

RESPIRATORY VIRUS DETECTION REPORT

March 24 to March 30, 2024
(Surveillance Week 2024-13)



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 13 (week ending March 30, 2024) in Canada, participating RVDSS laboratories reported 1,438 detections of SARS-CoV-2 from 29,526 tests (4.9% positive). Among non-SARS-CoV-2 respiratory viruses, where test volumes are lower (range of 7,176 to 27,703 tests), activity of influenza is highest.

- National SARS-CoV-2 percent positivity has been decreasing since mid-December 2023.
- Influenza A percent positivity has decreased in recent weeks (742 detections; 2.7% positive) and is lower than influenza B which is currently increasing (1,814 detections; 6.6% positive).
- RSV percent positivity has decreased in recent weeks (556 detections; 2.3% positive).
- Percent positivity of all other non-SARS-CoV-2 respiratory viruses is within 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

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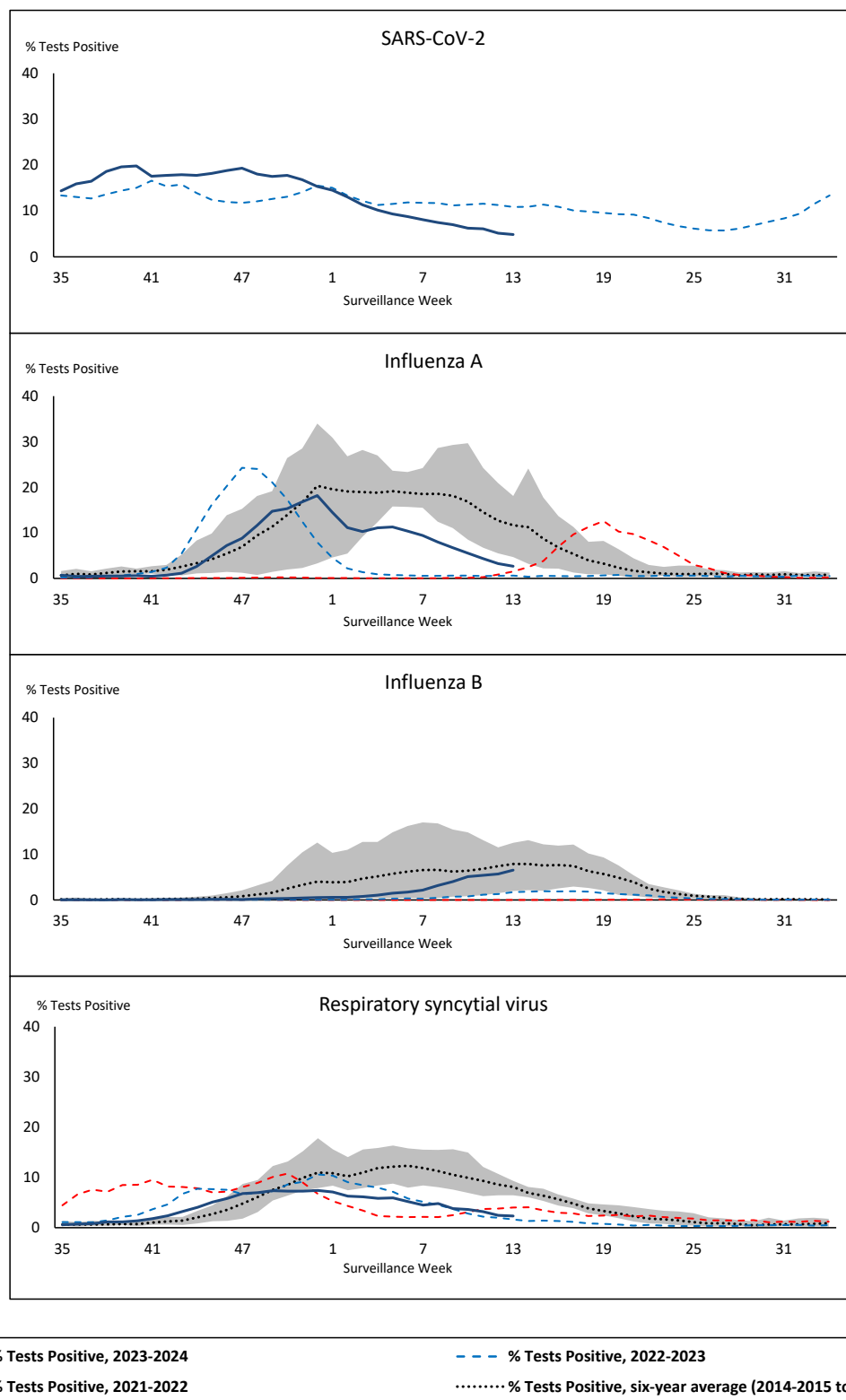


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Figure 1: Positive severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), influenza, and respiratory syncytial virus tests (%) reported by participating laboratories in Canada by surveillance week compared to average and range from 2014-2015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



