

RESPIRATORY VIRUS DETECTION REPORT

January 28 to February 3, 2024
(Surveillance Week 2024-05)



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 5 (week ending February 3, 2024) in Canada, participating RVDSS laboratories reported 3,436 detections of SARS-CoV-2 from 36,727 tests (9.4% positive). Among non-SARS-CoV-2 respiratory viruses, where test volumes are lower (range of 8,745 to 34,104 tests), activity of flu is highest and is slightly below expected levels for this time of year.

- National SARS-CoV-2 percent positivity has been decreasing since mid-December 2023.
- Activity of influenza A is similar to that of last week and is slightly below expected levels for this time of year (3,783 detections; 11.1% positive). Activity of influenza B remains low (493 detections; 1.5% positive).
- Activity of RSV remains below expected levels for this time of year (1,730 detections; 5.8% 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

© His Majesty the King in Right of Canada, as represented by the Minister of Health, 2021

ISSN: 2564-2359 | Cat.: HP38-7E-PDF | Pub.: 210284

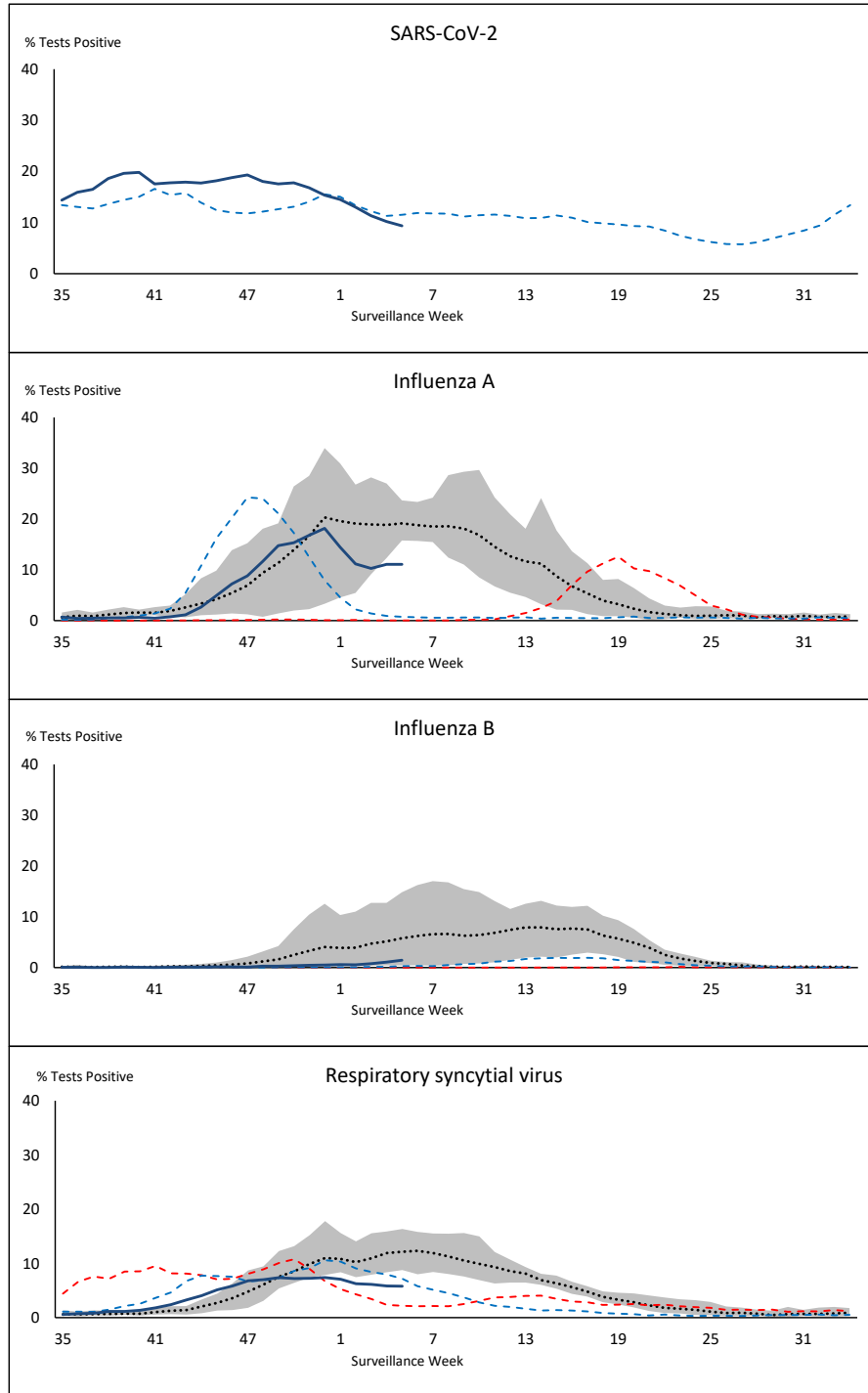


Public Health
Agency of Canada

Agence de la santé
publique du Canada

Canada

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



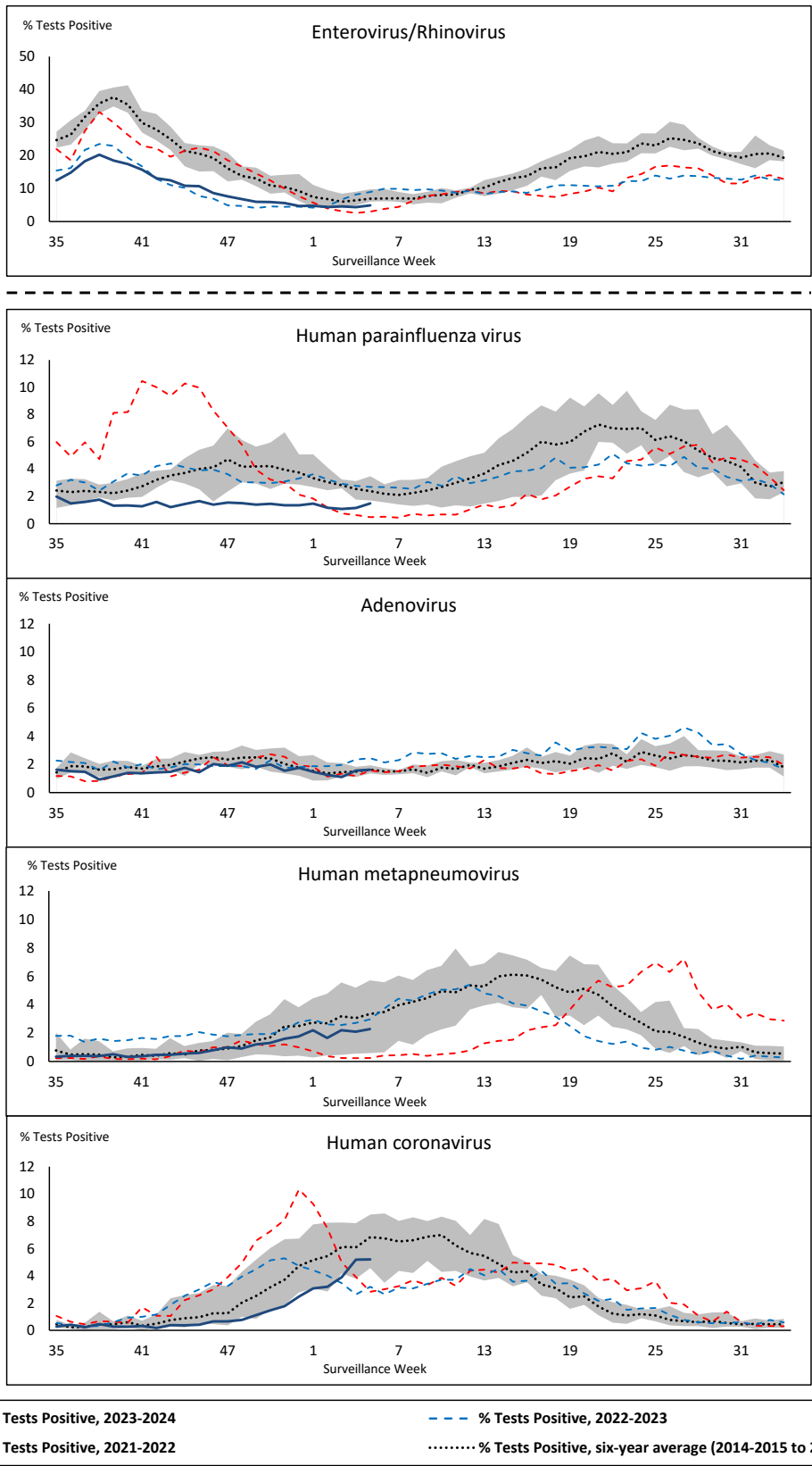
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

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 February 3, 2024 (surveillance week 2024-05)

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	843	76	623	0	0	127	127	5	623	61	623	0	3	4	1	0	623	12	623	16	623	16	623	27
Prince Edward Island	256	12	244	0	0	44	44	3	244	35	20	1	0	0	0	0	20	3	20	1	20	6	20	0
Nova Scotia	1585	147	1506	0	0	259	259	44	1146	72	32	0	0	0	0	0	32	3	32	0	32	4	32	1
New Brunswick	1224	107	1219	44	3	50	97	21	1206	137	103	0	0	1	0	0	103	5	103	2	103	11	103	10
Atlantic	3908	342	3592	44	3	480	527	73	3219	305	778	1	3	5	1	0	778	23	778	19	778	37	778	38
Région Nord-Est	1608	94	1723	0	0	308	308	7	744	73	74	0	0	0	0	0	74	4	70	3	N.C.	N.C.	74	2
Québec-Chaudière-Appalaches	1678	127	1971	0	0	534	534	22	1858	97	704	1	0	0	0	0	711	17	704	17	N.C.	N.C.	515	30
Centre-du-Québec	2496	206	1411	0	0	324	324	15	899	36	32	0	0	0	0	0	32	5	32	1	N.C.	N.C.	32	2
Montréal-Laval	2358	189	3626	0	0	559	559	7	1910	78	987	2	0	6	0	0	987	19	989	23	N.C.	N.C.	987	47
Ouest du Québec	1464	180	773	0	0	138	138	6	759	36	16	0	0	1	0	0	16	0	16	0	N.C.	N.C.	16	0
Montérégie	1390	147	1578	0	0	206	206	5	1578	66	11	0	0	0	0	0	11	1	11	0	N.C.	N.C.	11	0
Province of Québec	10994	943	11082	0	0	2069	2069	62	7748	386	1824	3	0	7	0	0	1831	46	1822	44	N.C.	N.C.	1635	81
