

RESPIRATORY VIRUS DETECTION REPORT

May 15 to May 21, 2022
(Surveillance Week 2022-20)



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 stabilized in recent weeks.

- Influenza is the most common seasonal respiratory virus detected in Canada. Influenza activity has decreased slightly but remains above the epidemic threshold.
 - A total of 1,739 influenza detections were reported (1,727 influenza A, 12 influenza B).
 - Activity of influenza A (10.6% positive) has decreased, but remains above expected levels for this time of year.
- Activity of other respiratory viruses is low, and is near expected levels for most viruses.
 - Activity of seasonal human coronavirus (141 detections; 4.6% positive) remains slightly above expected levels.
 - Activity of human metapneumovirus (214 detections; 4.8% positive) has increased in recent weeks, and is now within expected levels for this time of year.
- The number of tests performed for all viruses was 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

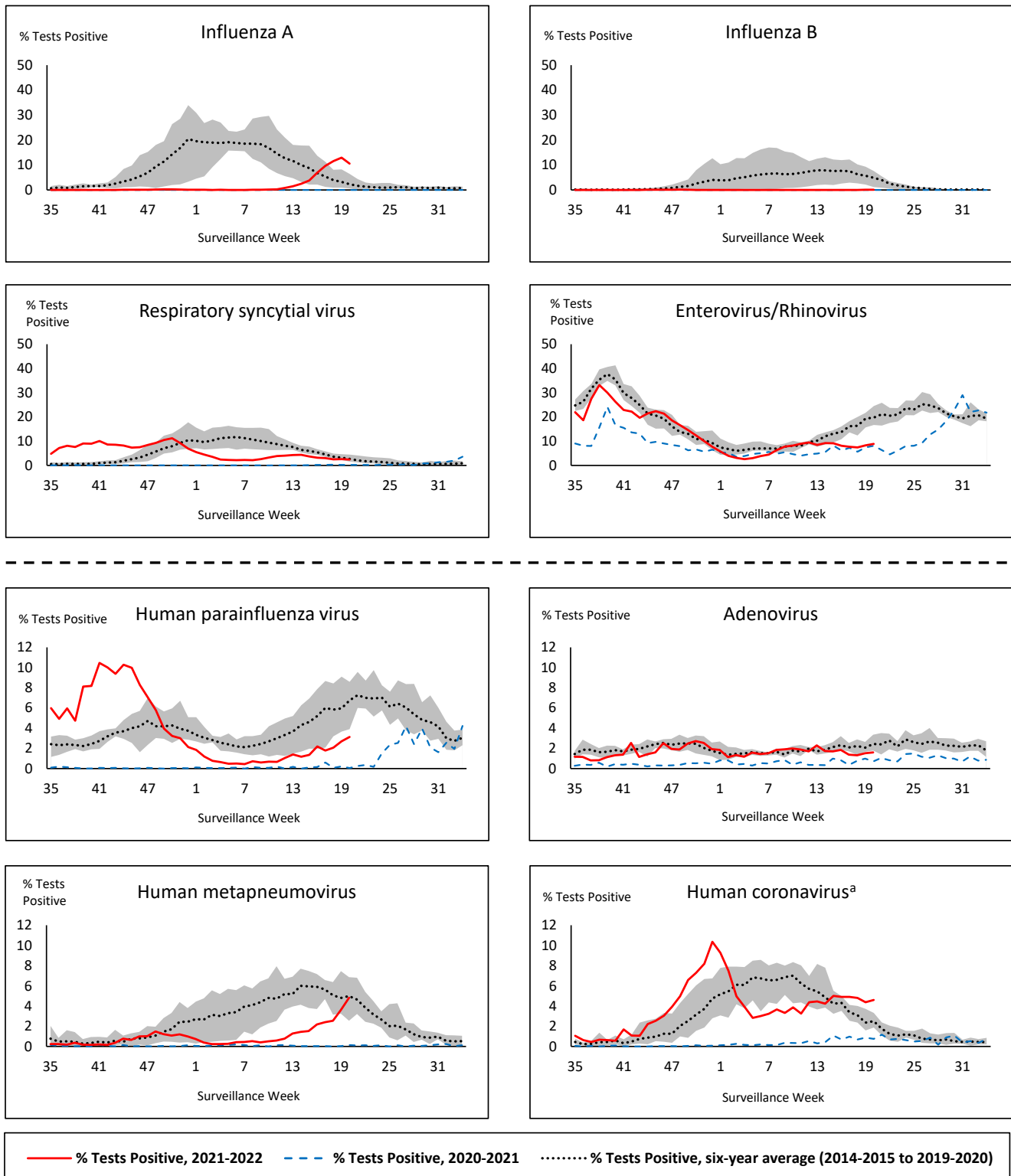
QC: Quebec

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 May 21, 2022 (surveillance week 2022-20)