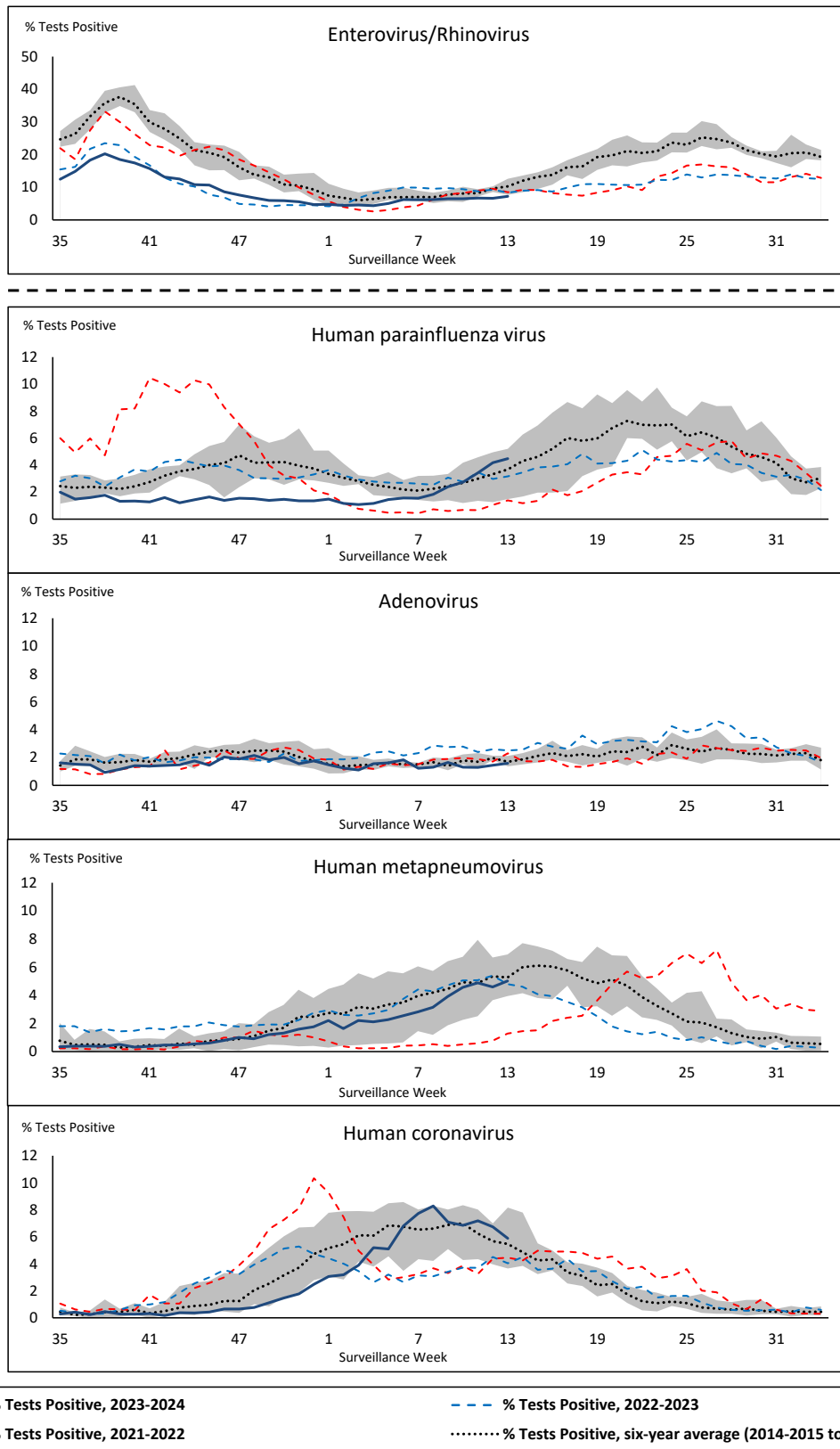
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

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 March 30, 2024 (surveillance week 2024-13)

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	533	59	401	0	0	6	6	18	401	25	401	0	2	9	1	0	401	5	401	30	401	17	401	32
Prince Edward Island	214	15	201	0	0	3	3	46	201	4	15	0	0	2	0	0	15	1	15	0	15	2	15	0
Nova Scotia	1217	81	1215	0	0	80	80	38	948	17	26	0	0	0	0	0	26	1	26	2	26	2	26	1
New Brunswick	867	39	1092	0	0	22	22	109	1092	37	139	0	0	7	2	0	139	5	139	11	139	29	139	5
Atlantic	2831	194	2909	0	0	111	111	211	2642	83	581	0	2	18	3	0	581	12	581	43	581	50	581	38
Région Nord-Est	1267	36	1398	0	0	15	15	125	634	35	88	0	0	6	0	0	88	5	84	6	N.C.	N.C.	88	8
Québec-Chaudière-Appalaches	1185	16	1315	0	0	46	46	152	1235	74	438	0	0	1	1	0	460	13	438	29	N.C.	N.C.	306	10
Centre-du-Québec	1806	52	1752	0	0	92	92	104	810	32	23	0	0	2	0	0	23	1	23	2	N.C.	N.C.	25	0
Montréal-Laval	2082	64	2788	0	0	75	75	132	1630	55	825	1	0	35	0	0	825	22	825	55	N.C.	N.C.	825	43
Ouest du Québec	1009	28	663	0	0	48	48	38	654	14	22	0	0	5	0	0	22	0	22	2	N.C.	N.C.	22	2
Montérégie	1188	34	1418	0	0	46	46	55	1417	27	3	0	0	0	0	0	3	0	3	0	N.C.	N.C.	3	0
Province of Québec	8537	230	9334	0	0	322	322	606	6380	237	1399	1	0	49	1	0	1421	41	1395	94	N.C.	N.C.	1269	63
P.H.O.L. - Ottawa	221	45	215	6	0	0	6	5	215	2	129	0	0	0	0	15	129	0	129	10	129	3	129	17
EORLA	853	52	549	0	0	17	17	53	549	5	47	0	0	5	0	0	47	1	47	4	47	5	47	1
P.H.O.L. - Kingston	139	24	111	1	0	0	1	1	111	0	66	0	0	0	0	2	66	0	66	2	66	2	66	22
UHN / Mount Sinai Hospital	897	17	620	0	0	8	8	4	620	5	70	0	0	1	0	0	70	1	70	0	70	4	70	0
P.H.O.L. - Toronto	229	23	809	20	1	5	24	15	809	1	801	0	0	0	0	68	801	5	801	57	801	52	801	79
Sick Kids Hospital - Toronto	116	2	117	0	1	0	1	8	117	1	117	0	0	8	0	0	117	5	117	10	117	28	117	4
Shared Hospital Laboratory	1626	25	1298	16	2	4	22	34	1298	3	1286	0	0	0	0	20	1286	11	1297	17	1297	19	1297	22
P.H.O.L. - Sault Ste. Marie	16	10	22	2	0	0	2	0	22	0	12	0	0	0	0	0	12	0	12	0	12	0	12	0
P.H.O.L. - Timmins	22	0	32	0	0	0	0	2	32	1	28	0	0	0	0	3	28	0	28	1	28	0	28	6
St. Joseph's - London	740	19	574	0	0	4	4	16	574	1	73	0	0	0	0	8	73	1	73	1	73	9	73	3
P.H.O.L. - London	224	13	210	1	0	7	8	5	210	1	198	0	0	0	0	16	198	1	198	12	198	31	198	16
P.H.O.L. - Orillia	4	0	4	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	1	4	0	4	0
P.H.O.L. - Thunder Bay	32	3	23	0	0	1	1	0	23	0	11	0	0	0	0	0	11	0	11	0	11	0	11	2
P.H.O.L. - Sudbury	14	0	26	2	0	1	3	0	26	2	25	0	0	0	0	2	25	0	25	0	25	0	25	9
P.H.O.L. - Hamilton	126	10	146	7	1	10	17	3	146	0	121	0	0	0	0	5	121	4	121	15	121	8	121	16
P.H.O.L. - Peterborough	38	0	49	0	0	3	3	0	49	0	28	0	0	0	0	4	28	2	28	8	28	4	28	1
St. Joseph's - Hamilton	1543	48	1478	0	0	36	36	63	1478	10	1478	0	0	51	0	0	1478	8	1478	73	1478	65	0	0
Sault Area Hospital	122	7	101	2	1	0	3	1	101	5	80	0	0	2	0	0	80	1	80	6	80	6	80	4
Province of Ontario	6962	298	6384	57	6	96	156	210	6384	37	4574	0	0	67	0	143	4574	40	4585	217	4585	236	3107	202
Manitoba	1280	85	1092	1	0	14	15	74	1092	24	75	0	0	1	0	0	75	1	83	8	75	7	83	7
Saskatchewan	1750	84	1348	0	0	35	35	214	1092	41	420	0	0	18	2	0	420	2	420	16	420	33	420	20
Alberta	4440	210	4230	24	5	2	39	403	4070	70	1028	3	0	46	0	0	1028	10	941	1	1012	105	1028	48
Prairies	7470	379	6670	25	5	51	89	691	6254	135	1523	3	0	65	2	0	1523	13	1444	25	1507	145	1531	75
British Columbia	3454	317	2178	23	15	2	62	47	2052	41	704	1	3	32	3	0	704	34	704	59	688	100	688	44
Yukon	31	0	22	0	0	0	0	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.	N.C.	N.C.	N.C.
Northwest Territories	25	3	23	0	0	0	0	1	23	0	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	23	0	23	0	23	2	N.C.	N.C.
Nunavut	216	17	183	1	1	0	2	48	183	23	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	272	20	228	1	1	0	2	49	228	23	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	23	0	23	0	23	2	N.C.	N.C.
CANADA	29526	1438	27703	106	27	582	742	1814	23940	556	8781	5	5	231	9	143	8826	140	8732	438	7384	533	7176	422

