

RESPIRATORY VIRUS DETECTION REPORT

October 30 to November 5, 2022
(Surveillance Week 2022-44)



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

Respiratory virus activity has increased in recent weeks in Canada, and activity of several viruses is above expected levels.

- Overall influenza activity is increasing and above expected levels for this time of year (2,234 detections; 11.7% positive). Influenza activity is above the seasonal threshold of 5% of tests positive, indicating the beginning of the influenza epidemic at the national level.
 - Influenza activity is increasing across Canada, with nearly all regions reporting over 5% of tests positive.
 - Influenza A accounts for nearly all influenza activity in Canada.
- Overall respiratory syncytial virus activity is increasing and is above expected levels for this time of year (1,309 detections; 7.8% positive). Level of activity is variable across regions (range: 1.8%–20.1% positive).
- Activity of other respiratory viruses is relatively stable and near expected levels for this time of year.
- 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

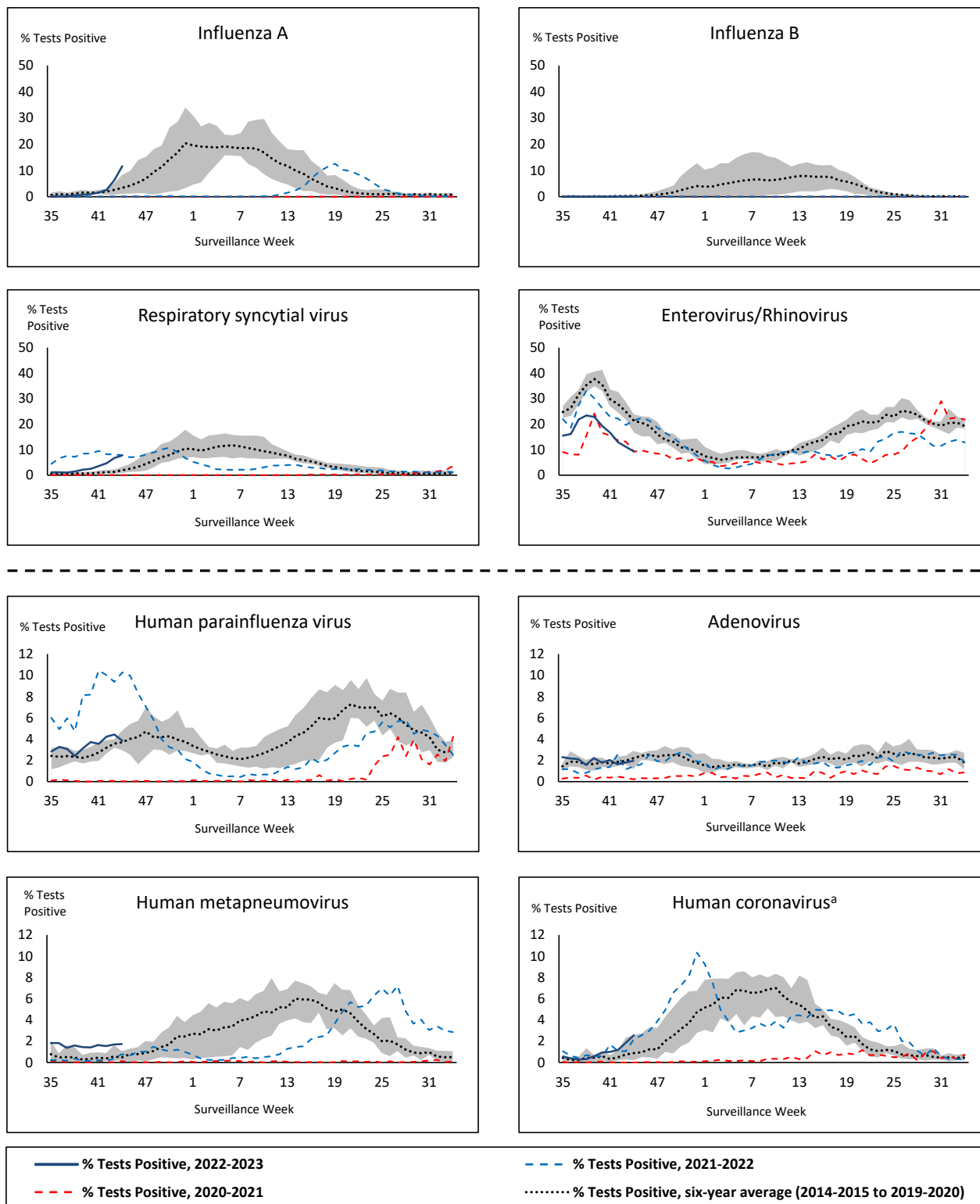
QC: Quebec

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 November 5, 2022 (surveillance week 2022-44)