Reporting Laboratory	Flu Tested	A(H1N1)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	442	0	0	15	15	0	442	11	442	0	4	0	0	12	442	2	442	3	442	22	N.C.	N.C.
Prince Edward Island	60	0	7	4	11	0	60	3	60	0	0	0	1	0	60	0	60	8	60	0	60	9
Nova Scotia	667	0	0	21	21	0	667	1	36	0	0	0	1	0	36	1	36	6	36	7	36	2
New Brunswick	359	0	3	65	68	0	250	9	46	0	0	0	2	0	46	0	46	3	46	5	46	1
Atlantic	1528	0	10	105	115	0	1419	24	584	0	4	0	4	12	584	3	584	20	584	34	142	12
Région Nord-Est	1445	6	0	246	252	1	879	0	1	0	0	0	0	0	1	1	1	0	N.C.	N.C.	1	0
Québec-Chaudière-Appalaches	633	0	0	128	128	9	633	1	40	0	1	1	1	0	287	6	286	10	N.C.	N.C.	136	3
Centre-du-Québec	683	0	0	171	171	0	542	1	27	1	2	0	1	0	27	0	27	1	N.C.	N.C.	27	2
Montréal-Laval	1398	0	0	165	165	2	879	2	166	0	5	1	1	0	166	16	166	5	N.C.	N.C.	181	8
Ouest du Québec	297	0	1	52	53	0	297	1	17	0	1	0	0	0	17	0	17	2	N.C.	N.C.	17	0
Montréal	196	0	0	24	24	0	196	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	4652	6	1	786	793	12	3426	5	251	1	9	2	3	0	498	23	497	18	N.C.	N.C.	362	13
P.H.O.L. - Ottawa	66	0	22	0	22	0	66	0	66	0	0	0	0	3	66	0	66	1	66	0	66	3
EORLA	216	0	0	16	16	0	216	5	42	0	0	0	2	0	42	0	42	2	42	5	42	2
P.H.O.L. - Kingston	19	0	0	0	0	0	19	0	19	0	0	0	0	2	19	2	19	1	19	5	19	0
UHN / Mount Sinai Hospital	500	0	0	4	4	0	500	1	17	0	0	0	0	0	17	0	17	0	0	0	17	2
P.H.O.L. - Toronto	350	0	31	0	31	0	335	7	335	0	0	0	0	20	336	3	335	26	335	25	335	33
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	0	9	0	9	0	9	2
P.H.O.L. - Timmins	9	0	1	0	1	0	9	0	9	0	0	0	0	0	9	0	9	0	9	0	9	0
St. Joseph's - London	56	0	0	4	4	0	56	1	56	0	0	0	0	0	56	3	56	8	56	9	4	2
P.H.O.L. - London	73	0	4	1	5	0	73	2	73	0	0	0	0	3	73	2	73	10	73	5	73	1
P.H.O.L. - Orillia	25	0	5	0	5	0	25	0	25	0	0	0	0	1	25	1	25	1	25	5	25	2
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	0
P.H.O.L. - Sudbury	11	0	1	0	1	0	11	0	11	0	0	0	0	0	11	1	11	0	11	0	11	0
P.H.O.L. - Hamilton	46	0	2	0	2	0	46	0	46	0	0	0	0	2	46	0	46	0	46	3	46	1
P.H.O.L. - Peterborough	17	0	0	0	0	0	17	0	17	0	0	0	0	1	17	0	16	0	17	5	16	0
St. Joseph's - Hamilton	735	0	0	41	41	0	735	8	735	0	0	3	0	0	735	4	735	43	735	50	0	0
Province of Ontario	2138	0	66	66	132	0	2123	24	1466	0	0	3	2	32	1467	16	1465	92	1449	112	678	48
Province of Manitoba	909	0	9	75	84	0	909	41	86	0	0	0	2	0	86	0	116	1	86	10	116	2
Province of Saskatchewan	578	0	0	81	81	0	578	56	202	0	1	0	5	0	202	3	202	15	202	31	202	9
Province of Alberta	2707	0	65	326	391	0	894	72	894	0	14	13	4	0	894	9	894	43	894	80	894	15
Prairies	4194	0	74	482	556	0	2381	169	1182	0	15	13	11	0	1182	12	1212	59	1182	121	1212	26
British Columbia	3489	0	29	0	96	0	3423	55	672	0	1	4	14	0	672	17	672	25	666	73	666	42
Yukon	10	0	0	0	0	0	10	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.
Northwest Territories	122	0	27	0	27	0	122	9	4	0	0	0	0	0	4	0	4	0	122	14	4	0
Nunavut	183	0	7	1	8	0	182	31	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	315	0	34	1	35	0	314	40	7	0	0	0	0	0	7	0	7	0	125	14	4	0
CANADA	16316	6	214	1440	1727	12	13086	317	4162	1	29	22	34	44	4410	71	4437	214	4006	354	3064	141

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 May 21, 2022 (surveillance week 2021-35 to 2022-20)

