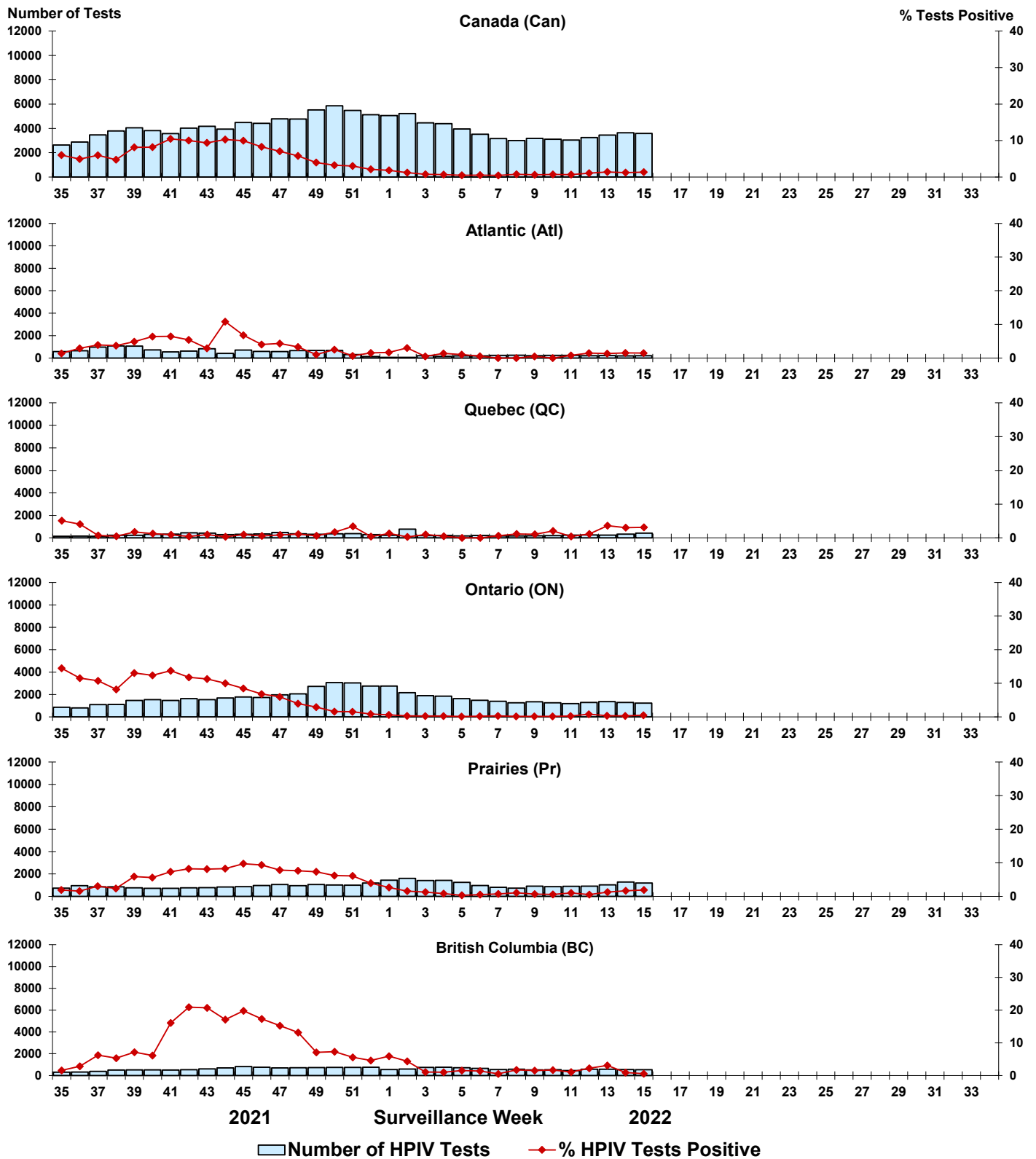


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