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	220	0	0	1	1	0	220	8	220	0	0	4	0	0	220	12	220	10	220	37	220	1
Prince Edward Island	63	0	5	1	6	0	63	1	63	4	5	5	1	0	63	4	63	0	63	19	63	1
Nova Scotia	415	0	0	32	32	0	415	51	33	0	0	3	0	0	33	1	33	0	33	13	33	0
New Brunswick	511	0	6	52	58	0	266	4	46	0	2	2	2	0	46	5	46	0	46	15	46	1
Atlantic	1209	0	11	86	97	0	964	64	362	4	7	14	3	0	362	22	362	10	362	84	362	3
Région Nord-Est	1037	0	0	2	2	0	225	38	25	0	0	0	0	0	25	0	25	2	N.C.	N.C.	25	2
Québec-Chaudière-Appalaches	428	0	0	3	3	0	429	121	179	1	0	3	0	0	191	15	179	15	N.C.	N.C.	179	8
Centre-du-Québec	437	0	0	14	14	0	424	95	26	1	0	1	0	0	26	2	26	3	N.C.	N.C.	26	0
Montréal-Laval	1833	0	1	83	84	1	1375	216	656	6	1	7	0	0	656	26	660	48	N.C.	N.C.	625	11
Ouest du Québec	326	0	0	23	23	0	274	65	46	2	0	6	0	0	46	5	46	4	N.C.	N.C.	46	3
Montérégie	346	0	0	22	22	0	346	82	5	0	0	0	0	0	5	0	5	0	N.C.	N.C.	5	0
Province of Québec	4407	0	1	147	148	1	3073	617	937	10	1	17	0	0	949	48	941	72	N.C.	N.C.	906	24
P.H.O.L. - Ottawa	129	0	1	0	1	0	129	1	129	0	0	0	0	3	129	0	129	0	129	9	129	0
EORLA	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. - Kingston	62	0	1	2	3	0	62	9	60	0	0	0	0	6	60	0	60	0	60	8	60	4
UHN / Mount Sinai Hospital	621	0	0	28	28	1	621	3	23	0	0	0	0	0	23	0	23	0	23	2	23	2
P.H.O.L. - Toronto	762	4	188	1	43	0	762	18	762	0	0	0	0	44	762	13	762	8	762	63	762	25
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.
Shared Hospital Laboratory	2322	4	180	247	431	0	2322	149	1987	0	0	0	0	20	1987	13	1989	5	1989	73	1988	26
P.H.O.L. - Sault Ste. Marie	11	0	0	0	0	0	11	0	11	0	0	0	0	0	11	0	11	0	11	2	11	0
P.H.O.L. - Timmins	12	0	3	0	3	0	12	0	12	0	0	0	0	0	12	0	12	0	12	0	12	0
St. Joseph's - London	338	0	0	22	22	0	338	38	49	0	0	0	0	1	49	4	49	0	49	12	49	3
P.H.O.L. - London	265	1	45	2	48	0	265	39	265	0	0	0	0	16	265	7	265	0	265	14	265	4
P.H.O.L. - Orillia	121	0	43	0	43	0	121	8	121	0	0	0	0	10	121	3	121	0	121	17	121	5
P.H.O.L. - Thunder Bay	43	0	9	1	10	0	43	0	43	0	0	0	0	0	43	0	43	0	43	0	43	0
P.H.O.L. - Sudbury	9	0	0	0	0	0	9	1	9	0	0	0	0	1	9	1	9	1	9	2	9	0
P.H.O.L. - Hamilton	160	0	32	1	33	0	160	26	160	0	0	0	0	4	160	4	160	6	160	17	160	3
P.H.O.L. - Peterborough	33	0	9	0	9	0	33	0	33	0	0	0	0	0	33	0	33	0	33	1	33	0
St. Joseph's - Hamilton	1444	0	0	241	241	1	1444	115	1444	0	0	47	0	0	1444	9	1444	1	1444	84	0	0
Province of Ontario	6332	9	511	545	915	2	6332	407	5108	0	0	47	0	105	5108	54	5110	21	5110	304	3665	72
Manitoba	778	3	4	0	7	0	778	23	155	0	0	8	1	0	155	7	187	10	155	34	187	1
Saskatchewan	896	0	0	192	192	0	703	12	377	2	4	21	1	0	377	11	377	14	377	56	377	11
Alberta	3200	19	521	113	653	0	2675	100	1119	7	1	29	1	0	1119	15	1118	9	1100	103	1119	69
Prairies	4874	22	525	305	852	0	4156	135	1651	9	5	58	3	0	1651	33	1682	33	1632	193	1683	81
British Columbia	2163	13	54	0	172	0	2163	83	463	8	11	26	0	0	463	10	463	13	463	117	463	1
Yukon	6	0	0	0	0	0	6	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	42	0	0	0	0	0	42	1	0	0	0	0	0	0	0	0	0	0	42	10	0	0
Nunavut	120	0	47	0	47	0	120	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.
Territories	168	0	47	0	47	0	168	3	0	0	0	0	0	0	0	0	0	0	42	10	0	0
CANADA	19153	44	1149	1083	2231	3	16856	1309	8521	31	24	162	6	105	8533	167	8558	149	7609	708	7079	181

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.

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: Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Vancouver Coastal Health sites, Victoria General Hospital, BCCDC Public Health Laboratory, Interior Health Authority sites and Northern Health Authority sites.

Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts. Total influenza A and B positive counts are used to calculate percentage of tests positive.

Delays in the reporting of data may cause data to change retrospectively.