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	11578	0	0	193	193	0	11576	139	11579	1	14	116	0	226	11586	39	11573	42	11580	1914	N.C.	N.C.
Prince Edward Island	2346	0	28	12	40	0	2346	245	2301	0	0	157	5	1	2346	61	2346	66	2346	541	2346	133
Nova Scotia	19931	0	2	172	174	8	19936	326	1573	0	2	41	19	0	1587	15	1587	18	1587	127	1587	41
New Brunswick	16321	0	4	117	121	0	10362	293	3022	0	0	26	14	0	3015	23	3022	20	3022	71	2931	11
Atlantic	50176	0	34	494	528	8	44220	1003	16475	1	16	340	38	227	18534	138	18528	146	18535	2653	6864	185
Région Nord-Est	25239	21	1	1754	1776	4	11972	1444	809	2	0	10	1	0	900	18	409	11	N.C.	N.C.	1244	23
Québec-Chaudière-Appalaches	8663	0	0	1096	1096	19	9261	1002	1603	0	12	8	12	0	2891	99	2799	106	N.C.	N.C.	2003	83
Centre-du-Québec	9371	0	2	886	888	7	8833	1086	1270	2	8	24	3	0	1270	35	1278	22	N.C.	N.C.	1263	20
Montréal-Laval	25015	0	5	1071	1076	8	23749	2456	7799	8	48	30	7	0	7798	459	7796	353	N.C.	N.C.	7849	177
Ouest du Québec	6428	0	6	416	422	0	6370	932	169	0	6	3	4	0	162	9	158	7	N.C.	N.C.	158	4
Montréal	3847	0	0	130	130	0	3549	387	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	78563	21	14	5353	5388	38	63734	7307	11650	12	74	75	27	0	13021	620	12440	499	N.C.	N.C.	12517	307
P.H.O.L. - Ottawa	6901	2	79	1	82	0	6901	1441	6901	0	0	0	0	736	6901	312	6899	44	6901	2241	6899	287
EORLA	6812	0	0	97	97	0	6787	625	992	0	2	19	4	0	992	17	673	8	992	156	650	24
P.H.O.L. - Kingston	1420	0	8	0	8	0	1428	128	1427	0	0	0	0	132	1427	21	1409	4	1427	320	1409	94
UHN / Mount Sinai Hospital	17944	0	0	41	41	3	17944	106	582	0	0	0	0	0	582	0	582	1	565	14	582	8
P.H.O.L. - Toronto	9575	2	70	1	73	0	9546	284	9546	0	0	0	0	324	9550	130	9542	70	9546	1085	9543	371
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	327	0	3	1	4	0	326	8	326	0	0	0	0	7	326	3	326	1	326	50	326	22
P.H.O.L. - Timmins	450	0	5	0	5	0	450	26	450	0	0	0	0	18	450	1	450	0	450	31	450	28
St. Joseph's - London	12697	0	0	55	55	0	12700	772	11143	0	0	7	0	89	11143	144	11143	54	11097	590	532	4
P.H.O.L. - London	3558	0	28	8	36	0	3557	456	3557	0	0	0	0	167	3557	86	3556	45	3557	468	3556	268
P.H.O.L. - Orillia	880	0	6	1	7	0	880	119	880	0	0	0	0	49	880	27	877	13	880	218	877	65
P.H.O.L. - Thunder Bay	318	0	1	0	1	0	318	22	318	0	0	0	0	24	318	1	318	0	318	59	318	37
P.H.O.L. - Sudbury	342	0	5	0	5	0	342	12	342	0	0	0	0	9	342	2	342	4	342	31	342	10
P.H.O.L. - Hamilton	1791	0	13	2	15	0	1786	70	1786	0	0	0	0	48	1787	14	1786	22	1786	234	1786	107
P.H.O.L. - Peterborough	629	0	0	0	0	0	629	45	622	0	0	0	0	13	622	3	619	2	622	100	619	45
St. Joseph's - Hamilton	23002	0	4	173	177	1	22996	1646	22996	3	0	656	0	0	22996	219	22996	148	22996	2009	0	0
Province of Ontario	87485	4	222	380	606	4	86590	5760	62707	3	4	750	5	1616	62712	992	62357	417	62644	7839	28728	1380
Manitoba	54045	1	64	354	419	0	54045	1289	2791	2	10	74	11	0	2791	44	4176	14	2791	327	3982	87
Province of Saskatchewan	27154	2	299	297	598	0	27123	1621	5096	1	9	198	64	0	5096	89	5096	50	5096	696	5085	280
Province of Alberta	80267	3	447	1473	1923	2	31967	3350	31967	2	87	702	210	0	31967	325	31967	340	31967	3588	31967	1477
Prairies	161466	6	810	2124	2940	2	113135	6260	39854	5	106	974	285	0	39854	458	41239	404	39854	4611	41034	1844
British Columbia	186451	7	437	6	778	87	182181	9134	23596	6	15	1078	251	167	23596	461	23592	200	23129	3560	23177	865
Yukon	5431	1	2	2	10	7	5441	306	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	1583	0	156	1	157	0	1516	145	101	0	1	1	0	0	101	2	101	0	1515	165	101	1
Nunavut	15633	0	120	2	122	0	15614	120	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	22647	1	278	5	289	7	22571	571	135	0	1	2	0	0	135	4	135	0	1549	175	127	1
CANADA	586788	39	1795	8362	10529	146	512431	30035	156417	27	216	3219	606	2010	157852	2673	158291	1666	145711	18838	112447	4582