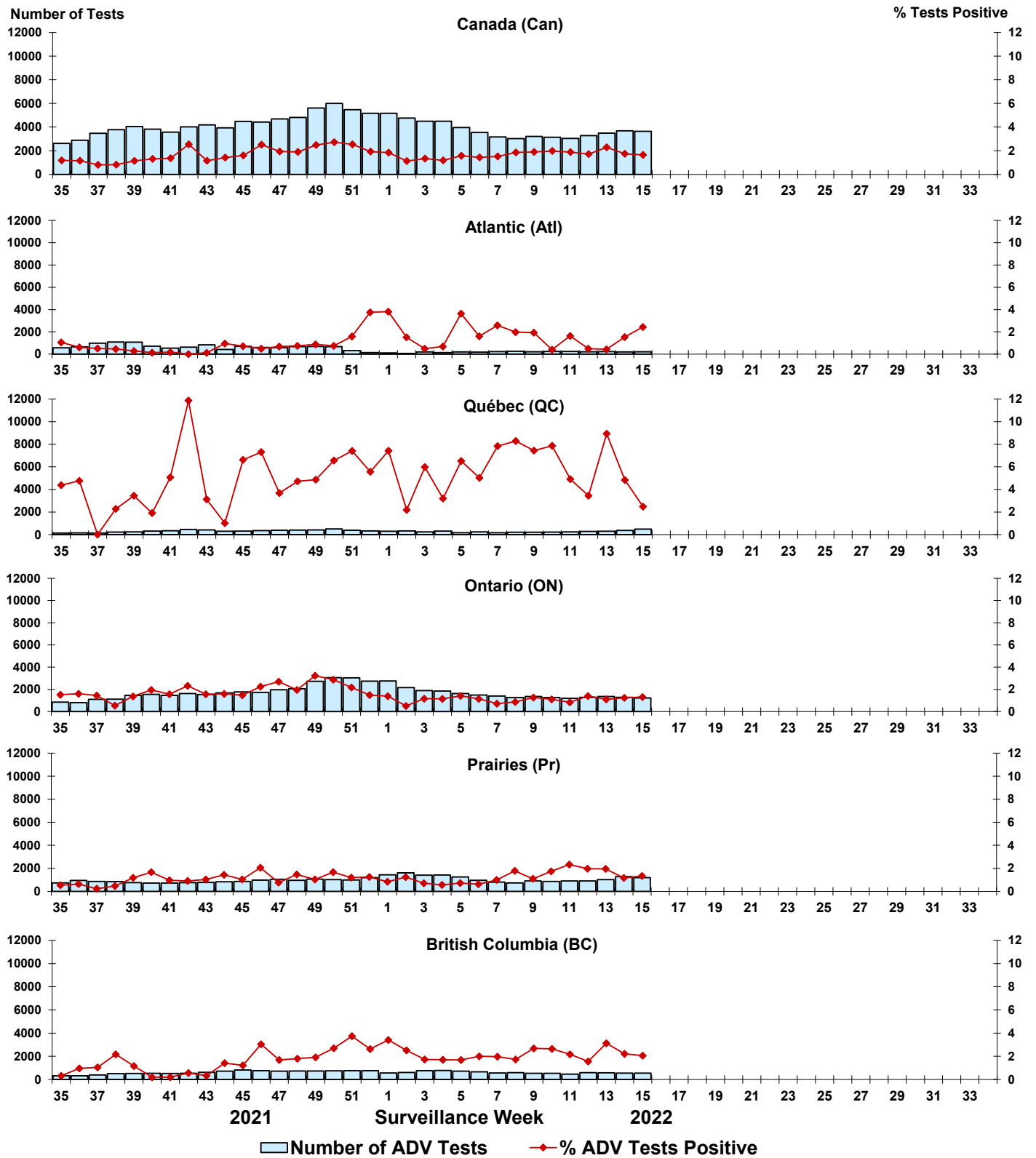


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