Table 2: Cumulative respiratory virus detections from August 28, 2022 to November 5, 2022 (surveillance weeks 2022-35 to 2022-44)

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	1846	0	1	1	2	0	1846	65	1846	2	7	12	3	0	1846	27	1846	50	1846	260	1846	2
Prince Edward Island	423	0	6	1	7	0	423	8	423	4	10	24	2	0	423	28	423	6	423	212	423	2
Nova Scotia	2645	0	3	54	57	1	2644	119	455	3	4	7	1	0	455	16	455	0	455	116	455	3
New Brunswick	4027	0	11	102	113	1	2752	31	491	0	8	29	4	0	491	43	491	1	491	157	436	8
Atlantic	8941	0	21	158	179	2	7665	223	3215	9	29	72	10	0	3215	114	3215	57	3215	745	3160	15
Région Nord-Est	8749	0	0	8	8	1	1577	86	238	3	2	14	0	0	238	11	238	4	N.C.	N.C.	238	2
Québec-Chaudière-Appalaches	2880	0	0	8	8	0	2886	393	1431	14	4	19	0	0	1555	84	1431	70	N.C.	N.C.	1431	17
Centre-du-Québec	2225	0	0	20	20	1	2194	252	262	11	0	12	0	0	262	14	262	32	N.C.	N.C.	262	1
Montréal-Laval	10850	0	1	158	159	6	9598	930	5215	72	8	94	4	0	5215	157	5265	284	N.C.	N.C.	5076	37
Ouest du Québec	2128	0	0	32	32	0	1849	269	410	12	0	32	0	0	410	60	410	18	N.C.	N.C.	410	10
Montérégie	3749	0	0	51	51	3	3683	363	29	0	0	1	0	0	29	0	29	0	N.C.	N.C.	29	0
Province of Québec	30581	0	1	277	278	11	21787	2293	7585	112	14	172	4	0	7709	326	7635	408	N.C.	N.C.	7446	67
P.H.O.L. - Ottawa	597	0	5	0	5	0	597	8	597	0	0	0	0	10	597	0	597	10	597	52	597	1
EORLA	2470	0	0	31	31	1	2470	177	361	4	2	6	2	0	361	11	361	8	361	119	361	5
P.H.O.L. - Kingston	553	0	16	2	18	0	553	33	547	0	0	0	0	24	547	12	547	5	547	95	547	6
UHN / Mount Sinai Hospital	4728	0	1	67	68	5	4728	27	198	0	0	1	0	0	198	1	198	0	198	9	198	15
P.H.O.L. - Toronto	3790	22	372	2	127	0	3787	59	3787	0	0	0	0	189	3789	59	3786	38	3787	479	3786	46
Sick Kids Hospital - Toronto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shared Hospital Laboratory	27526	9	331	539	879	2	27526	472	6860	4	0	15	0	105	6872	41	6881	17	6853	270	6730	48
P.H.O.L. - Sault Ste. Marie	60	0	0	0	0	0	60	0	60	0	0	0	0	0	60	0	60	0	60	8	60	0
P.H.O.L. - Timmins	139	0	9	0	9	0	139	0	139	0	0	0	0	9	139	1	139	6	139	27	139	9
St. Joseph's - London	1033	0	0	34	34	0	1033	86	527	0	0	0	0	13	561	13	561	0	561	120	150	6
P.H.O.L. - London	1411	2	96	3	94	0	1411	78	1411	0	0	0	0	64	1411	25	1411	3	1411	195	1411	12
P.H.O.L. - Orillia	555	0	81	1	82	0	555	28	555	0	0	0	0	38	555	12	555	6	555	118	555	10
P.H.O.L. - Thunder Bay	130	0	21	1	22	0	130	0	130	0	0	0	0	1	130	1	130	0	130	32	130	1
P.H.O.L. - Sudbury	66	0	0	0	0	0	66	2	66	0	0	0	0	3	66	2	66	1	66	11	66	0
P.H.O.L. - Hamilton	978	0	50	1	51	2	975	75	975	0	0	0	0	42	975	13	975	8	975	144	975	9
P.H.O.L. - Peterborough	319	0	24	0	24	0	319	17	319	0	0	0	0	15	319	5	319	2	319	75	319	3
St. Joseph's - Hamilton	8966	0	0	558	558	4	8966	408	8966	0	0	283	0	0	8966	66	8966	33	8966	1065	0	0
Province of Ontario	53321	33	1006	1239	2002	14	53315	1470	25498	8	2	305	2	513	25546	262	25552	137	25525	2819	16024	171
Manitoba	5901	4	9	18	31	0	5901	85	1389	0	2	31	4	0	1389	50	1613	55	1389	371	1613	6
Saskatchewan	5813	0	0	284	284	1	4961	38	2251	6	16	99	8	0	2253	71	2255	90	2253	415	2251	37
Alberta	21881	54	812	167	1033	6	19124	318	9397	60	26	163	9	0	9396	124	9388	52	9209	1548	9397	219
Prairies	33595	58	821	469	1348	7	29986	441	13037	66	44	293	21	0	13038	245	13256	197	12851	2334	13261	262
British Columbia	23878	68	259	7	505	7	22296	320	5616	34	58	183	26	6	5616	112	5616	95	5474	1392	5474	25
Yukon	61	0	0	0	0	0	61	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	392	0	1	0	1	0	392	15	0	0	0	0	0	0	0	0	0	0	392	157	0	0
Nunavut	823	3	123	0	126	0	823	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.
Territories	1276	3	124	0	127	0	1276	37	0	0	0	0	0	0	0	0	0	0	392	157	0	0
CANADA	151592	162	2232	2150	4439	41	136325	4784	54951	229	147	1025	63	519	55124	1059	55274	894	47457	7447	45365	540

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.

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: Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Vancouver Coastal Health sites, Victoria General Hospital, BCCDC Public Health Laboratory, Interior Health Authority sites and Northern Health Authority sites.

Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts. Total influenza A and B positive counts are used to calculate percentage of tests positive.

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.

Figure 2: Number of positive respiratory virus tests reported by participating laboratories in Canada by surveillance week

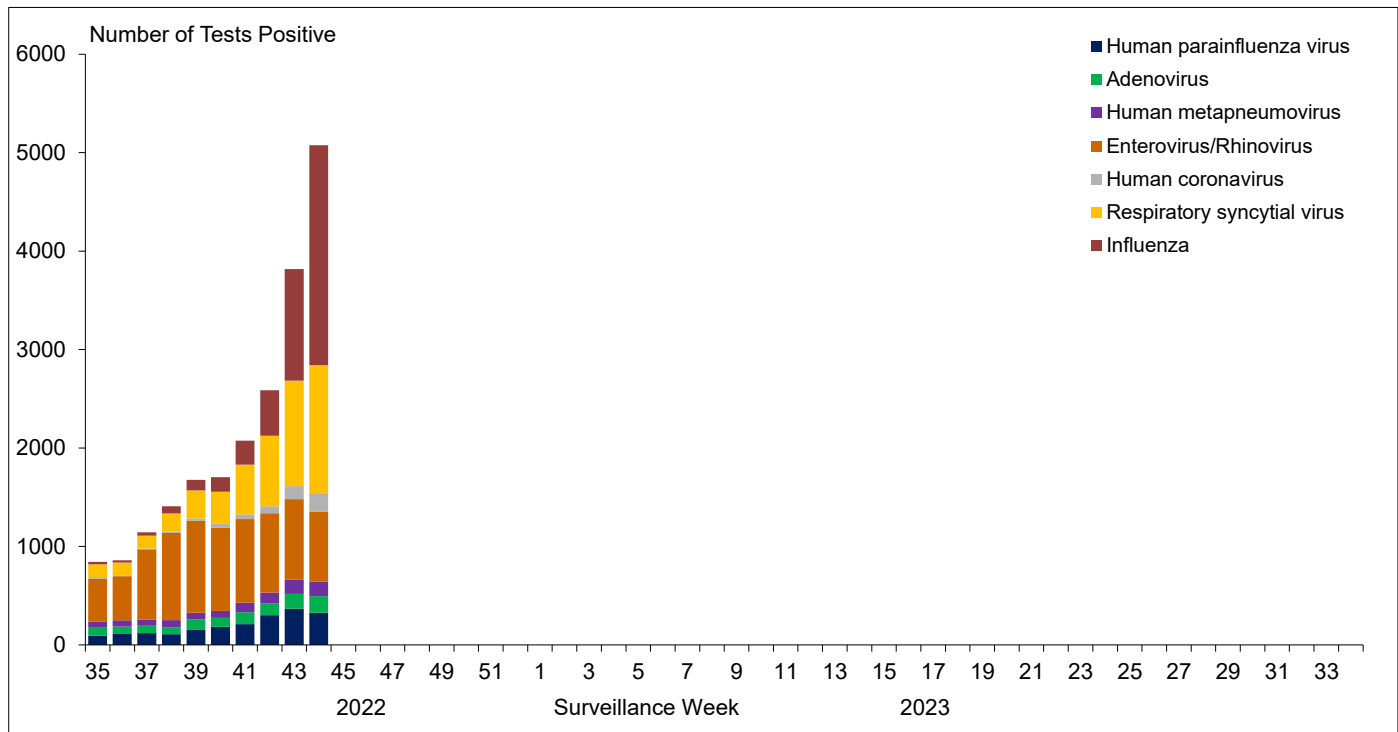


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

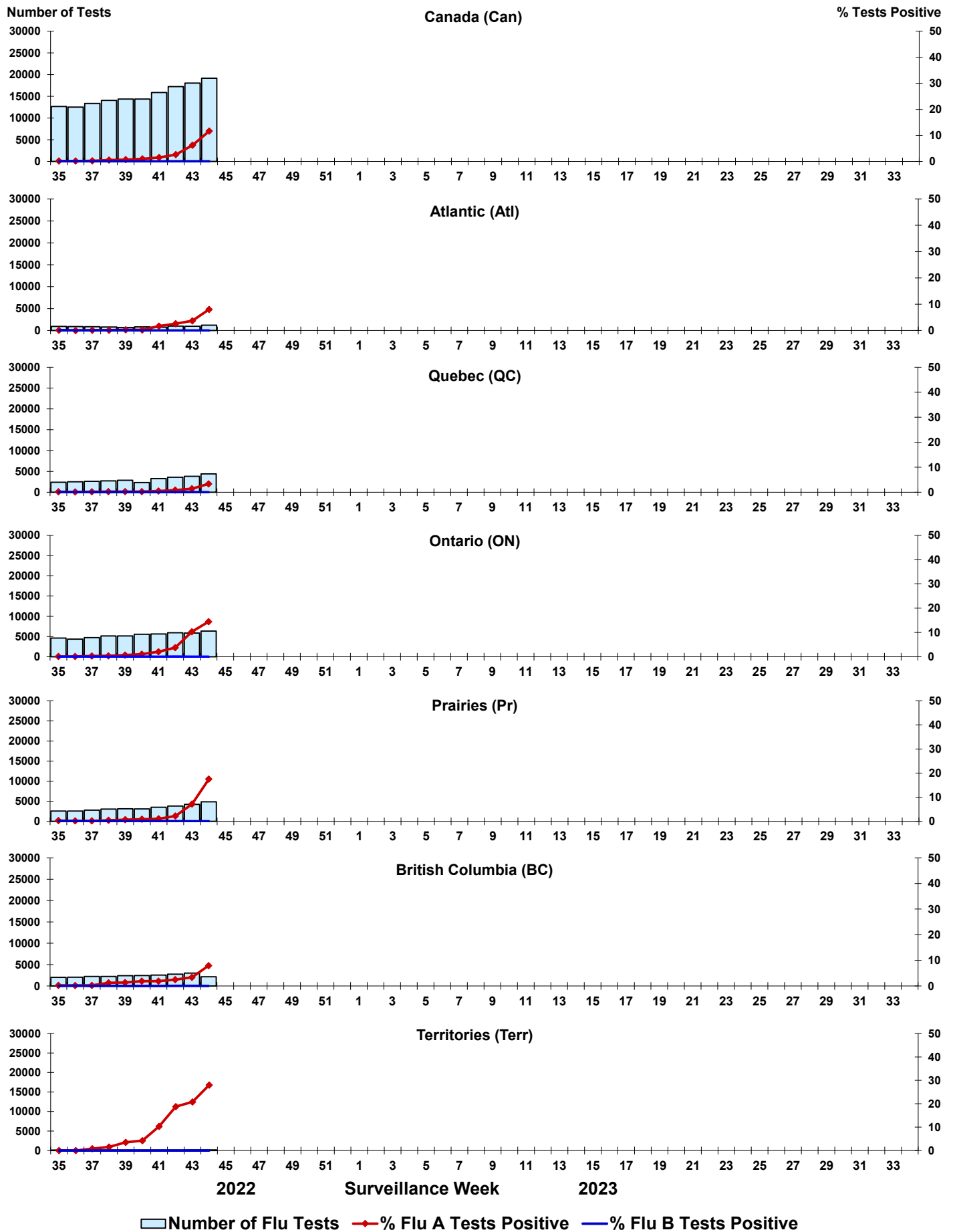
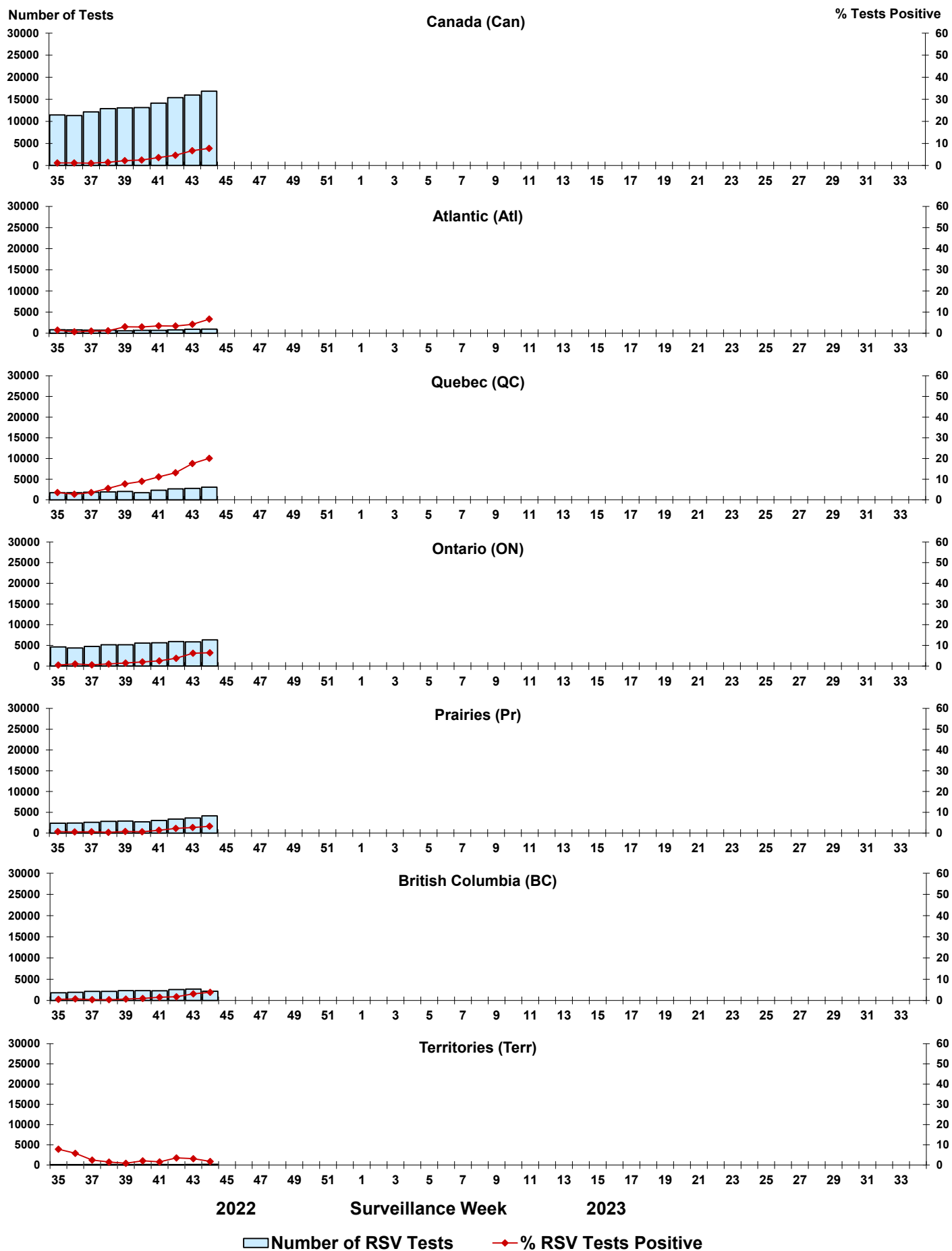