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

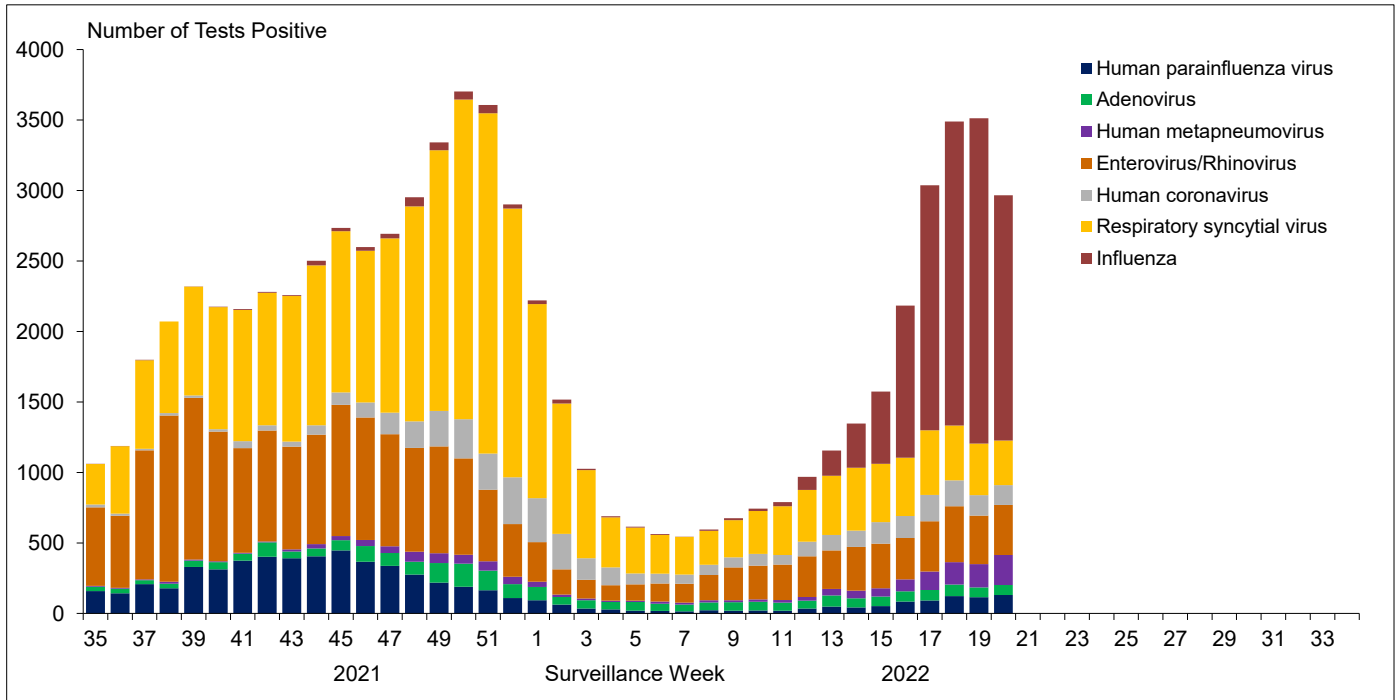


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

