

RESPIRATORY VIRUS DETECTION REPORT

November 19 to November 25, 2023
(Surveillance Week 2023-47)



Please note that the Respiratory Virus Detection Surveillance System (RVDSS) is a sentinel laboratory surveillance system that does not capture all respiratory virus testing performed in Canada; differences may exist between the data presented in this report and provincial/territorial epidemiological reports. SARS-CoV-2 laboratory data is included in this report to facilitate the comparison of positivity with other respiratory viruses. Interpretation should be made with caution as testing practices differ among viruses.

For additional SARS-CoV-2 surveillance information, please refer to the [COVID-19 epidemiology update](#).

Overall Summary

In week 47 (week ending November 25, 2023) in Canada, participating RVDSS laboratories reported 8,137 detections of SARS-CoV-2 from 42,135 tests (19.3% positive). Among non-SARS-CoV-2 respiratory viruses, where test volumes are lower (range of 8,423 to 28,421 tests), activity of both flu and RSV has increased in recent weeks, as is expected at this time of year.

- In recent weeks national SARS-CoV-2 percent positivity has increased slightly, but trends vary by region.
- At the national level, activity of influenza has increased in recent weeks, but is within expected levels for this time of year (2,143 detections; 7.5% positive). Influenza percent positivity currently varies greatly by region.
- Activity of RSV continues to increase but is within expected levels for this time of year (1,815 detections; 6.9% positive).
- Activity of all other non-SARS-CoV-2 respiratory viruses is low and near expected levels typical of this time of year.
- 35/35 sentinel laboratories reported surveillance data

Abbreviations

ADV: Adenovirus

Atl: Atlantic Canada

BC: British Columbia

Can: Canada

EORLA: Eastern Ontario Regional Laboratory Association

EV/RV: Enterovirus/Rhinovirus

Flu: Influenza

Flu A(H1N1)pdm09: Influenza A(H1N1)pdm09

Flu A(H3): Influenza A(H3N2)

Flu A (UnS): Influenza A(Unsubtyped)

HCoV: Human coronavirus 229E/OC43/NL63/HKU1

HMPV: Human metapneumovirus

HPIV: Human parainfluenza virus

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

RSV: Respiratory syncytial virus

RVDSS: Respiratory Virus Detection Surveillance System

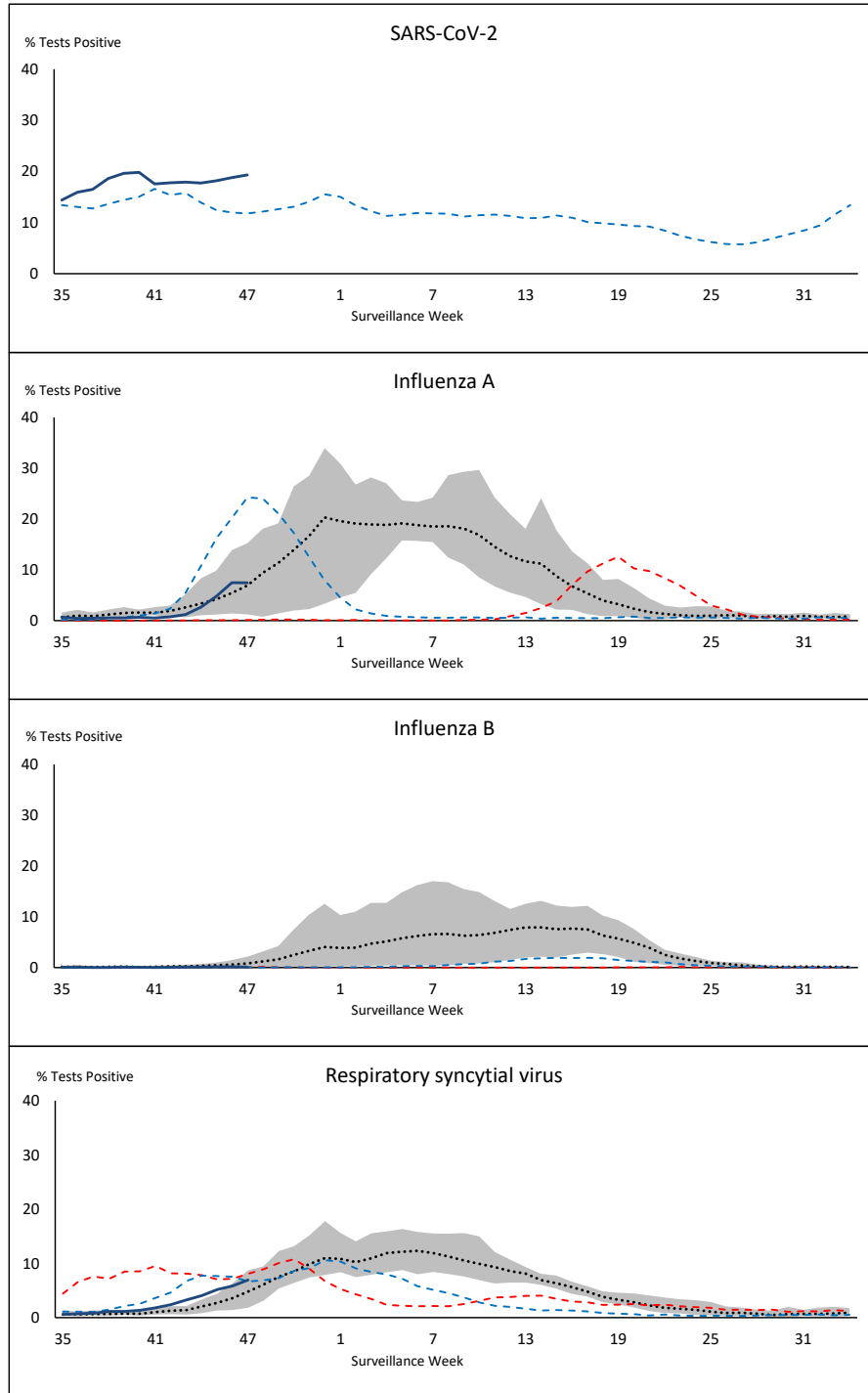
SARS-CoV-2: Severe acute respiratory syndrome coronavirus 2

Terr: Territories of Canada

UHN: University Health Network



Figure 1: Positive severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), influenza, and respiratory syncytial virus tests (%) reported by participating laboratories in Canada by surveillance week compared to average and range from 2014-2015 to 2019-2020 season