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



Legend: █ Number of RSV Tests ◆ % RSV Tests Positive

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

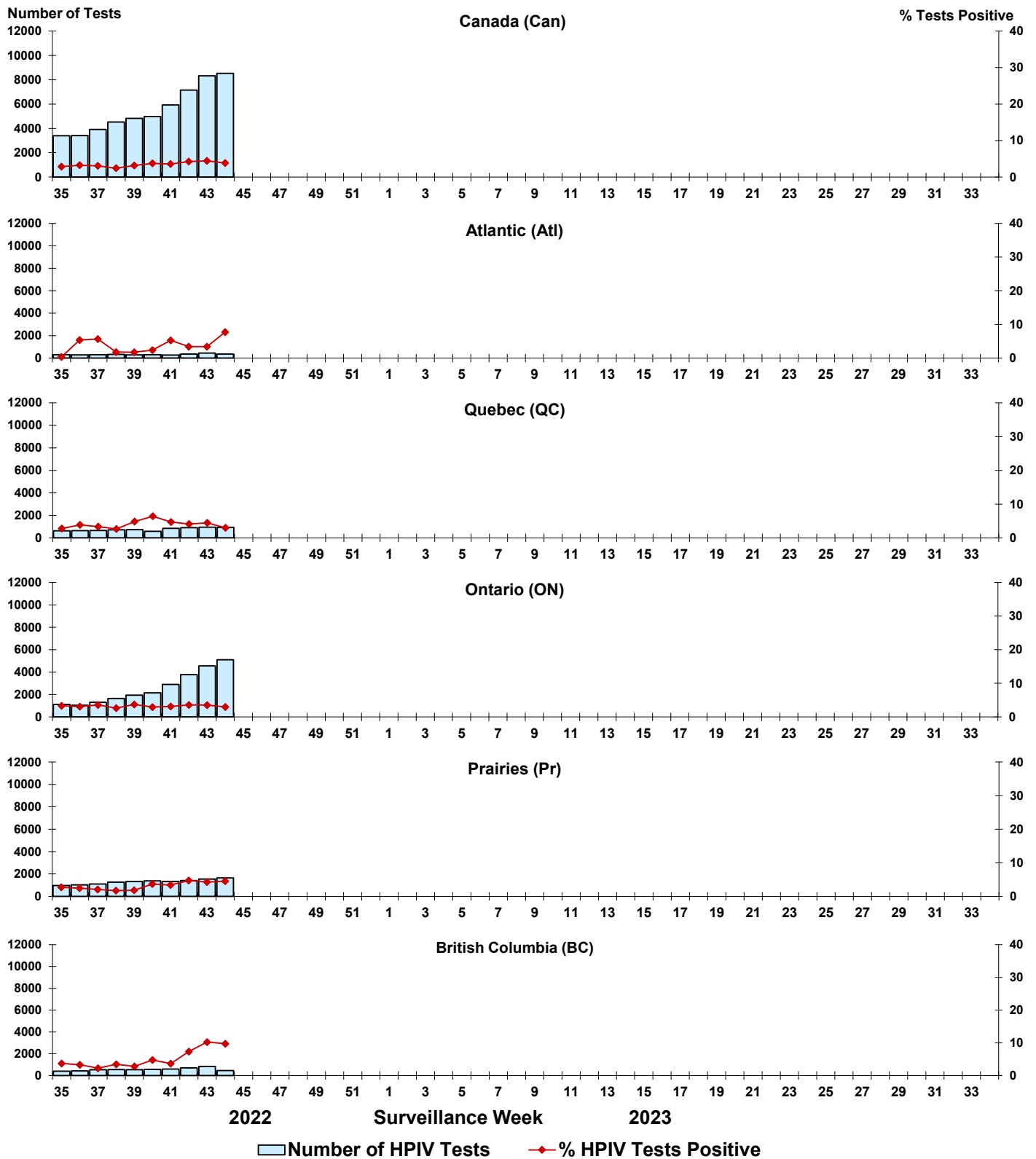


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

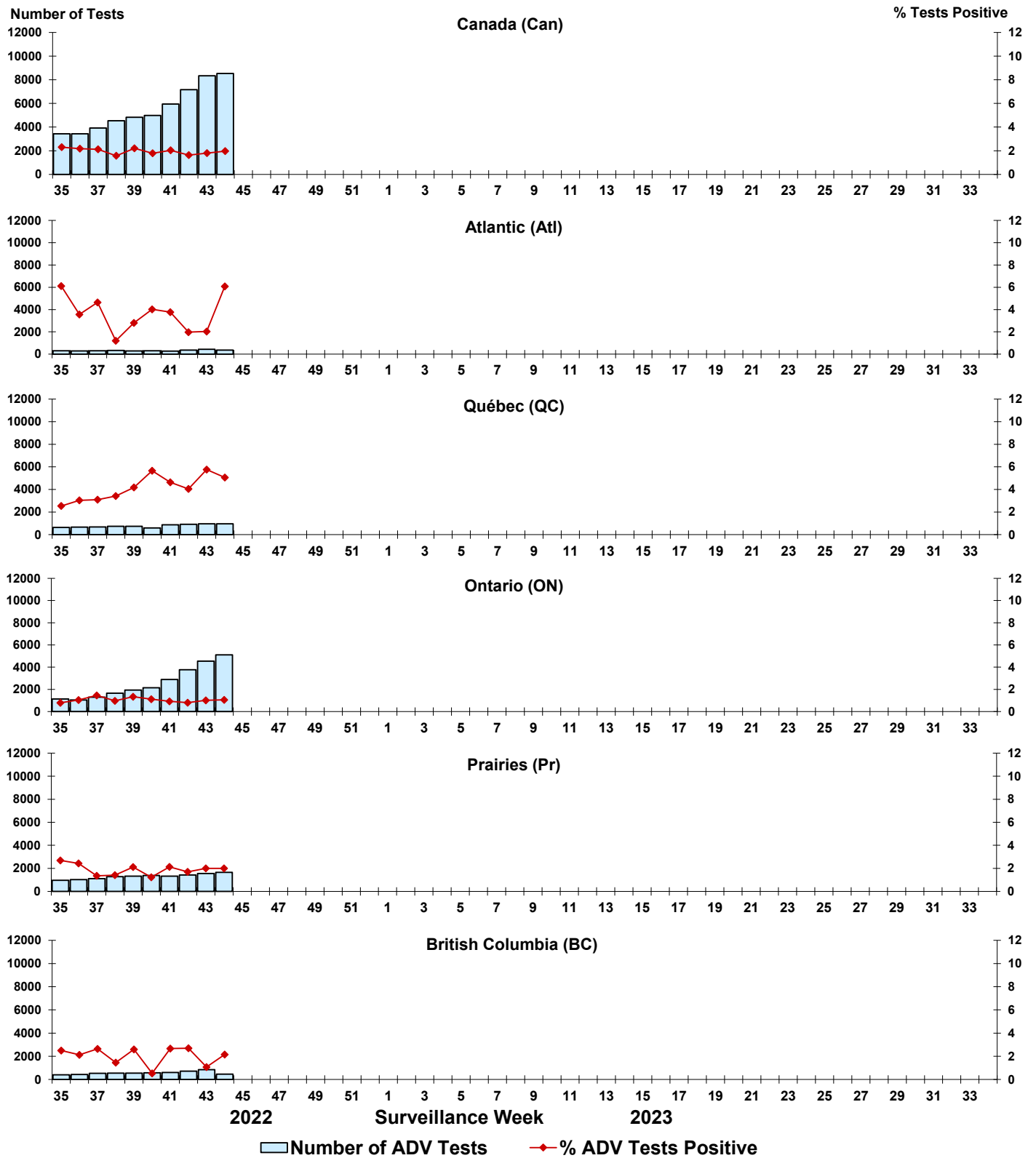


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