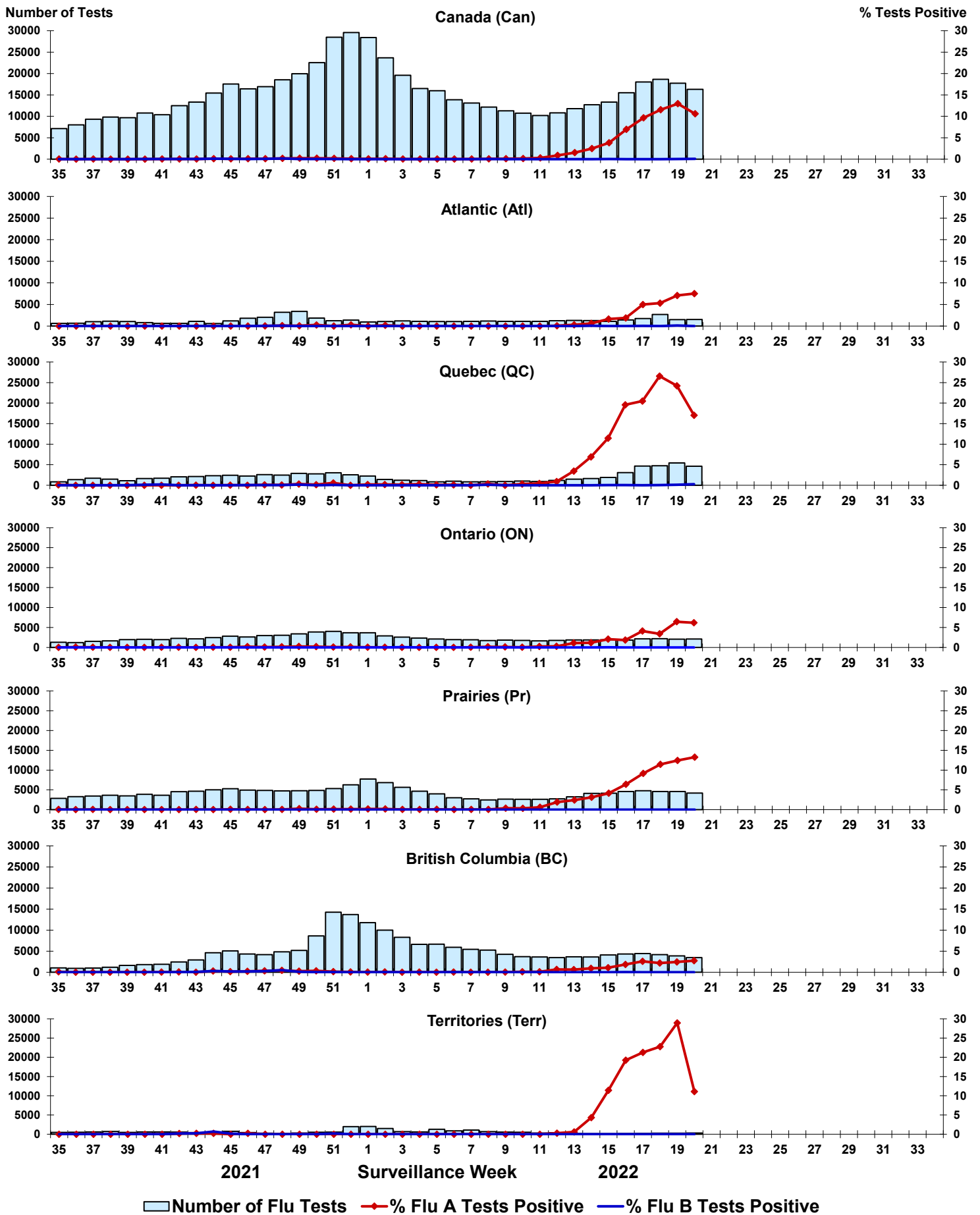


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

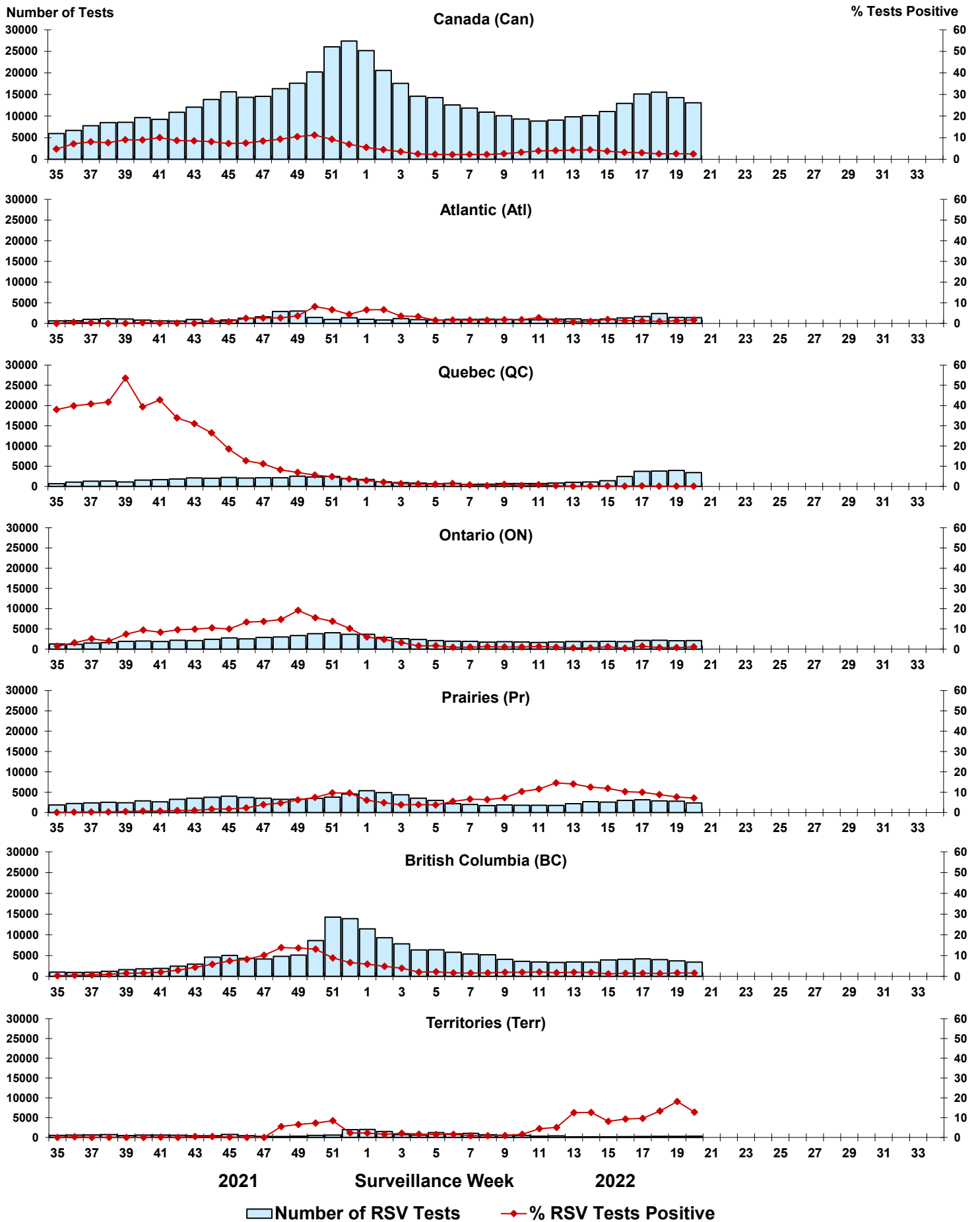