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 March 30, 2024 (surveillance weeks 2023-35 to 2024-13)

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	19228	2816	14064	0	0	1319	1319	101	14064	913	14064	16	67	40	101	0	14064	235	14064	288	14064	1114	14064	364
Prince Edward Island	7210	773	4660	0	0	541	541	196	4660	363	512	3	0	6	8	0	511	29	501	16	511	125	495	24
Nova Scotia	44482	8338	30947	0	0	2605	2605	337	25535	1402	1080	16	3	4	10	0	1080	40	1073	10	1080	220	1079	16
New Brunswick	33951	3851	31777	889	25	1894	2808	666	31373	1846	2823	7	4	20	30	0	2823	105	2823	73	2823	546	2823	116
Atlantic	104871	15778	81448	889	25	6359	7273	1300	75632	4524	18479	42	74	70	149	0	18478	409	18461	387	18478	2005	18461	520
Région Nord-Est	52541	7045	47624	5	0	4712	4717	634	18899	1392	2427	16	12	25	16	0	2427	104	2370	93	N.C.	N.C.	2427	104
Québec-Chaudière-Appalaches	61514	9295	41272	0	0	5464	5464	1186	39584	2626	15723	22	9	29	14	0	16209	499	15723	466	N.C.	N.C.	12890	419
Centre-du-Québec	76652	12400	38129	0	0	4471	4471	723	22393	1592	1137	15	8	19	7	0	1137	56	1137	51	N.C.	N.C.	1168	43
Montréal-Laval	91936	13870	75838	5	2	6554	6561	523	48793	2847	25790	95	40	226	24	0	25790	503	25860	590	N.C.	N.C.	25790	891
Ouest du Québec	50497	10018	21644	4	0	2055	2059	259	21432	1092	598	11	3	18	7	0	598	43	598	19	N.C.	N.C.	598	28
Montérégie	49049	8009	40008	0	0	3186	3186	275	38931	1760	213	1	0	0	1	0	213	7	213	3	N.C.	N.C.	213	3
Province of Québec	382189	60637	264515	14	2	26442	26458	3600	190032	11309	45888	160	72	317	69	0	46374	1212	45901	1222	N.C.	N.C.	43086	1488
P.H.O.L. - Ottawa	10628	3721	7402	290	54	184	405	33	7396	132	4417	0	0	0	0	117	4417	13	4415	85	4417	421	4415	245
EOURLA	39327	4499	18437	0	0	1576	1576	345	18437	1120	1215	2	5	26	4	0	1190	14	1215	29	1215	219	1215	37
P.H.O.L. - Kingston	7273	2073	4103	132	19	96	221	5	4103	168	2869	0	0	0	0	65	2869	11	2869	24	2869	330	2869	117
UHN / Mount Sinai Hospital	33711	3016	21099	41	10	540	591	72	21099	224	1339	0	0	19	2	0	1339	3	1339	7	1339	64	1339	43
P.H.O.L. - Toronto	18492	5420	33691	1166	907	342	1765	230	33682	1044	30917	0	0	0	0	1022	30925	359	30902	644	30917	2872	30902	1542
Sick Kids Hospital - Toronto	3959	307	3565	105	99	20	224	52	3565	310	3565	15	12	80	21	0	3565	97	3565	103	3565	635	3565	107
Shared Hospital Laboratory	54076	4533	45515	846	520	291	1657	358	45522	1338	45292	0	0	0	0	309	39638	330	45369	252	45414	1468	45391	516
P.H.O.L. - Sault Ste. Marie	452	198	552	52	3	16	65	1	552	45	384	0	0	0	0	5	384	1	384	0	384	21	384	38
P.H.O.L. - Timmins	1109	325	1102	58	10	30	87	7	1102	62	871	0	0	0	0	25	871	4	871	9	871	52	871	37