P.H.O.L. - Ottawa	284	81	213	8	0	9	17	3	213	3	107	0	0	0	0	2	107	1	107	4	107	3	107	10
EORLA	1094	92	592	0	0	80	80	9	592	17	50	0	0	0	0	0	50	2	50	1	50	6	50	1
P.H.O.L. - Kingston	139	17	79	3	0	4	7	0	79	4	56	0	0	0	0	0	56	0	56	1	56	2	56	2
UHN / Mount Sinai Hospital	992	78	717	0	0	21	21	2	717	6	112	0	0	2	1	0	112	0	112	0	112	6	112	9
P.H.O.L. - Toronto	577	156	1054	28	28	25	79	10	1054	17	959	0	0	0	0	20	959	17	959	22	959	35	959	114
Sick Kids Hospital - Toronto	124	9	111	3	3	0	6	0	111	6	111	0	0	5	0	0	111	0	111	3	111	21	111	9
Shared Hospital Laboratory	1939	79	1580	51	19	27	97	14	1579	22	1581	0	0	0	0	10	1581	6	1581	10	1581	18	1581	36
P.H.O.L. - Sault Ste. Marie	21	7	33	1	3	2	6	0	33	6	25	0	0	0	0	1	25	0	25	0	25	1	25	2
P.H.O.L. - Timmins	32	6	41	6	0	3	9	0	41	1	36	0	0	0	0	0	36	0	36	1	36	0	36	3
St. Joseph's - London	901	65	700	0	0	80	80	11	700	20	55	0	0	0	0	0	55	1	55	1	55	5	55	9
P.H.O.L. - London	393	89	314	15	1	8	24	6	314	16	251	0	0	0	0	16	251	0	251	2	251	4	251	15
P.H.O.L. - Orillia	8	2	25	2	0	2	4	0	25	1	25	0	0	0	0	0	25	0	25	0	25	1	25	2
P.H.O.L. - Thunder Bay	50	6	44	2	0	0	2	0	43	2	36	0	0	0	0	0	36	0	36	3	36	1	36	0
P.H.O.L. - Sudbury	19	1	33	6	0	4	10	0	33	2	29	0	0	0	0	0	29	0	29	1	29	0	29	0
P.H.O.L. - Hamilton	184	30	164	12	1	3	15	4	164	1	134	0	0	0	0	6	134	3	134	6	134	10	134	15
P.H.O.L. - Peterborough	100	9	92	4	0	17	20	1	92	1	52	0	0	0	0	3	52	0	52	2	52	6	52	3
St. Joseph's - Hamilton	1947	128	1817	0	0	170	170	18	1817	28	1817	0	0	24	0	0	1817	9	1817	18	1817	56	0	0
Sault Area Hospital	219	25	142	3	2	3	8	1	142	11	111	1	0	1	0	0	111	2	111	0	111	6	111	3
Province of Ontario	9023	880	7751	144	57	458	655	79	7749	164	5547	1	0	32	1	58	5547	41	5547	75	5547	181	3730	233
Manitoba	1481	126	1152	0	1	27	28	11	1152	129	113	0	3	1	0	0	113	3	124	5	113	19	124	10
Saskatchewan	1814	147	1398	0	0	9	9	99	1231	118	435	2	0	4	1	0	435	15	435	44	435	28	435	19
Alberta	4916	520	4435	46	29	3	97	109	4197	283	1069	1	1	22	0	0	1069	8	1026	0	1060	77	1069	29
Prairies	8211	793	6985	46	30	39	134	219	6580	530	1617	3	4	27	1	0	1617	26	1585	49	1608	124	1628	58
British Columbia	4419	468	4560	81	30	8	395	57	4360	322	1024	1	1	11	1	0	1024	38	1024	58	974	92	974	45
Yukon	60	8	44	2	0	0	3	0	42	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	36	1	36	0	0	0	0	1	36	12	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	36	2	36	1	36	2	N.C.	N.C.
Nunavut	76	1	54	0	0	0	0	2	54	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.
Territories	172	10	134	2	0	0	3	3	132	23	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	36	2	36	1	36	2	N.C.	N.C.
CANADA	36727	3436	34104	317	120	3054	3783	493	29788	1730	10790	9	8	82	4	58	10833	176	10792	246	8943	436	8745	455