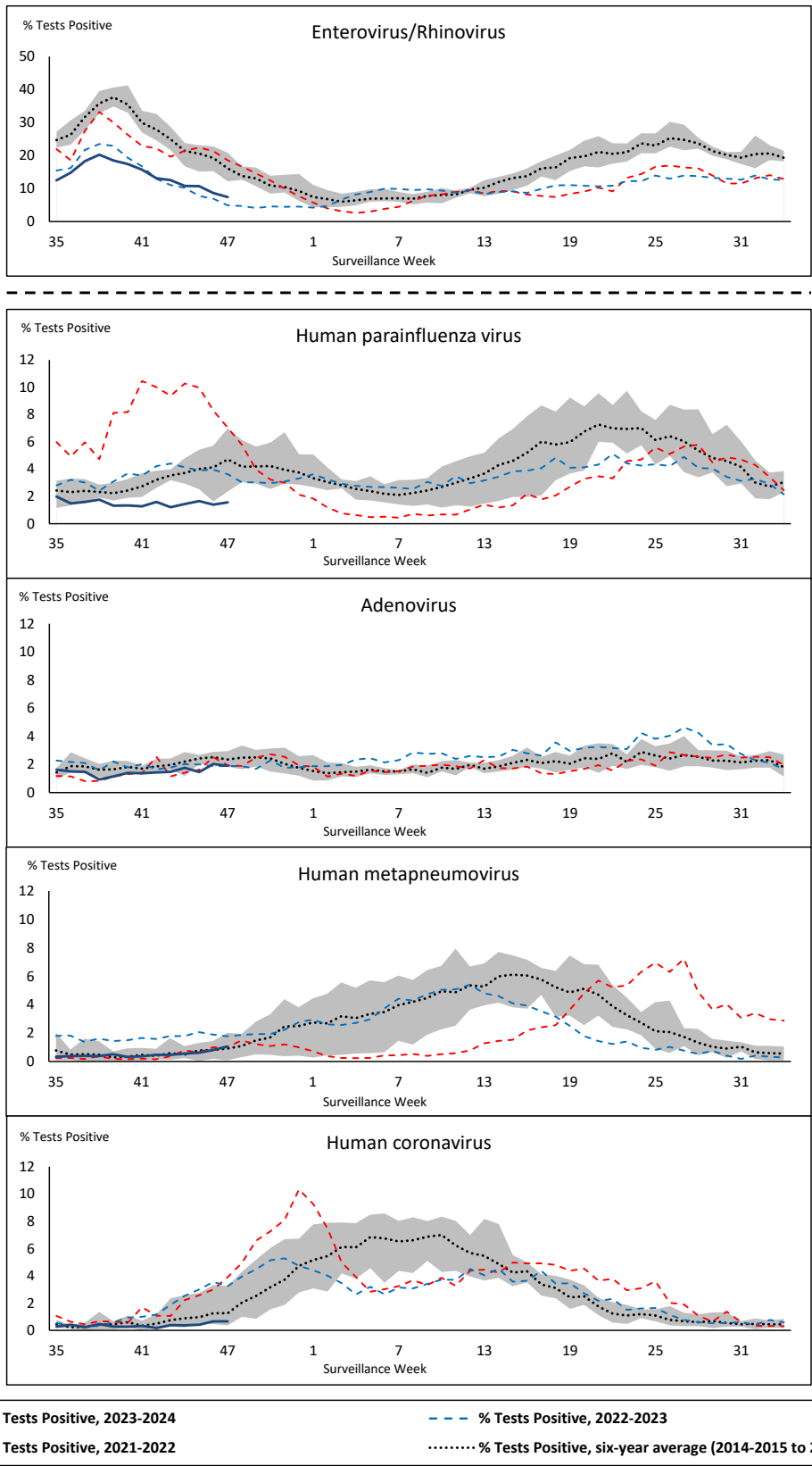
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

Note: Changes to testing practices during the COVID-19 pandemic may cause substantial changes to indicator estimates from previous years. Collection of laboratory testing practice meta-data to understand these changes is ongoing. Interpret trends with caution.

Note: SARS-CoV-2 surveillance was integrated into RVDSS at the beginning of the 2022-2023 season; no prior data is available for historical comparison.

Note: Data from week 11 of the 2019-2020 season onwards are excluded from the historical comparison due to the COVID-19 pandemic.

Figure 2: Positive tests (%) of other respiratory viruses 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: Changes to testing practices during the COVID-19 pandemic may cause substantial changes to indicator estimates from previous years. Collection of laboratory testing practice meta-data to understand these changes is ongoing. Interpret trends with caution.

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

Table 1: Respiratory virus detections for the week ending November 25, 2023 (surveillance week 2023-47)