St. Joseph's - London	27420	3463	14953	0	0	965	965	210	14953	712	2080	0	0	0	0	34	2099	33	2099	32	2101	236	2099	58
P.H.O.L. - London	14261	4104	10596	483	141	168	607	90	10593	470	8519	0	0	0	0	248	8519	37	8517	107	8519	747	8517	333
P.H.O.L. - Orillia	554	144	1241	71	17	11	99	0	1238	74	1176	0	0	0	0	31	1176	16	1176	19	1176	145	1176	24
P.H.O.L. - Thunder Bay	1816	501	1132	57	0	9	38	5	1129	30	942	0	0	0	0	27	942	6	942	29	942	57	942	27
P.H.O.L. - Sudbury	715	239	858	42	1	23	66	1	856	25	610	0	0	0	0	21	611	1	610	8	610	47	610	50
P.H.O.L. - Hamilton	7061	2106	5840	149	66	97	257	37	5839	172	4402	0	0	0	0	140	4402	84	4401	111	4402	561	4401	207
P.H.O.L. - Peterborough	2252	666	2298	206	204	73	153	24	2288	221	1809	0	0	0	0	65	1809	38	1809	43	1809	289	1809	54
St. Joseph's - Hamilton	58996	5793	52463	0	0	3162	3162	646	52463	1762	52463	0	0	467	0	0	52463	330	52463	634	52463	2991	0	0
Sault Area Hospital	5805	782	3910	176	18	55	249	15	3903	203	3066	27	0	20	17	0	3017	36	3017	25	3017	257	3027	67
Province of Ontario	287907	41890	228757	3874	2069	7658	12187	2131	228720	8112	165936	44	17	612	44	2109	160236	1413	165963	2161	166030	11412	113532	3502
Manitoba	50134	7228	37721	144	12	1841	1997	375	37721	1353	2891	2	10	22	41	0	2891	122	3667	143	2891	526	3667	130
Saskatchewan	64408	7300	44017	117	10	5408	5535	1521	39368	1561	14229	30	9	93	25	0	14229	273	14229	763	14229	1354	14229	359
Alberta	167787	19698	146246	11772	749	584	13181	3081	136568	6080	40212	135	91	495	3	0	40201	469	38917	30	39577	3630	40211	999
Prairies	282329	34226	227984	12033	771	7833	20713	4977	213657	8994	57332	167	110	610	69	0	57321	864	56813	936	56697	5510	58107	1488
British Columbia	118747	15893	118824	4050	801	260	8564	940	115939	5801	27929	115	177	303	179	0	27931	867	27816	1095	26819	4079	26796	816
Yukon	1659	178	1086	34	15	0	60	5	1077	46	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	1172	75	1110	166	6	1	173	48	1110	168	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	911	44	911	9	1110	133	N.C.	N.C.
Nunavut	4222	358	3004	432	33	52	517	156	3004	453	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	7053	611	5200	632	54	53	750	209	5191	667	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	911	44	911	9	1110	133	N.C.	N.C.
CANADA	1183096	169035	926728	21492	3722	48605	75945	13157	829171	39407	315564	528	450	1912	510	2109	311251	4809	315865	5810	269134	23139	259982	7814

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.

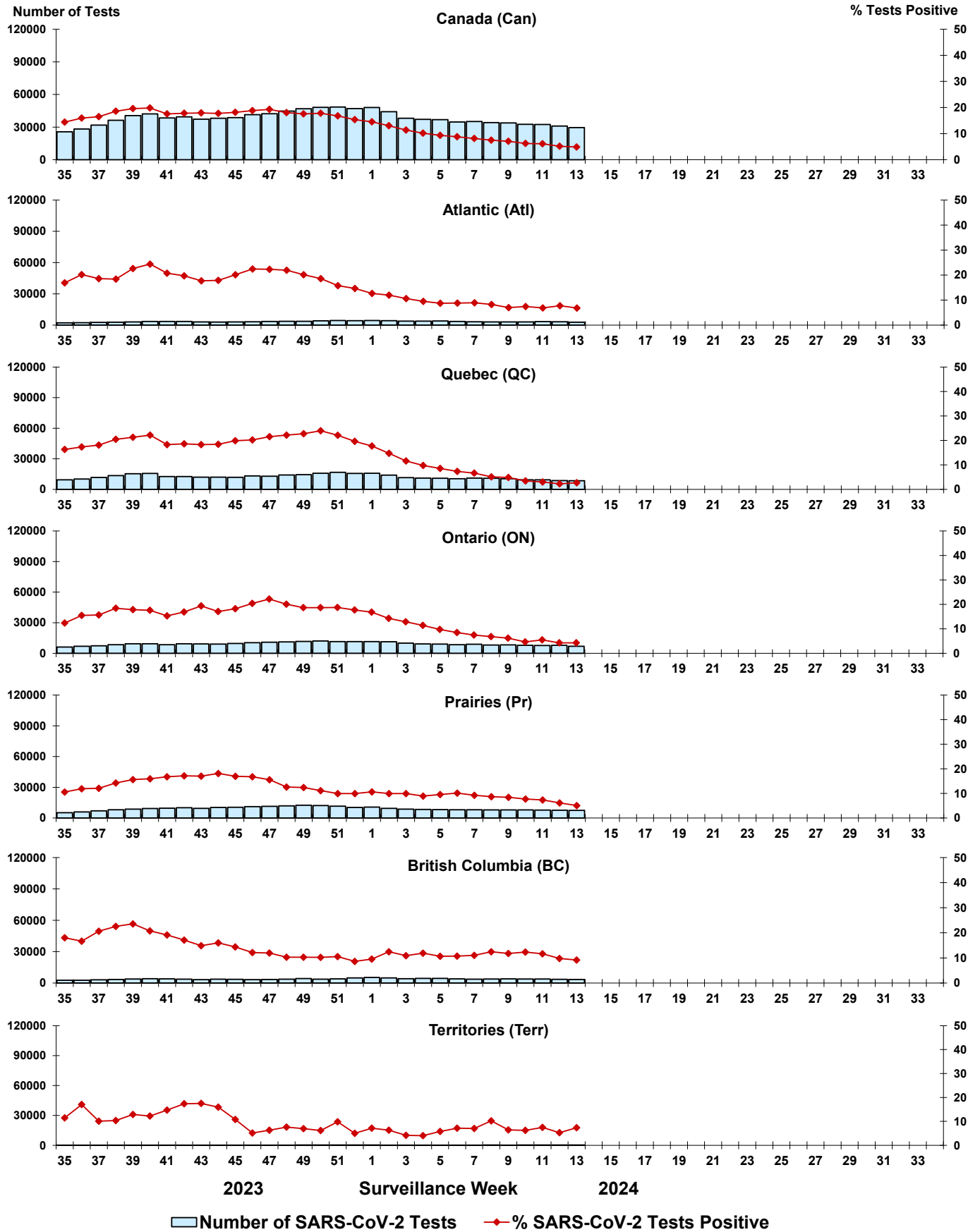
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Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts. Total influenza A and B positive counts are used to calculate percentage of tests positive.