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 February 3, 2024 (surveillance weeks 2023-35 to 2024-05)

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	14595	2436	10500	0	0	1027	1027	24	10500	615	10500	8	50	19	94	0	10500	175	10500	129	10500	974	10500	166	
Prince Edward Island	5400	654	2944	0	0	457	457	7	2944	189	337	2	0	0	8	0	336	18	326	2	336	98	320	3	
Nova Scotia	34613	7451	21696	0	0	1622	1622	153	17854	1160	789	15	2	1	10	0	789	38	782	3	789	195	788	1	
New Brunswick	24994	3276	22430	744	18	1682	2444	39	22027	1161	1935	7	4	1	24	0	1935	67	1935	15	1935	371	1935	56	
Atlantic	79602	13817	57570	744	18	4788	5550	223	53325	3125	13561	32	56	21	136	0	13560	298	13543	149	13560	1638	13543	226	
Région Nord-Est	40814	6549	34895	5	0	3654	3659	27	13114	940	1709	14	11	9	16	0	1709	78	1673	48	N.C.	N.C.	1709	23	
Québec-Chaudière-Appalaches	49583	8789	26932	0	0	3529	3529	65	26213	2048	10862	19	9	6	10	0	11181	394	10862	220	N.C.	N.C.	9277	158	
Centre-du-Québec	59413	11686	20995	0	0	2051	2051	33	14887	1237	882	15	8	13	7	0	882	45	882	28	N.C.	N.C.	909	22	
Montréal-Laval	74433	13121	51605	2	1	4293	4296	64	35067	2331	18653	92	38	90	24	0	18653	372	18710	315	N.C.	N.C.	18653	352	
Ouest du Québec	40606	9446	15292	4	0	1357	1361	55	15164	909	462	11	3	4	6	0	462	34	462	9	N.C.	N.C.	462	10	
Montérégie	38306	7431	27922	0	0	2092	2092	44	26872	1438	148	1	0	0	1	0	148	5	148	1	N.C.	N.C.	148	1	
Province of Québec	303155	57022	177641	11	1	16976	16988	288	131317	8903	32716	152	69	122	64	0	33035	928	32737	621	N.C.	N.C.	31158	566	
P.H.O.L. - Ottawa	8656	3310	5714	246	51	102	277	7	5708	121	3363	0	0	0	0	46	3363	11	3361	37	3363	377	3361	74	
EORLA	31638	4046	13903	0	0	1208	1208	67	13903	1055	886	2	3	8	4	0	861	9	886	7	886	169	886	16	
P.H.O.L. - Kingston	6009	1959	3217	89	16	49	128	2	3217	163	2279	0	0	0	0	40	2279	10	2279	2	2279	304	2279	9	
UHN / Mount Sinai Hospital	26373	2729	15994	40	8	419	467	39	15994	186	681	0	0	7	2	0	681	1	681	0	681	29	681	14	
P.H.O.L. - Toronto	15359	5115	26480	1017	849	223	1462	73	26471	968	24088	0	0	0	0	647	24095	271	24073	231	24088	2490	24073	651	
Sick Kids Hospital - Toronto	3025	260	2656	93	82	20	195	7	2656	300	2656	14	12	35	18	0	2656	65	2656	40	2656	467	2656	60	
Shared Hospital Laboratory	39755	4177	34164	648	447	193	1288	76	34166	1271	34006	0	0	0	0	195	28353	257	34038	93	34083	1210	34060	260	
P.H.O.L. - Sault Ste. Marie	329	184	379	37	3	11	45	0	379	39	266	0	0	0	0	3	266	1	266	0	266	20	266	2	
P.H.O.L. - Timmins	809	243	739	46	8	19	62	0	739	58	606	0	0	0	0	14	606	4	606	2	606	45	606	4	