Reporting Laboratory	SARS-CoV-2 Tested	SARS-CoV-2 Positive	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	702	168	482	0	0	43	43	0	482	22	482	1	1	0	5	0	482	10	482	5	482	41	482	2	
Prince Edward Island	256	55	117	0	0	1	1	0	117	2	11	0	0	0	1	0	11	0	11	0	11	3	11	0	
Nova Scotia	1514	393	953	0	0	16	16	0	821	50	24	1	0	0	0	0	24	0	24	1	24	7	24	0	
New Brunswick	1018	164	969	20	0	36	56	1	943	37	103	0	0	0	2	0	103	7	103	0	103	23	103	2	
Atlantic	3490	780	2521	20	0	96	116	1	2363	111	620	2	1	0	8	0	620	17	620	6	620	74	620	4	
Région Nord-Est	1544	311	1273	0	0	23	23	0	429	39	56	2	0	1	0	0	56	7	51	3	N.C.	N.C.	56	0	
Québec-Chaudière-Appalaches	2171	462	1118	0	0	8	8	0	1119	125	548	2	1	0	0	0	562	23	549	11	N.C.	N.C.	460	4	
Centre-du-Québec	2583	513	906	0	0	27	27	2	549	85	47	1	0	0	1	0	47	5	47	2	N.C.	N.C.	48	0	
Montréal-Laval	3082	649	1732	0	0	37	37	1	1367	180	756	1	3	2	0	0	756	21	760	21	N.C.	N.C.	756	9	
Ouest du Québec	1631	451	496	0	0	10	10	0	495	68	14	0	0	0	0	0	14	1	14	0	N.C.	N.C.	14	0	
Montérégie	1856	375	1028	0	0	29	29	1	1004	88	9	0	0	0	0	0	9	1	9	0	N.C.	N.C.	9	0	
Province of Québec	12867	2761	6553	0	0	134	134	4	4963	585	1430	6	4	3	1	0	1444	58	1430	37	N.C.	N.C.	1343	13	
P.H.O.L. - Ottawa	352	165	206	16	4	0	5	0	205	8	125	0	0	0	0	0	125	0	125	0	125	8	125	3	
EORLA	1431	255	690	0	0	31	31	0	690	116	26	0	0	0	0	0	26	0	26	0	26	7	26	0	
P.H.O.L. - Kingston	217	108	153	1	0	0	1	0	153	14	92	0	0	0	0	1	92	1	92	0	92	10	92	0	
UHN / Mount Sinai Hospital	1346	194	727	8	0	0	8	1	727	17	30	0	0	0	0	0	30	0	30	0	30	1	30	0	
P.H.O.L. - Toronto	841	355	1185	39	10	11	51	0	1185	59	1059	0	0	0	0	33	1063	17	1059	8	1059	69	1059	7	
Sick Kids Hospital - Toronto	125	15	125	3	2	5	10	0	125	24	125	0	1	0	4	0	125	2	125	0	125	36	125	3	
Shared Hospital Laboratory	2132	261	1659	25	15	6	46	0	1658	129	1644	0	0	0	0	11	1644	17	1652	5	1652	55	1652	6	
P.H.O.L. - Sault Ste. Marie	13	9	13	0	0	0	0	0	13	0	10	0	0	0	0	0	10	0	10	0	10	0	10	0	
P.H.O.L. - Timmins	26	5	21	0	0	0	0	0	21	5	14	0	0	0	0	0	14	0	14	0	14	0	14	0	
St. Joseph's - London	897	175	498	0	0	9	9	1	498	61	38	0	0	0	0	0	38	2	38	0	38	3	38	0	
P.H.O.L. - London	683	279	453	13	1	0	8	0	453	55	355	0	0	0	0	8	355	3	355	2	355	21	355	1	
P.H.O.L. - Orillia	8	2	28	1	0	0	1	0	28	3	28	0	0	0	0	1	28	0	28	1	28	1	28	0	
P.H.O.L. - Thunder Bay	87	28	50	0	0	0	0	0	50	0	41	0	0	0	0	6	41	0	41	0	41	1	41	0	
P.H.O.L. - Sudbury	32	27	31	0	0	0	0	0	31	0	11	0	0	0	0	0	11	0	11	0	11	2	11	0	
P.H.O.L. - Hamilton	357	180	281	3	0	1	2	0	281	20	177	0	0	0	0	4	177	2	177	1	177	16	177	1	
P.H.O.L. - Peterborough	92	36	75	3	0	0	3	0	75	19	75	0	0	0	0	6	75	1	75	0	75	10	75	1	
St. Joseph's - Hamilton	2018	269	1738	0	0	44	44	0	1738	169	1738	0	0	5	0	0	1738	16	1738	8	1738	84	0	0	
Sault Area Hospital	227	50	139	3	2	0	5	0	139	0	111	2	1	1	1	0	111	0	111	0	111	11	111	0	
Province of Ontario	10884	2413	8072	115	34	107	224	2	8070	699	5699	2	1	6	5	70	5703	61	5707	25	5707	335	3969	22	
Manitoba	1757	411	1368	1	3	80	84	0	1368	28	106	0	0	1	6	0	106	2	143	1	106	12	143	1	
Saskatchewan	2983	448	2085	0	0	618	618	4	1925	34	521	0	0	0	1	0	521	10	521	8	521	24	521	0	
Alberta	6580	909	4229	611	32	61	704	14	3950	164	999	6	3	4	0	0	998	12	987	4	993	73	999	8	
Prairies	11320	1768	7682	612	35	759	1406	18	7243	226	1626	6	3	5	7	0	1625	24	1651	13	1620	109	1663	9	
British Columbia	3385	403	3461	84	17	3	218	3	3389	179	852	7	12	2	9	0	856	33	856	26	828	129	828	8	
Yukon	64	3	42	0	0	0	1	0	42	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	22	1	22	4	0	0	4	0	22	0	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	22	6	N.C.	N.C.
Nunavut	103	8	68	0	0	12	12	0	68	13	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	189	12	132	4	0	12	17	0	132	15	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	22	6	N.C.	N.C.	
CANADA	42135	8137	28421	835	86	1111	2115	28	26160	1815	10227	23	21	16	30	70	10270	196	10286	108	8797	653	8423	56	

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.

Some 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 27, 2023 to November 25, 2023 (surveillance weeks 2023-35 to 2023-47)