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

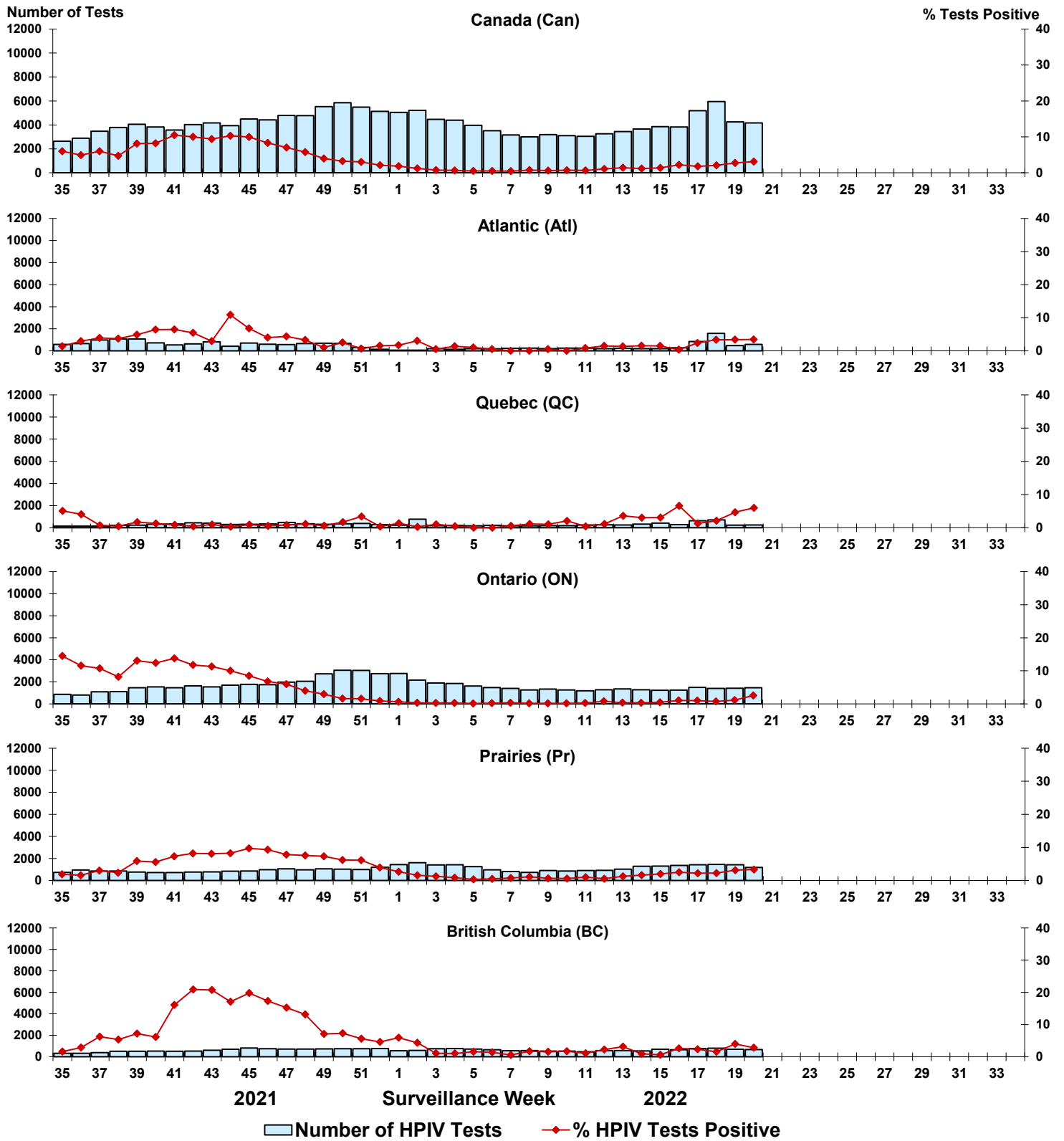


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