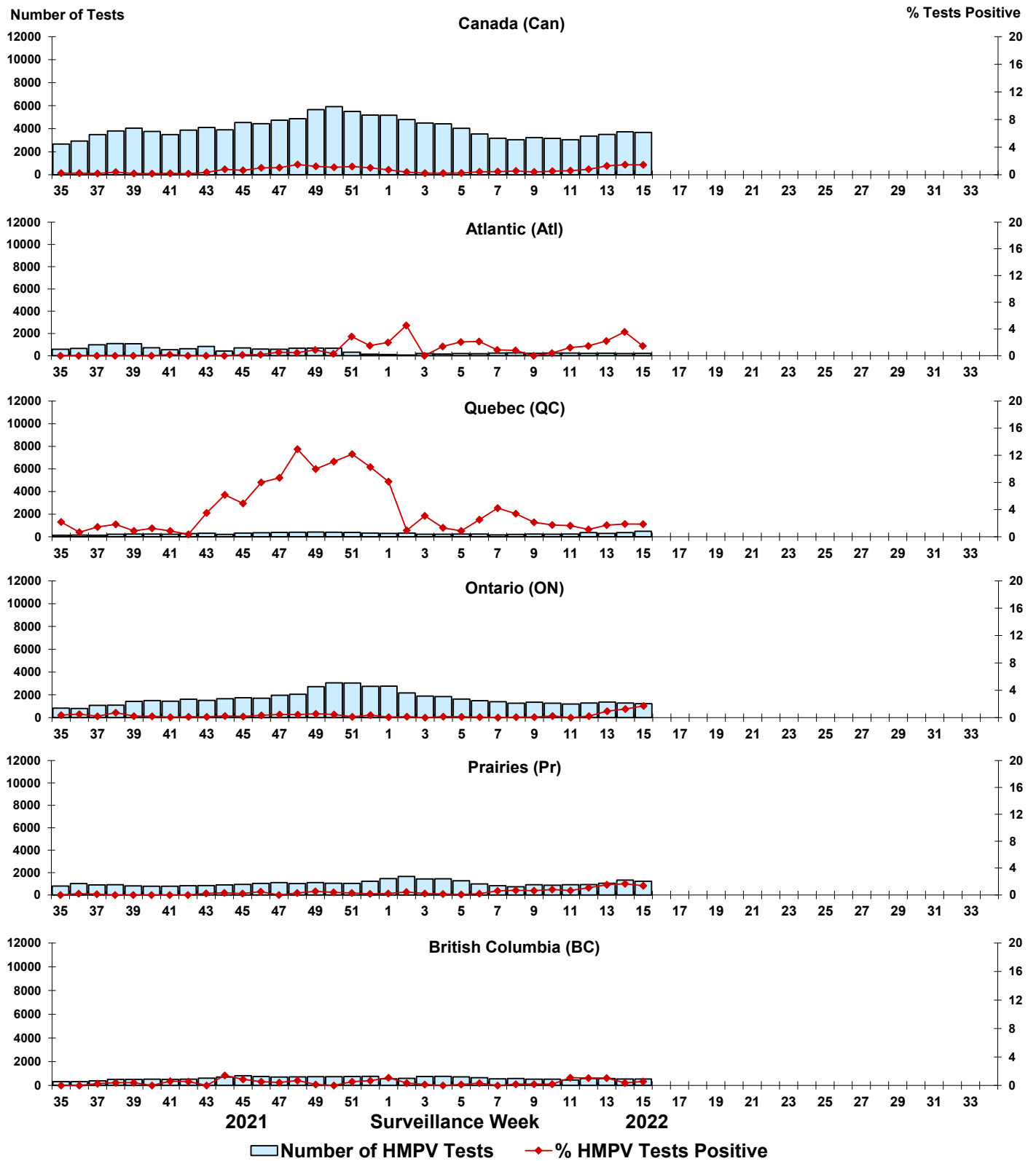


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