Reporting Laboratory	SARS-CoV-2 Tested	SARS-CoV-2 Positive	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	6816	1314	4485	0	0	122	122	1	4485	70	4485	6	12	6	47	0	4485	80	4485	18	4485	747	4485	16
Prince Edward Island	2517	346	738	0	0	8	8	0	738	5	118	0	0	0	5	0	117	5	107	0	117	52	101	0
Nova Scotia	18562	4635	8219	0	0	68	68	6	8087	180	478	15	2	1	8	0	478	22	471	2	478	157	477	0
New Brunswick	11507	1732	9040	47	4	56	107	2	8873	115	877	6	2	0	16	0	877	24	877	0	877	244	877	3
Atlantic	39402	8027	22482	47	4	254	305	9	22183	370	5958	27	16	7	76	0	5957	131	5940	20	5957	1200	5940	19
Région Nord-Est	21071	4061	15412	0	0	51	51	1	4348	155	787	13	7	3	14	0	787	37	774	17	N.C.	N.C.	787	1
Québec-Chaudière-Appalaches	28315	5169	8621	0	0	37	37	7	8627	513	3941	16	7	1	9	0	4114	181	3943	60	N.C.	N.C.	3677	8
Centre-du-Québec	29562	6022	7203	0	0	68	68	7	5816	423	480	12	7	5	4	0	480	26	480	10	N.C.	N.C.	486	2
Montréal-Laval	40377	6768	17533	0	0	131	131	9	15417	874	9014	77	29	38	19	0	9014	188	9037	132	N.C.	N.C.	9014	71
Ouest du Québec	22989	5755	6892	1	0	55	56	8	6874	367	279	9	3	2	5	0	279	19	279	3	N.C.	N.C.	279	1
Montréal	20537	3991	10932	0	0	107	107	11	10243	446	73	1	0	0	1	0	73	2	73	0	N.C.	N.C.	73	0
Province of Québec	162851	31766	66593	1	0	449	450	43	51325	2778	14574	128	53	49	52	0	14747	453	14586	222	N.C.	N.C.	14316	83
P.H.O.L. - Ottawa	4932	1861	2926	32	6	3	20	0	2925	46	1757	0	0	0	0	24	1757	2	1757	8	1757	304	1757	24
EORLA	17246	2175	6362	0	0	90	90	8	6362	655	413	2	3	2	3	0	388	4	413	1	413	108	413	2
P.H.O.L. - Kingston	3375	1092	1681	2	0	0	1	0	1681	43	1273	0	0	0	0	27	1273	6	1273	0	1273	247	1273	1
UHN / Mount Sinai Hospital	13472	1236	7812	21	0	14	35	13	7812	65	303	0	0	4	1	0	303	1	303	0	303	18	303	1
P.H.O.L. - Toronto	8149	2825	12621	191	60	22	213	4	12619	247	11373	0	0	0	0	320	11378	120	11370	62	11373	1910	11370	36
Sick Kids Hospital - Toronto	1571	108	1362	19	16	25	60	1	1362	177	1362	11	7	9	11	0	1362	35	1362	6	1362	286	1362	7
Shared Hospital Laboratory	17770	1941	16474	64	45	12	121	3	16476	714	16444	0	0	0	0	106	16442	128	16449	19	16476	939	16451	33
P.H.O.L. - Sault Ste. Marie	201	151	158	0	0	0	0	0	158	1	91	0	0	0	0	1	91	0	91	0	91	15	91	0
P.H.O.L. - Timmins	470	171	347	0	0	0	0	0	347	10	278	0	0	0	0	12	278	4	278	0	278	34	278	0
St. Joseph's - London	10477	1619	2524	0	0	21	21	4	2524	194	1018	0	0	0	0	12	1035	10	1035	1	1035	150	1035	4
P.H.O.L. - London	6711	2314	4431	28	11	1	21	1	4431	157	3469	0	0	0	0	74	3469	18	3469	2	3469	516	3469	1
P.H.O.L. - Orillia	236	55	552	3	1	0	4	0	551	32	538	0	0	0	0	16	538	11	538	3	538	121	538	0
P.H.O.L. - Thunder Bay	849	310	431	0	0	0	0	0	431	0	344	0	0	0	0	15	344	2	344	1	344	43	344	1
P.H.O.L. - Sudbury	302	157	285	0	0	0	0	0	283	1	199	0	0	0	0	4	200	1	199	0	199	36	199	0
P.H.O.L. - Hamilton	3407	1174	2728	13	1	1	7	1	2728	80	1962	0	0	0	0	54	1962	26	1962	15	1962	366	1962	3
P.H.O.L. - Peterborough	945	356	935	3	0	1	4	1	935	132	826	0	0	0	0	23	826	14	826	2	826	190	826	3
St. Joseph's - Hamilton	22609	2533	19323	0	0	135	135	14	19323	833	19323	0	0	55	0	0	19323	122	19323	47	19323	1608	0	0
Sault Area Hospital	1961	281	1302	7	3	1	11	0	1295	5	977	7	0	3	7	0	977	11	977	0	977	143	987	0
Province of Ontario	114683	20359	82254	383	143	326	743	50	82243	3392	61950	20	10	73	22	688	61946	515	61969	167	61999	7034	42658	116
Manitoba	20010	3874	15483	1	6	218	225	5	15483	95	961	0	5	5	34	0	961	48	1475	5	961	321	1475	5
Saskatchewan	28154	3893	14588	23	4	2054	2081	20	13916	141	5280	8	4	2	9	0	5280	147	5280	58	5280	793	5280	9
Alberta	68130	10530	47413	2222	169	175	2566	89	44010	704	14194	63	42	38	3	0	14191	163	14024	7	13927	1947	14193	83
Prairies	116294	18297	77484	2246	179	2447	4872	114	73409	940	20435	71	51	45	46	0	20432	358	20779	70	20168	3061	20948	97
British Columbia	44745	7905	41589	575	109	34	947	31	41499	750	9609	62	64	31	94	0	9613	250	9498	116	9149	1915	9126	45
Yukon	750	90	438	0	2	0	4	0	438	10	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	270	33	221	9	4	0	13	0	221	0	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	221	58	N.C.	N.C.
Nunavut	1286	170	822	0	1	12	13	0	822	27	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	2306	293	1481	9	7	12	30	0	1481	37	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	221	58	N.C.	N.C.
CANADA	480281	86647	291883	3261	442	3522	7347	247	272140	8267	112526	308	194	205	290	688	112717	1710	112794	596	97494	13268	92988	360