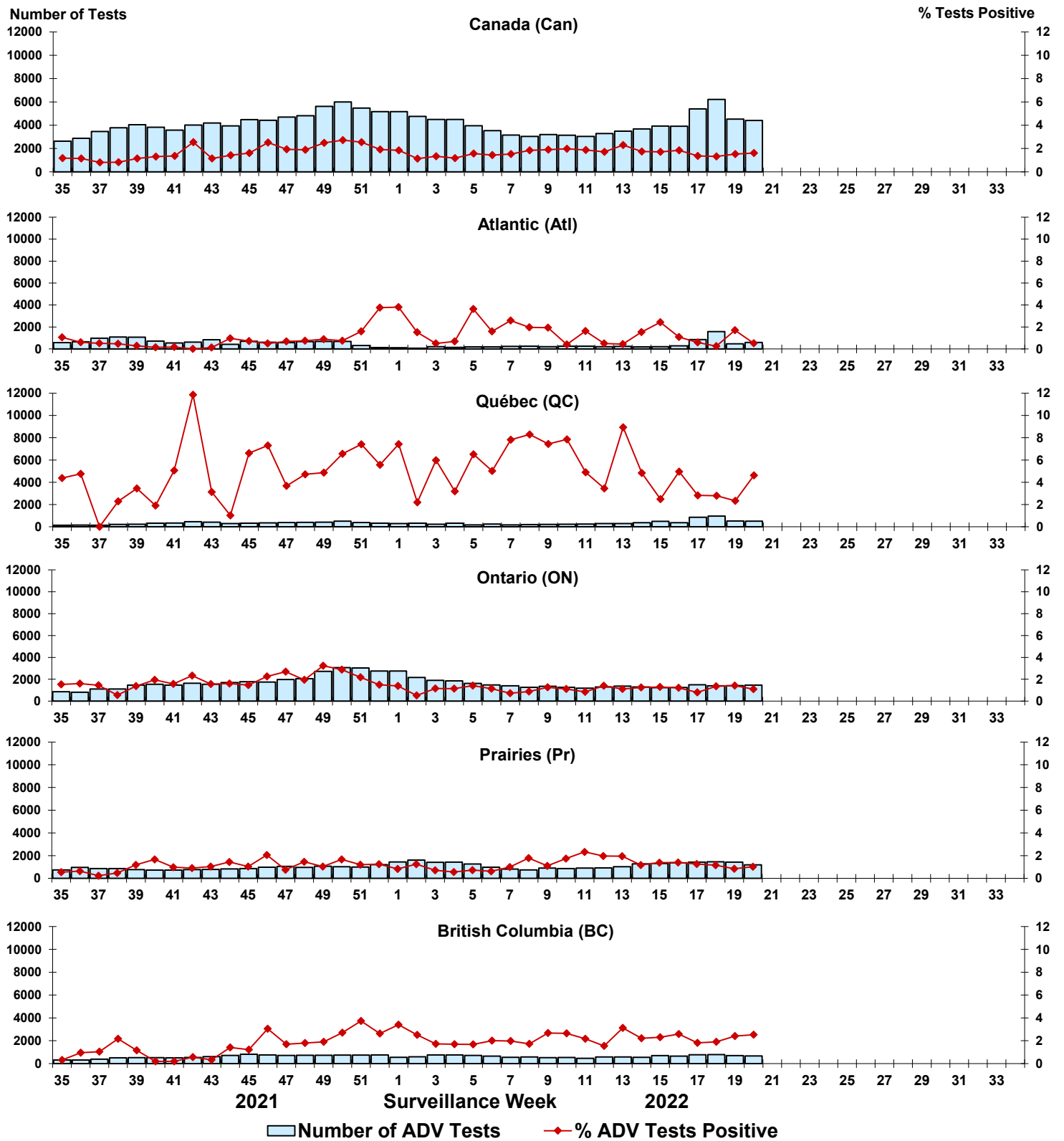


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

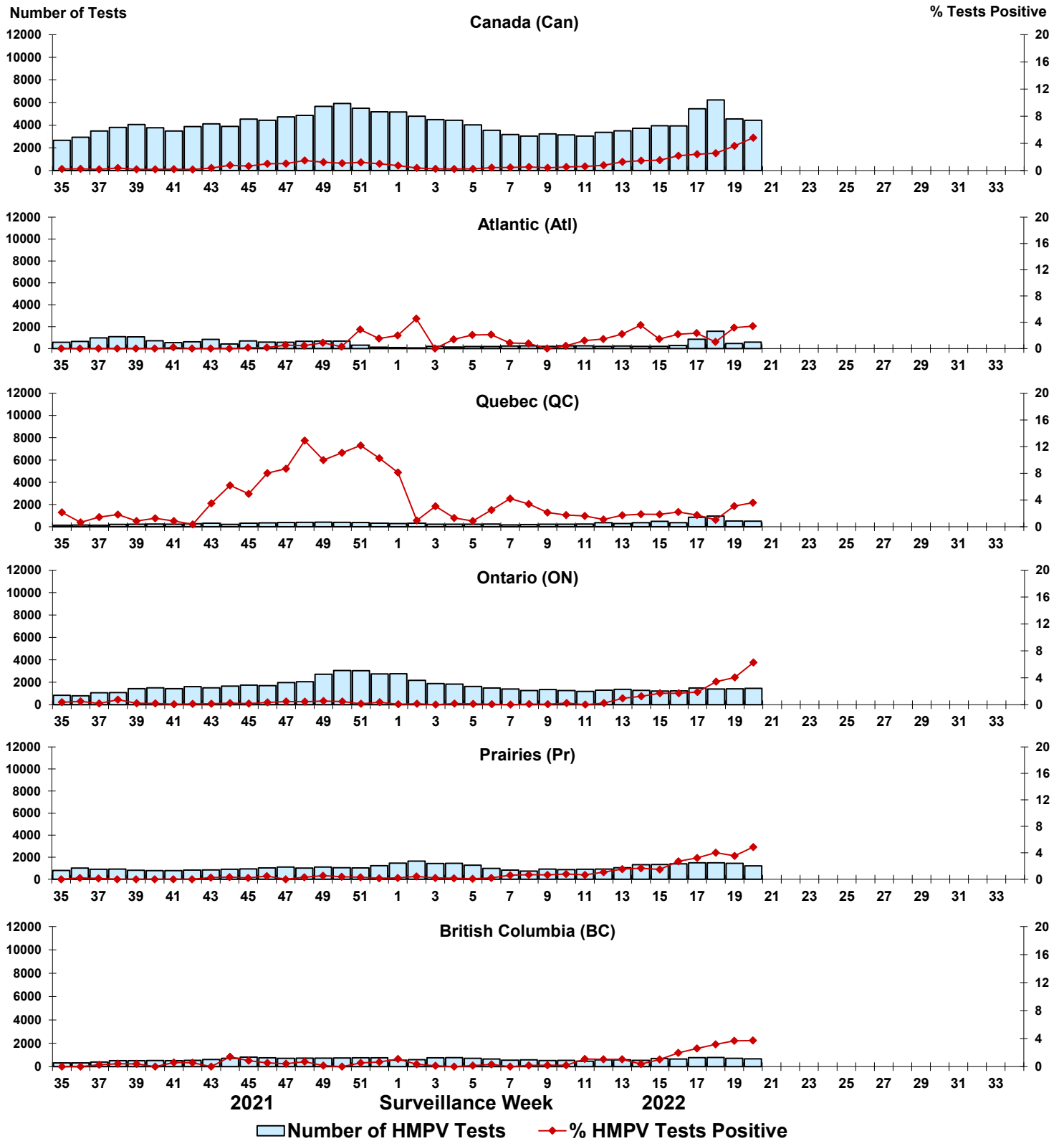