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

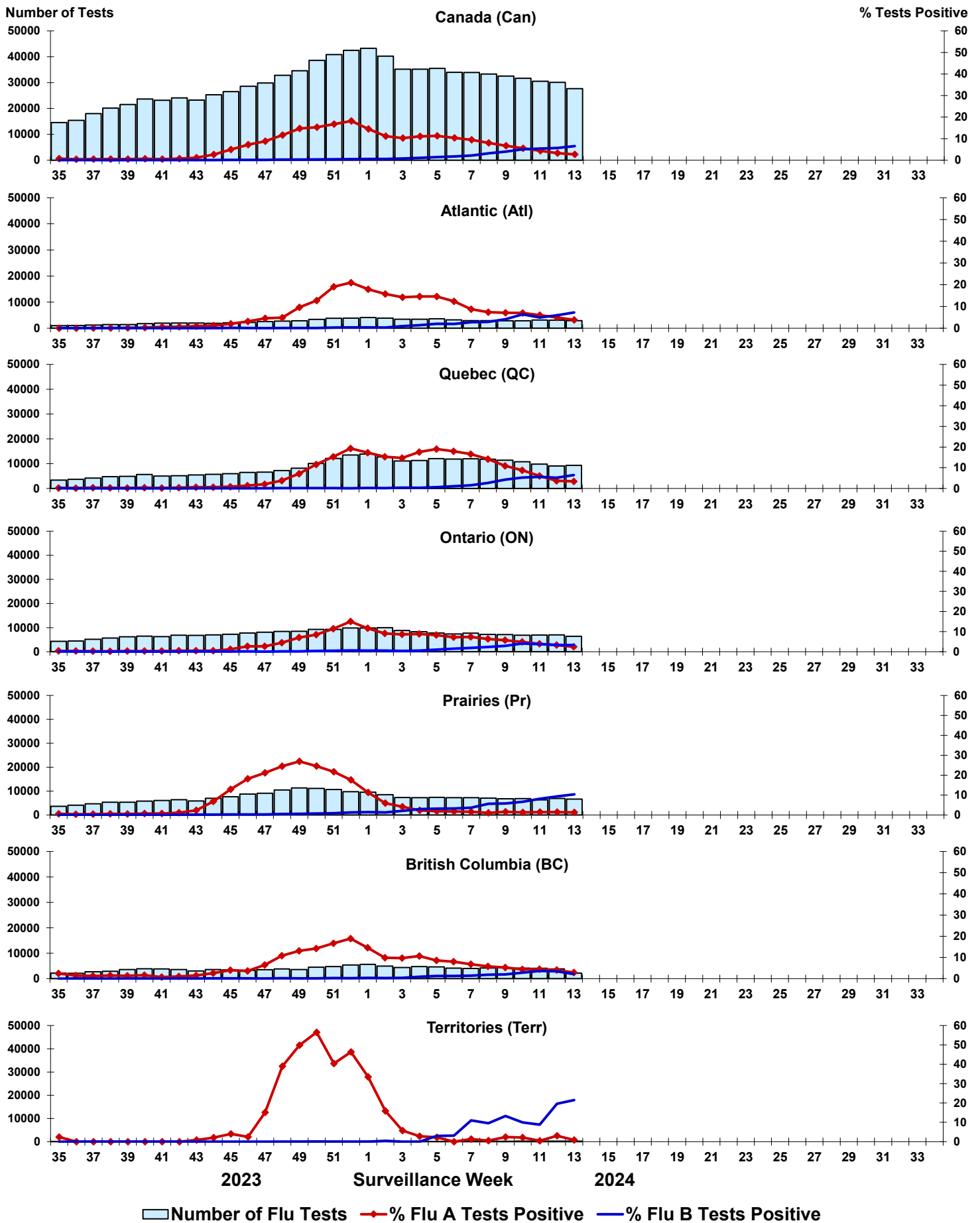


Figure 5: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