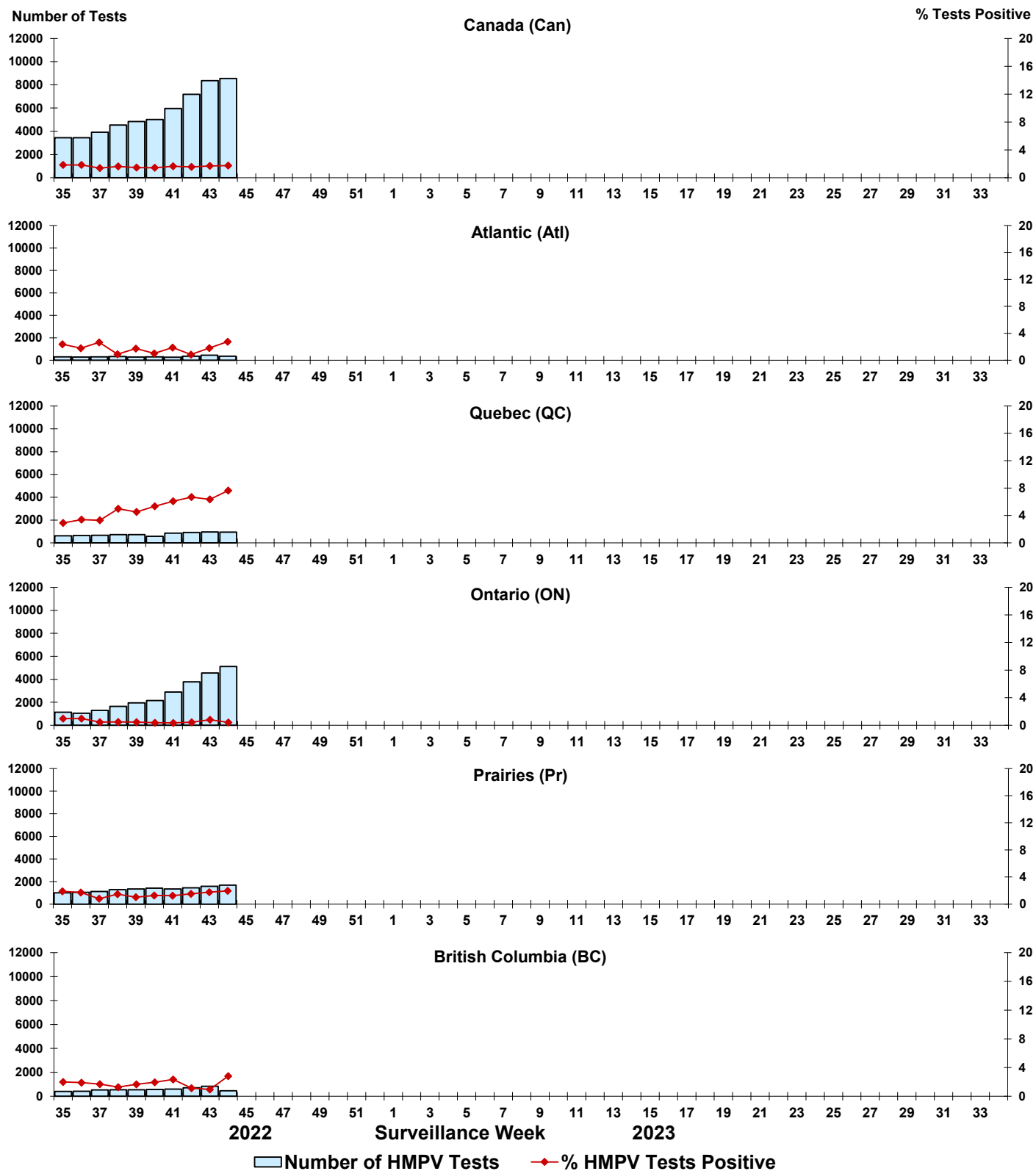


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

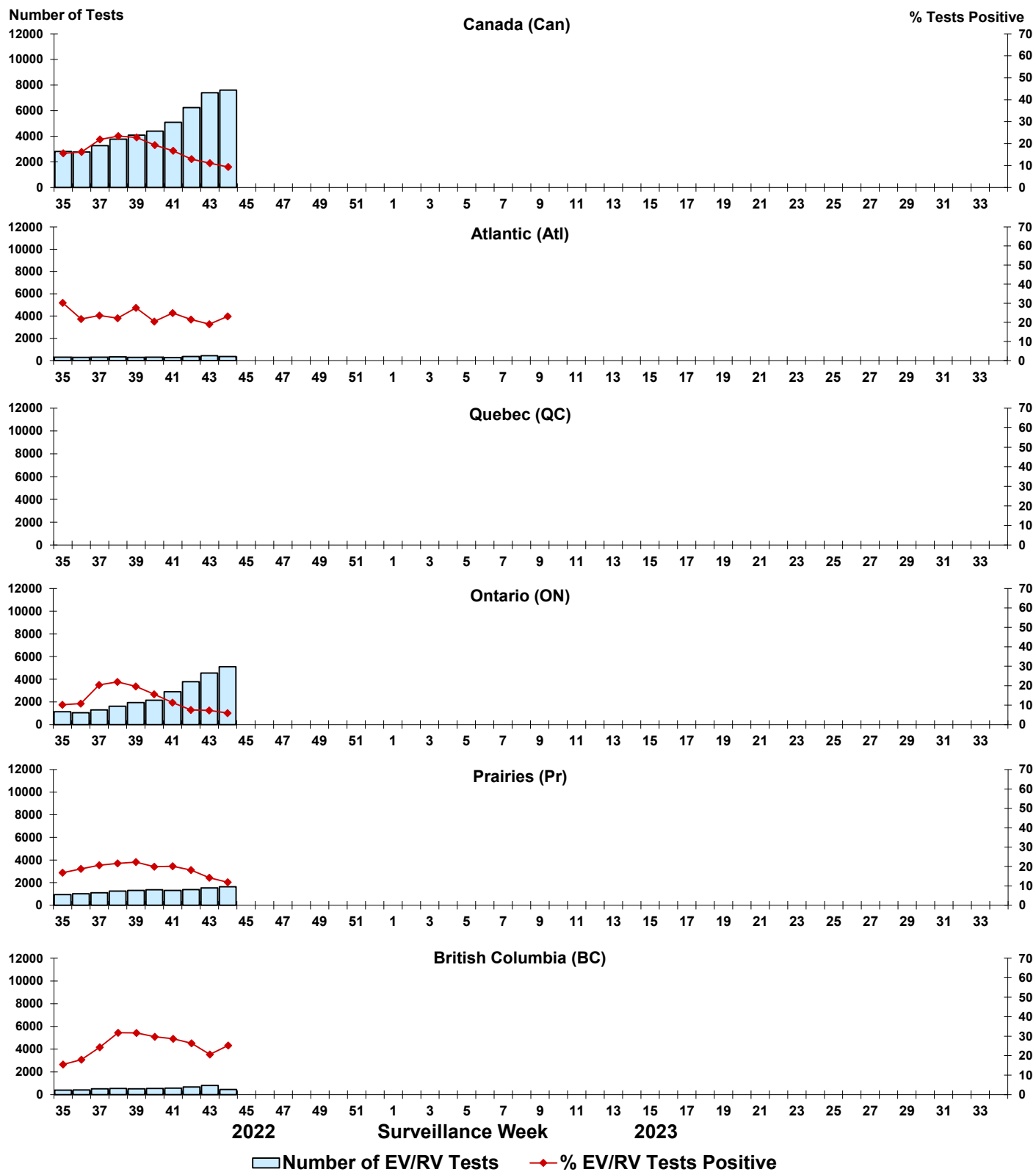


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