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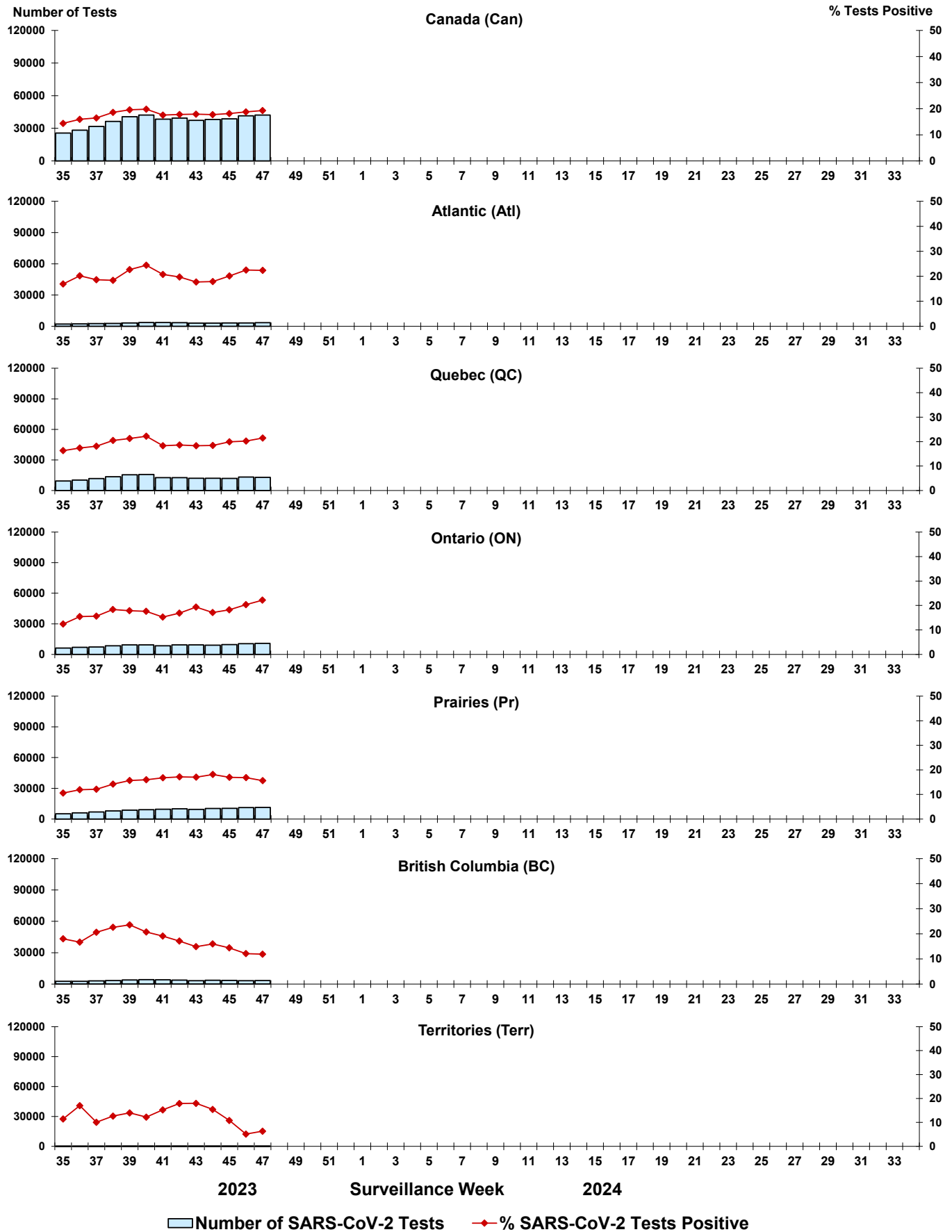
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Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts. Total influenza A and B positive counts are used to calculate percentage of tests positive.

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 3: Positive severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) tests (%) in Canada by region by surveillance week



Note: Differences in positivity between jurisdictions can reflect differences in testing practices. Please interpret with caution.