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

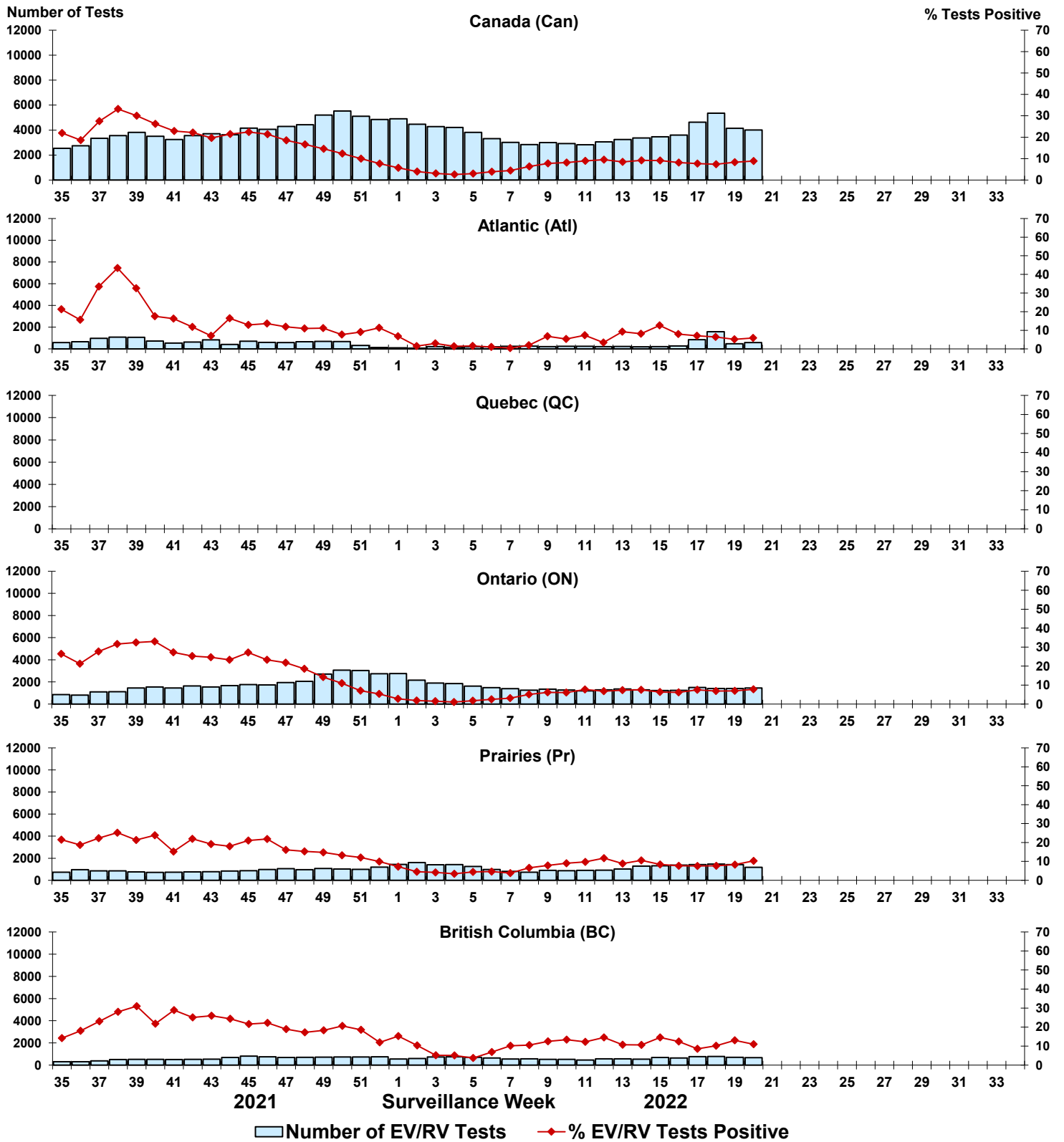


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