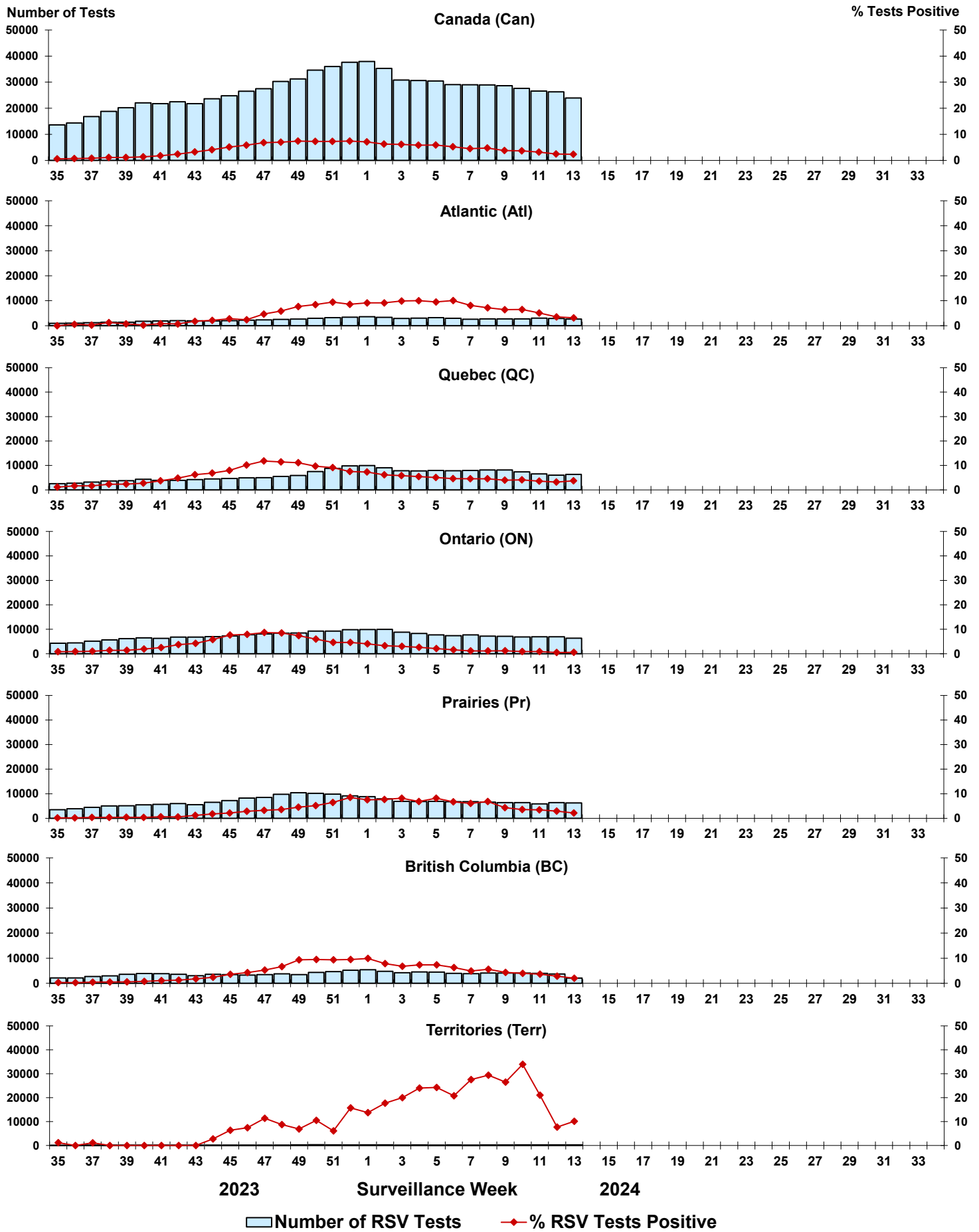


Figure 6: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

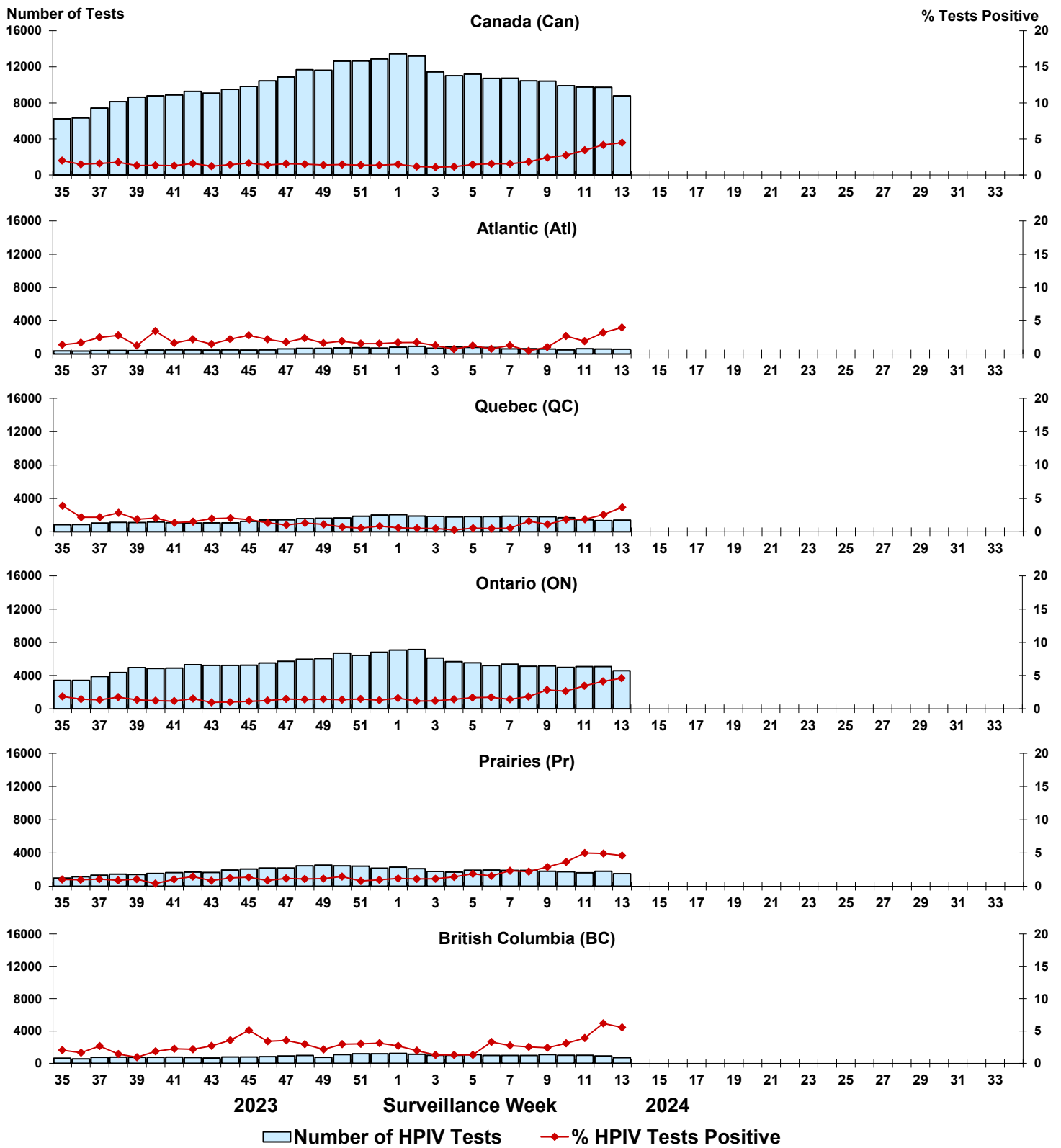