Figure 4: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

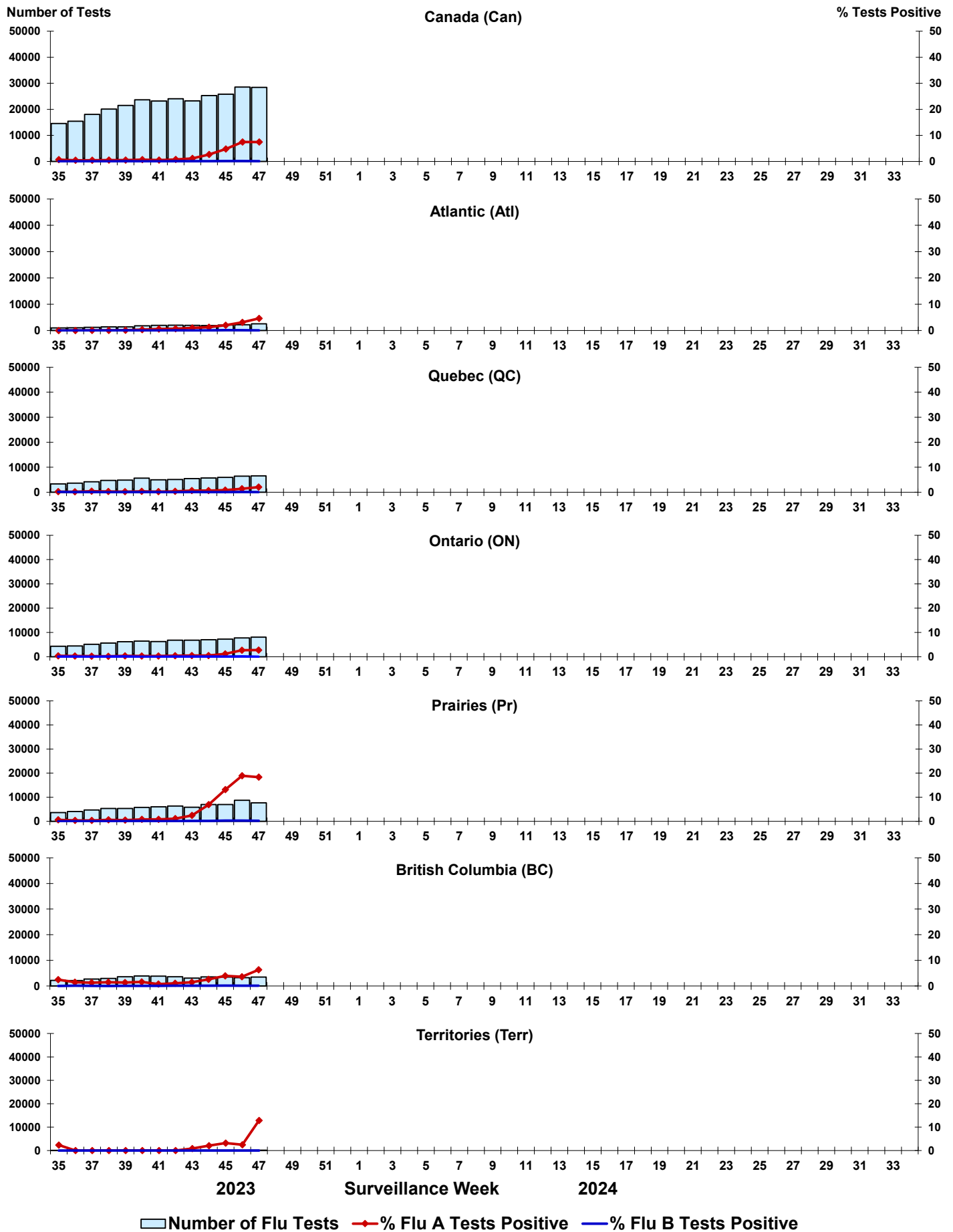


Figure 5: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

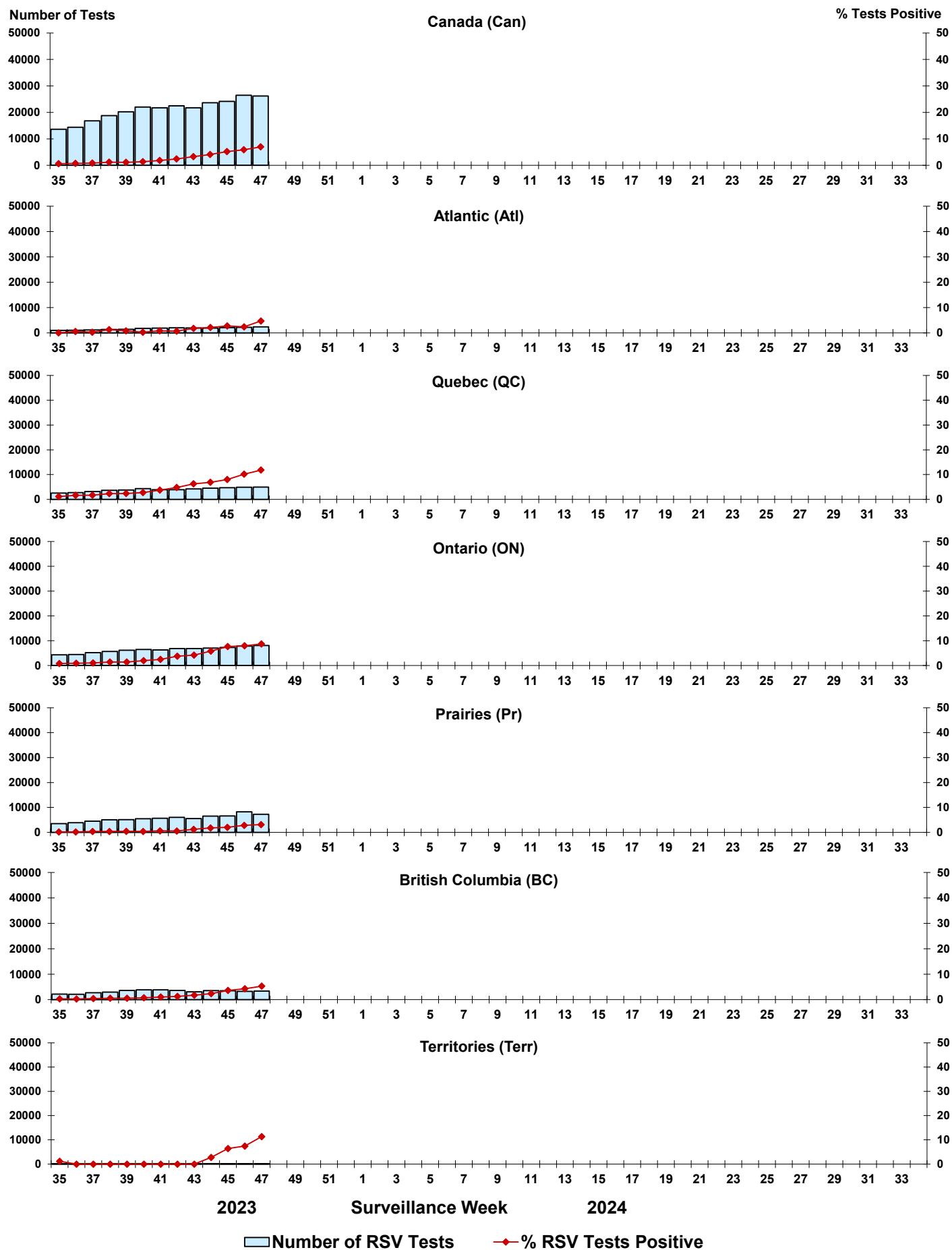