St. Joseph's - London	20793	3101	9628	0	0	705	705	46	9628	667	1530	0	0	0	0	16	1549	23	1549	8	1551	184	1549	23	
P.H.O.L. - London	11500	3748	8139	369	115	68	378	20	8136	438	6476	0	0	0	0	161	6476	33	6474	31	6476	625	6474	88	
P.H.O.L. - Orillia	448	128	1099	54	16	6	76	0	1096	72	1049	0	0	0	0	25	1049	15	1049	5	1049	143	1049	9	
P.H.O.L. - Thunder Bay	1474	435	870	53	0	7	32	1	867	20	717	0	0	0	0	24	717	5	717	17	717	52	717	2	
P.H.O.L. - Sudbury	495	205	577	22	0	9	31	0	575	20	414	0	0	0	0	6	415	1	414	1	414	43	414	4	
P.H.O.L. - Hamilton	5858	1918	4622	113	55	56	172	10	4621	168	3372	0	0	0	0	92	3372	59	3371	44	3372	466	3371	104	
P.H.O.L. - Peterborough	1869	639	1814	198	201	33	103	7	1805	210	1470	0	0	0	0	44	1470	33	1470	18	1470	249	1470	23	
St. Joseph's - Hamilton	45116	5239	39302	0	0	2400	2400	150	39302	1635	39302	0	0	229	0	0	39302	246	39302	188	39302	2342	0	0	
Sault Area Hospital	4300	583	2898	154	7	47	208	4	2891	149	2254	23	0	10	16	0	2205	30	2205	0	2205	220	2215	7	
Province of Ontario	223806	38019	172195	3179	1858	5575	9237	509	172154	7540	125415	39	15	289	40	1313	119715	1074	125397	724	125464	9435	86127	1350	
Manitoba	38681	6008	29263	11	139	1890	2040	77	29263	926	2174	0	9	7	41	0	2174	102	2833	84	2174	446	2833	50	
Saskatchewan	50824	6301	34567	93	6	5265	5364	447	31465	970	10511	22	9	16	20	0	10511	227	10511	538	10511	1095	10511	132	
Alberta	130332	17006	109652	11426	586	563	12655	840	102008	4711	30094	106	79	171	3	0	30088	363	29421	21	29615	2851	30093	443	
Prairies	219837	29315	173482	11530	731	7718	20059	1364	162736	6607	42779	128	97	194	64	0	42773	692	42765	643	42300	4392	43437	625	
British Columbia	88471	12514	87942	3623	513	197	6915	228	86200	4511	20230	100	141	107	150	0	20232	607	20117	537	19405	3167	19382	357	
Yukon	1288	148	838	30	12	0	49	1	831	41	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	838	58	779	166	6	1	173	1	779	70	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	580	27	580	7	779	100	N.C.	N.C.
Nunavut	2859	269	1978	0	28	458	486	2	1978	205	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	4985	475	3595	196	46	459	708	4	3588	316	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	580	27	580	7	779	100	N.C.	N.C.	
CANADA	919856	151162	672425	19283	3167	35713	59457	2616	609320	31002	234701	451	378	733	454	1313	229895	3626	235139	2681	201508	18732	193647	3124	

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.

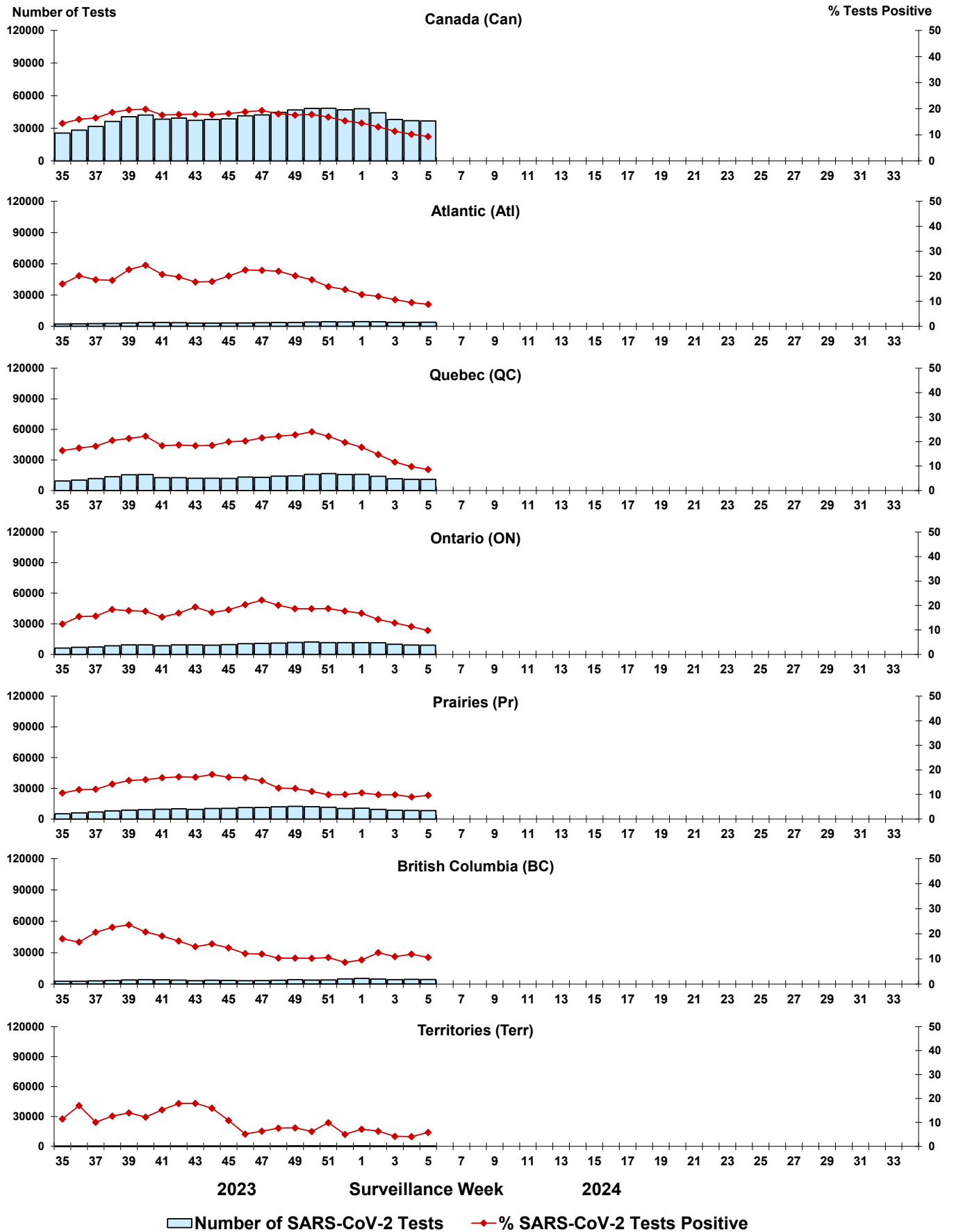
Some specimens from Yukon (YT) are sent to reference laboratories in British Columbia and reported results reflect specimens identified as originating from YT.