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

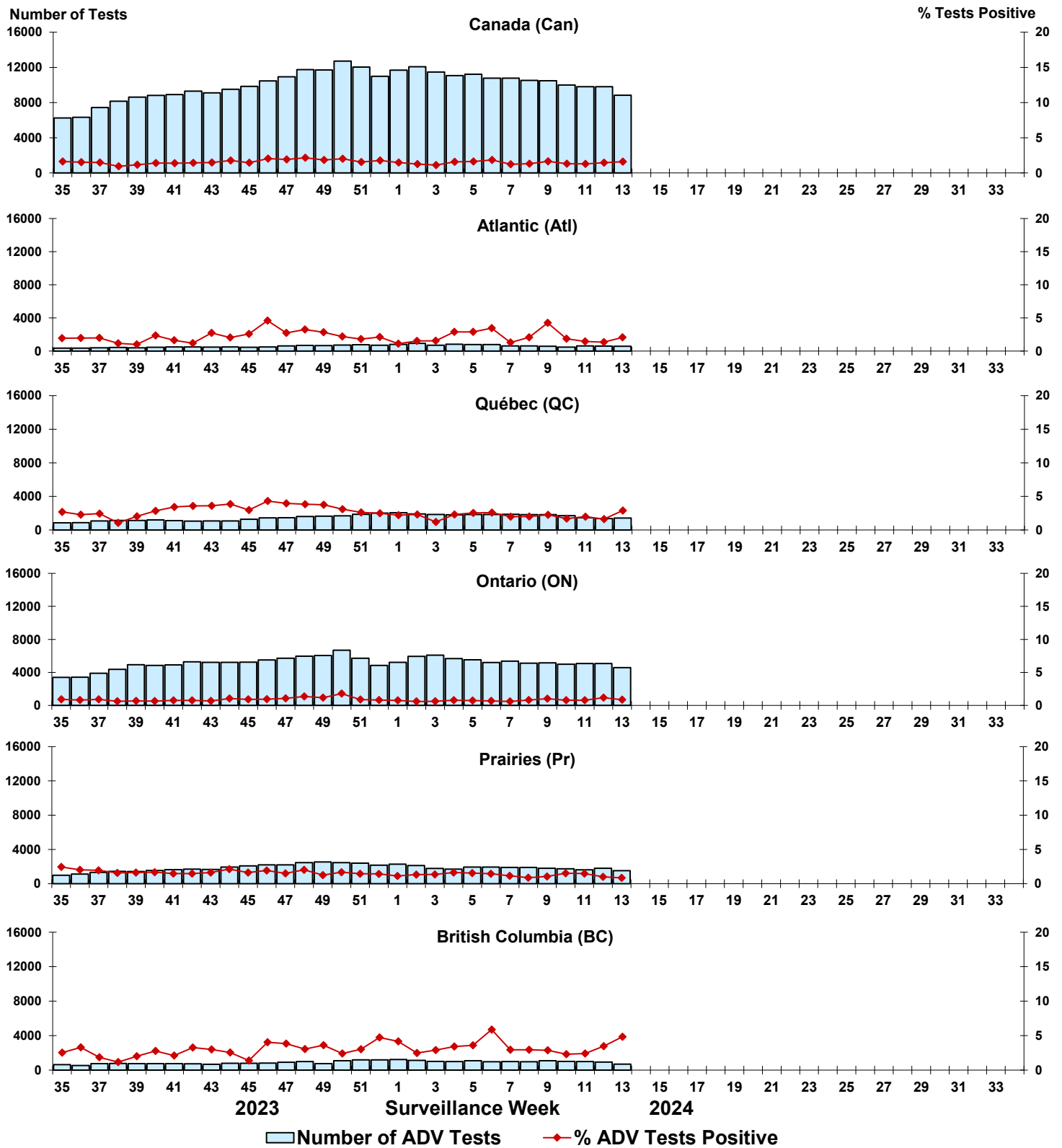


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

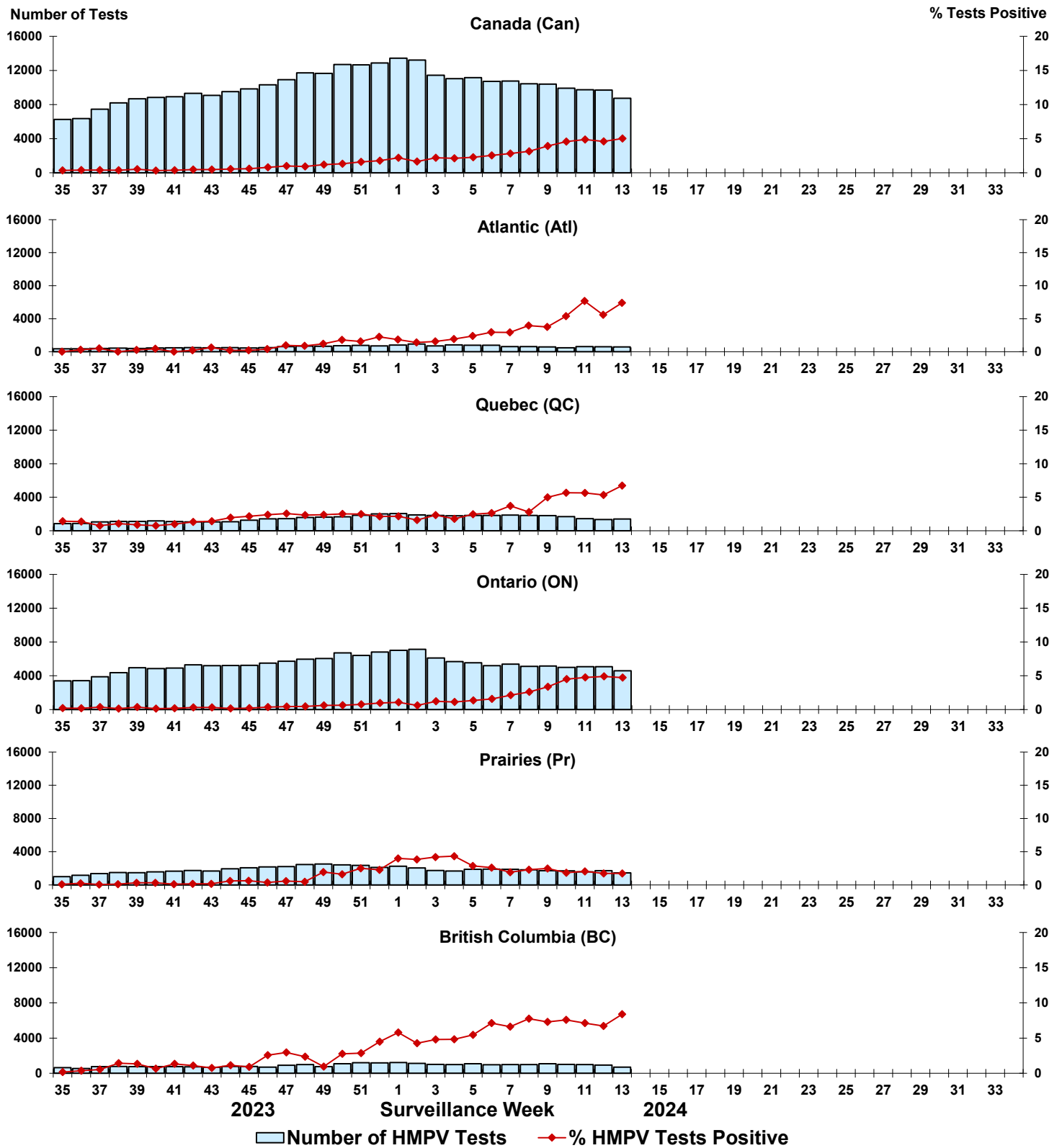