Figure 6: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

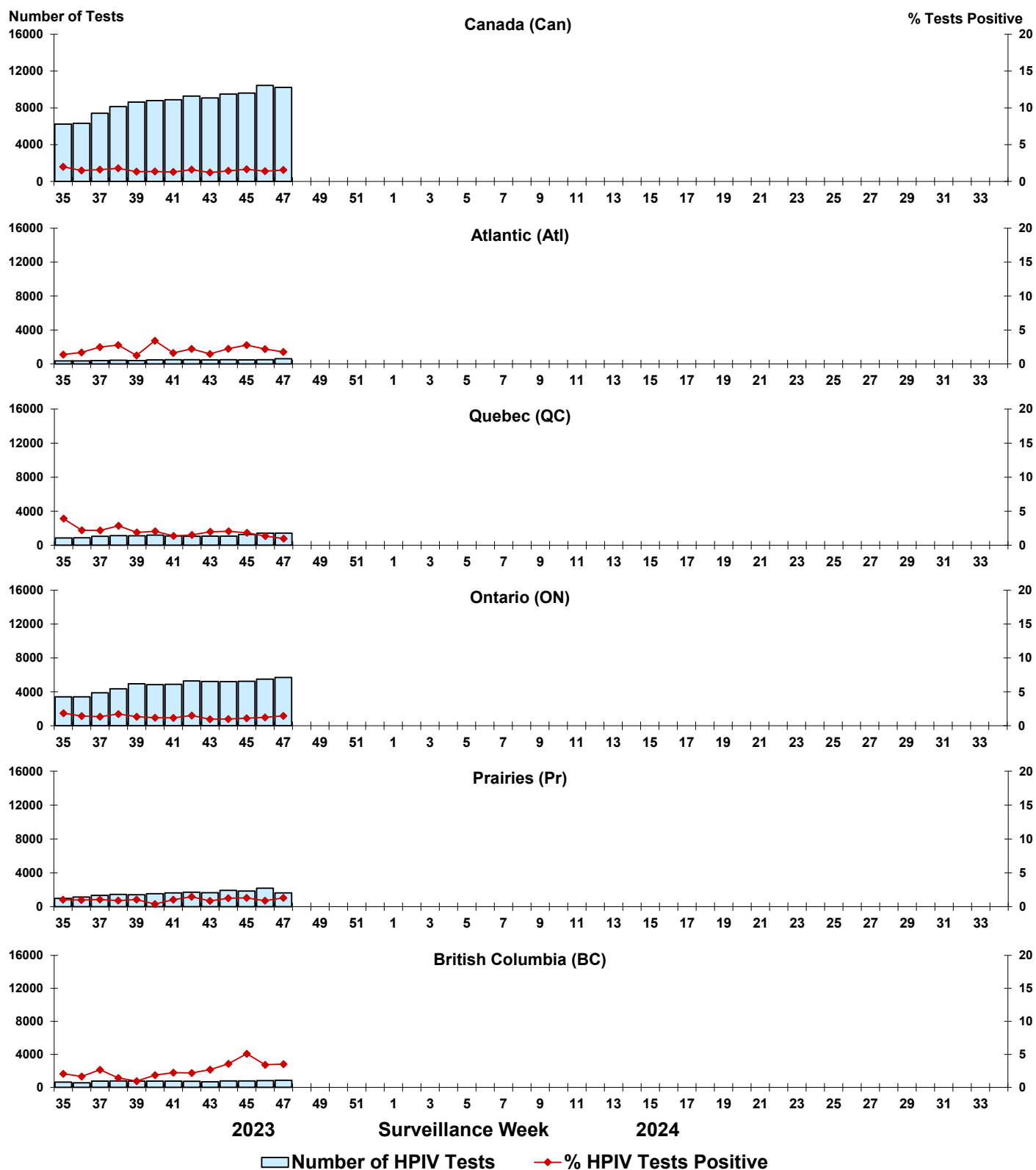


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

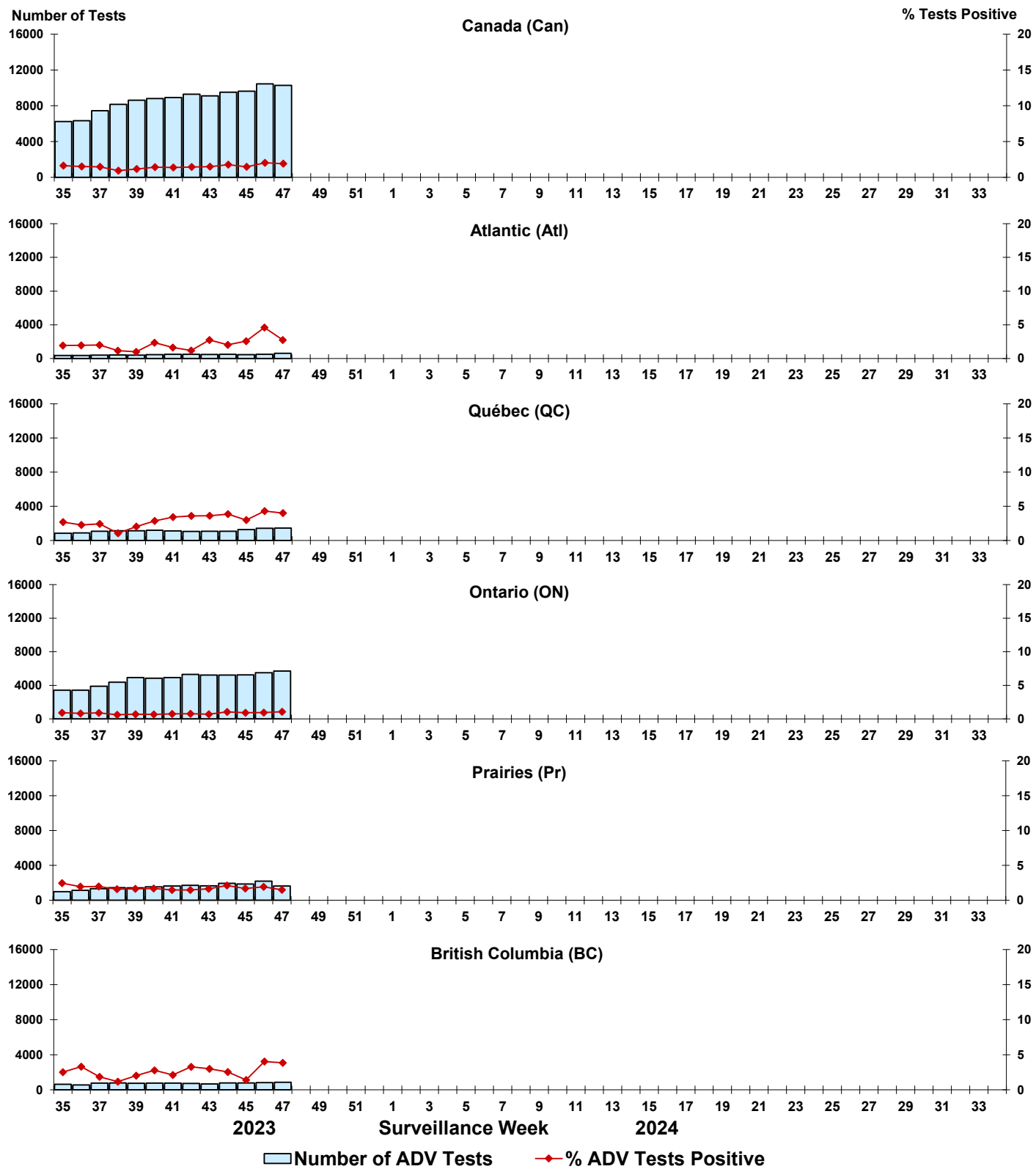


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