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. 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

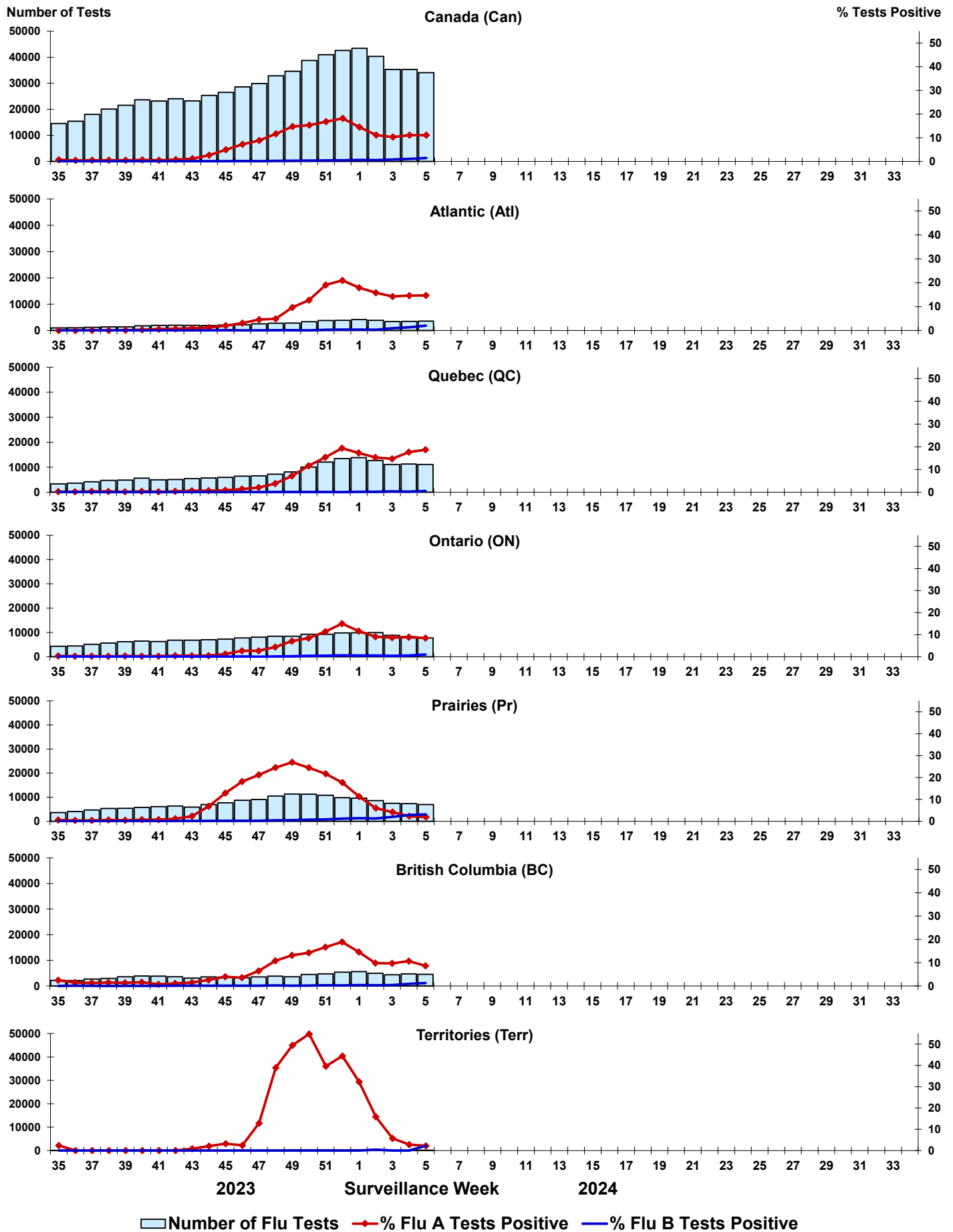
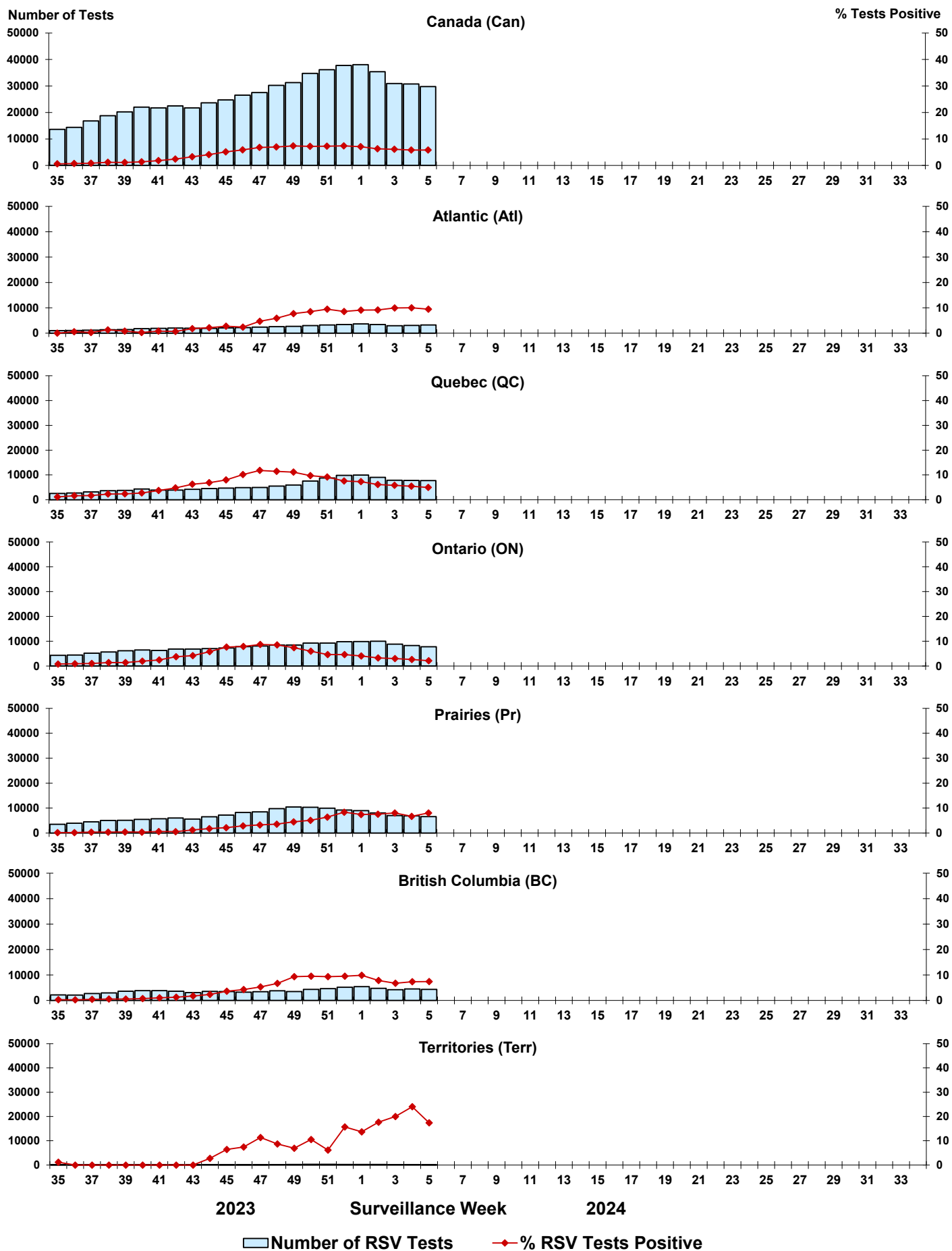