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

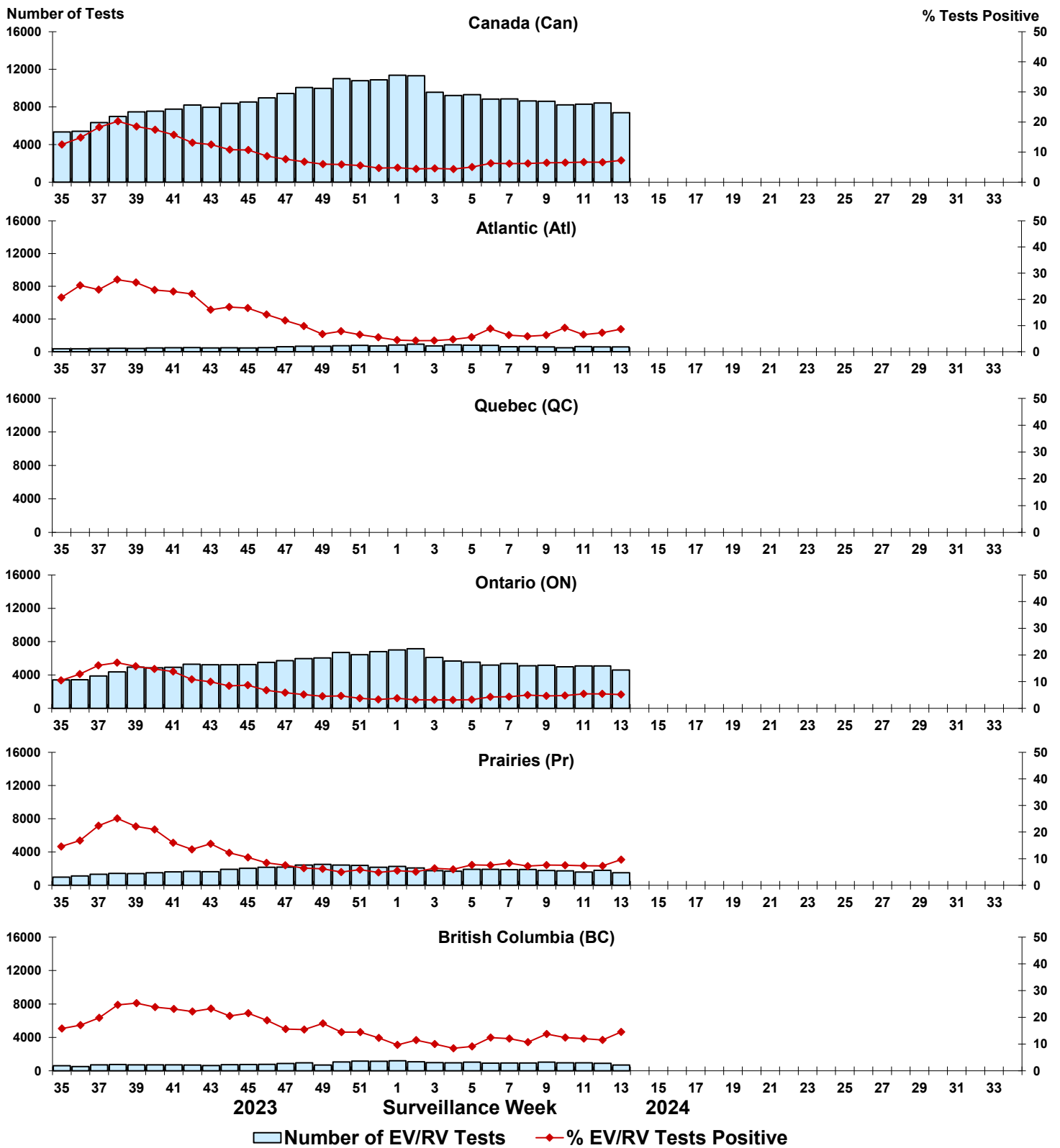


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