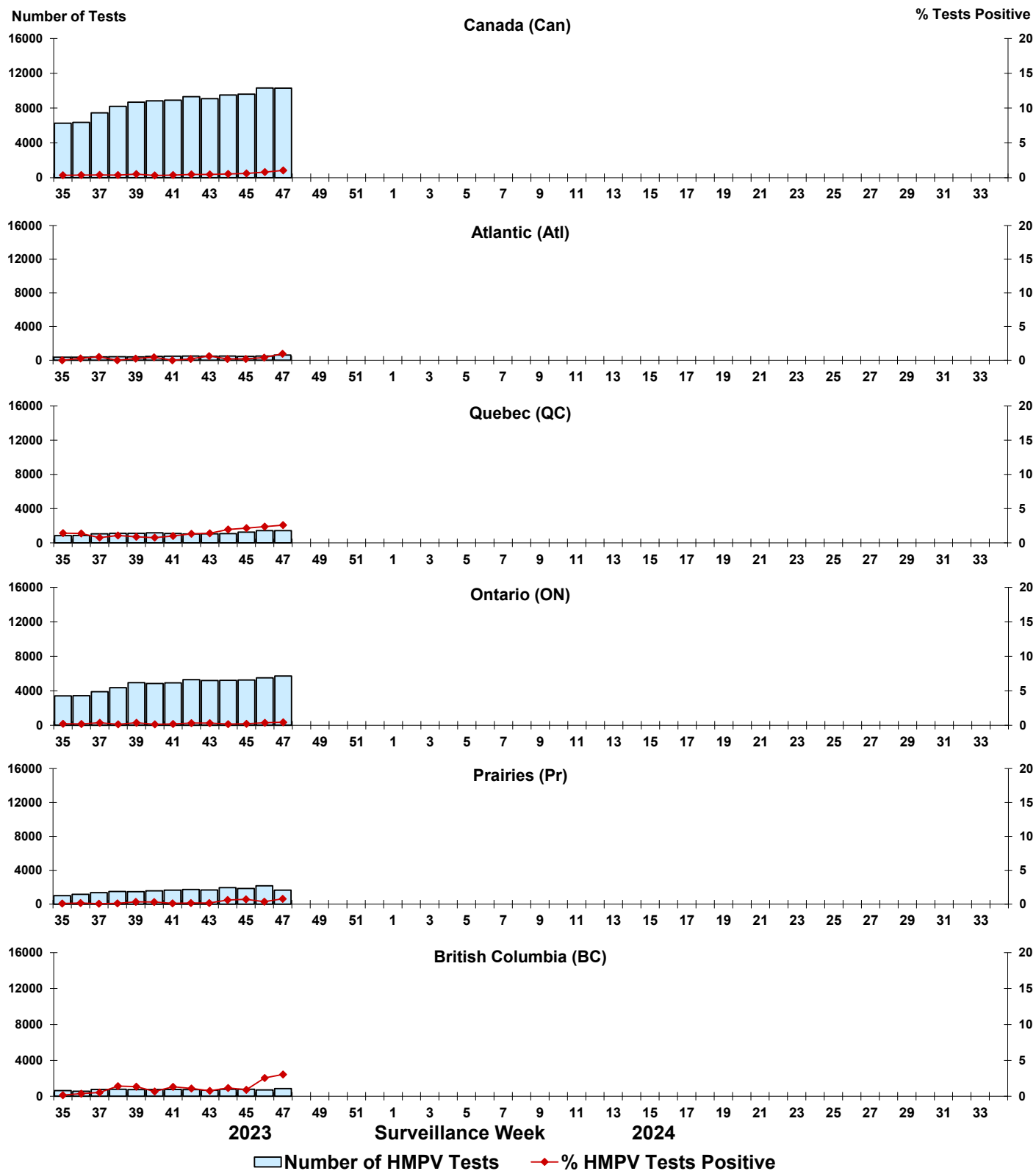


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

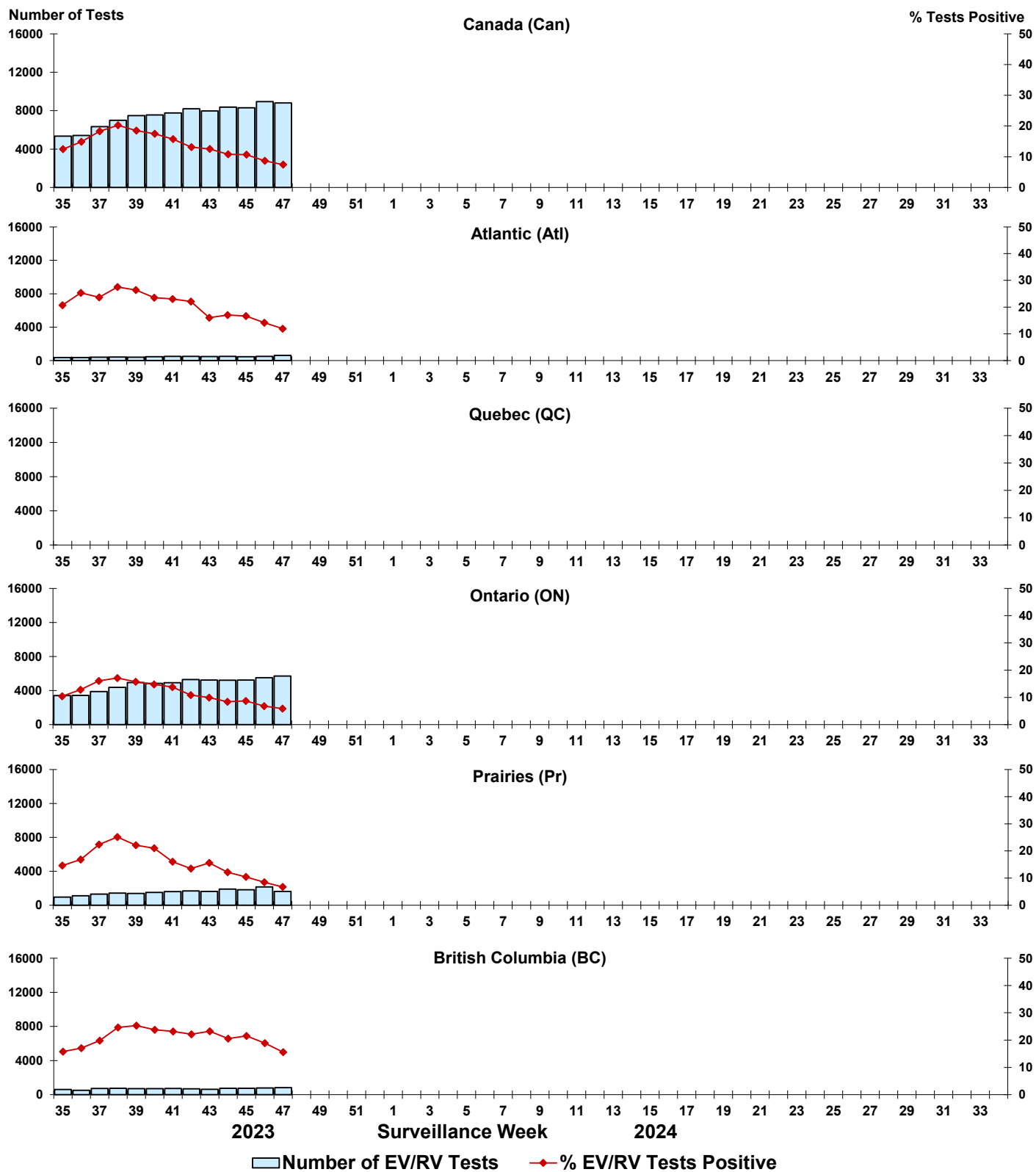


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