Figure 5: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



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

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

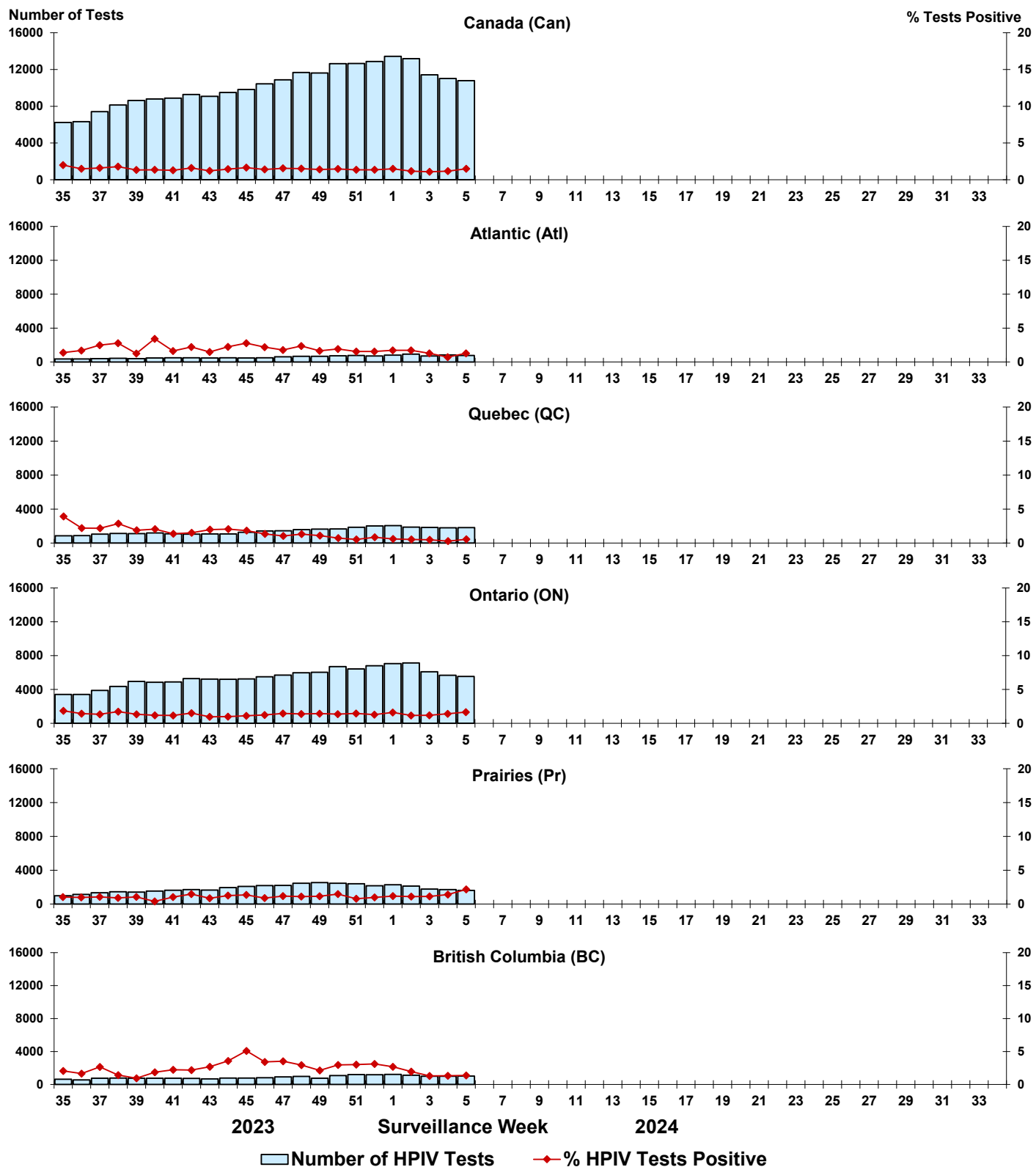


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

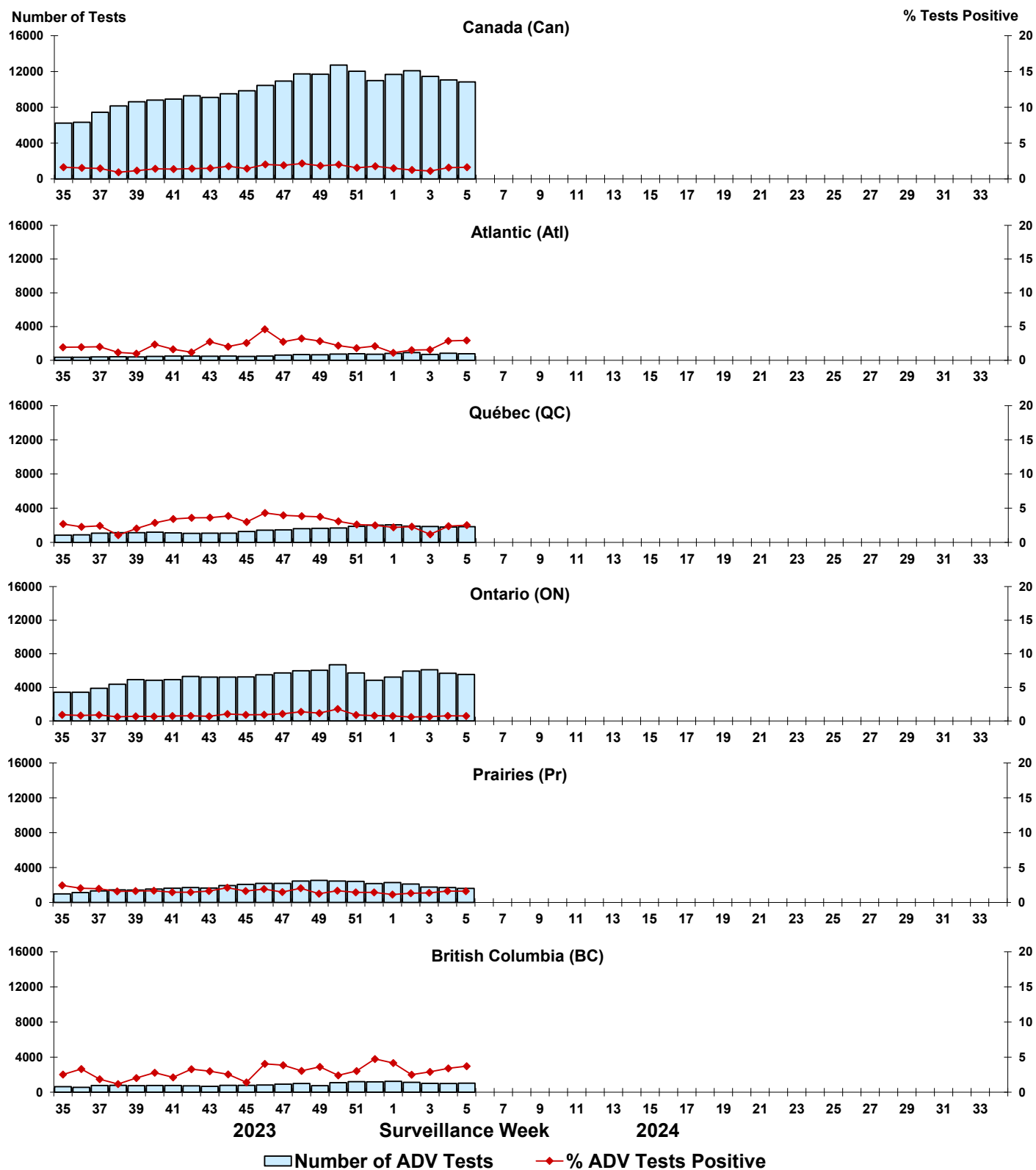


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