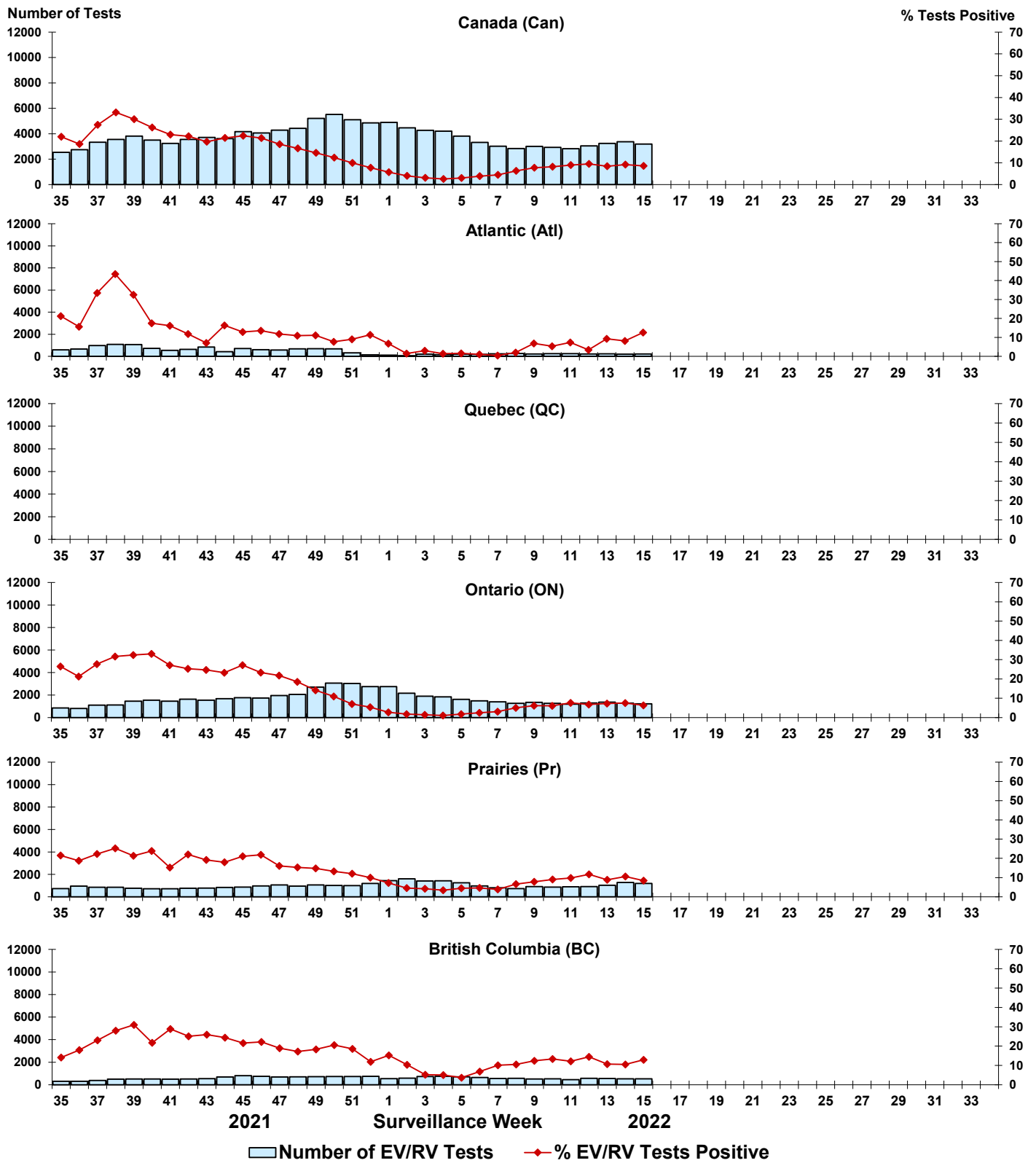


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