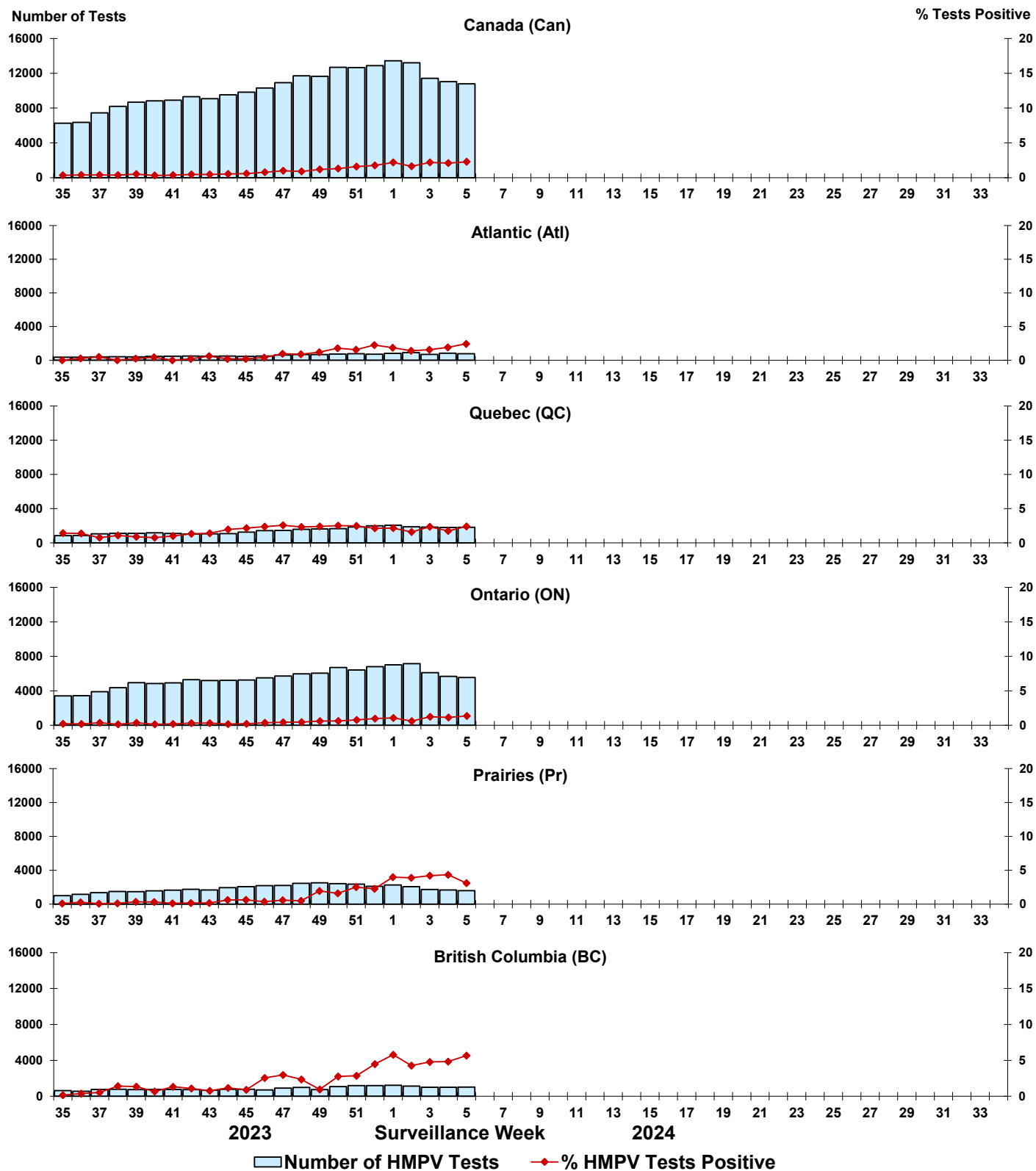


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

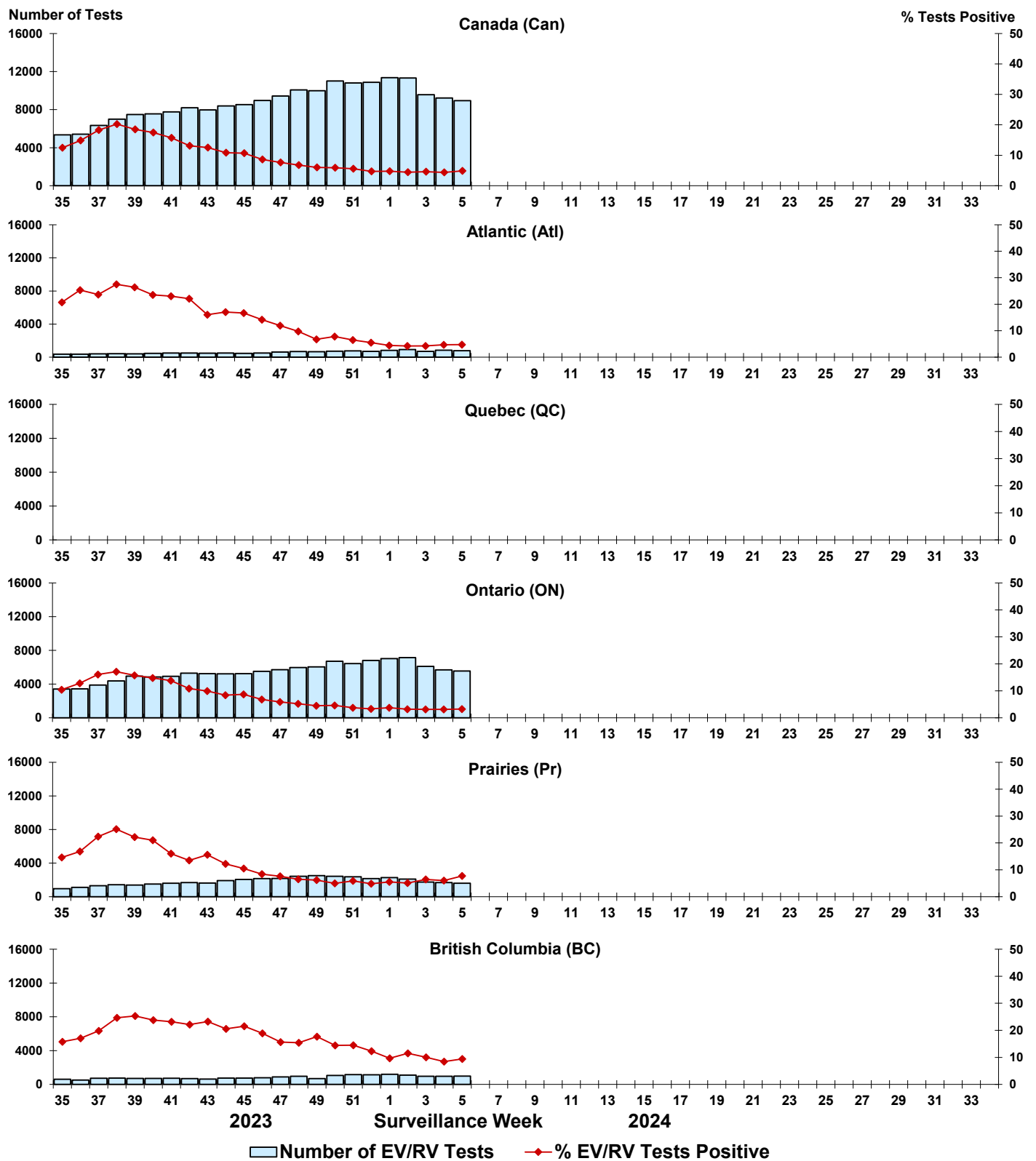


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

