

RESPIRATORY VIRUS DETECTION REPORT

November 12 to November 18, 2023
(Surveillance Week 2023-46)



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 46 (week ending November 18, 2023) in Canada, participating RVDSS laboratories reported 7,772 detections of SARS-CoV-2 from 41,355 tests (18.8% positive). Among non-SARS-CoV-2 respiratory viruses, where test volumes are lower (range of 7,997 to 27,368 tests), activity of both flu and RSV is increasing, as is expected at this time of year.

- In recent weeks national SARS-CoV-2 percent positivity has remained relatively stable, but trends vary by region.
- At the national level, activity of influenza is increasing, but is within expected levels for this time of year (1,849 detections; 6.8% positive). Influenza percent positivity currently varies greatly by region.
- Activity of RSV continues to increase but is now within expected levels for this time of year (1,502 detections; 5.9% 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

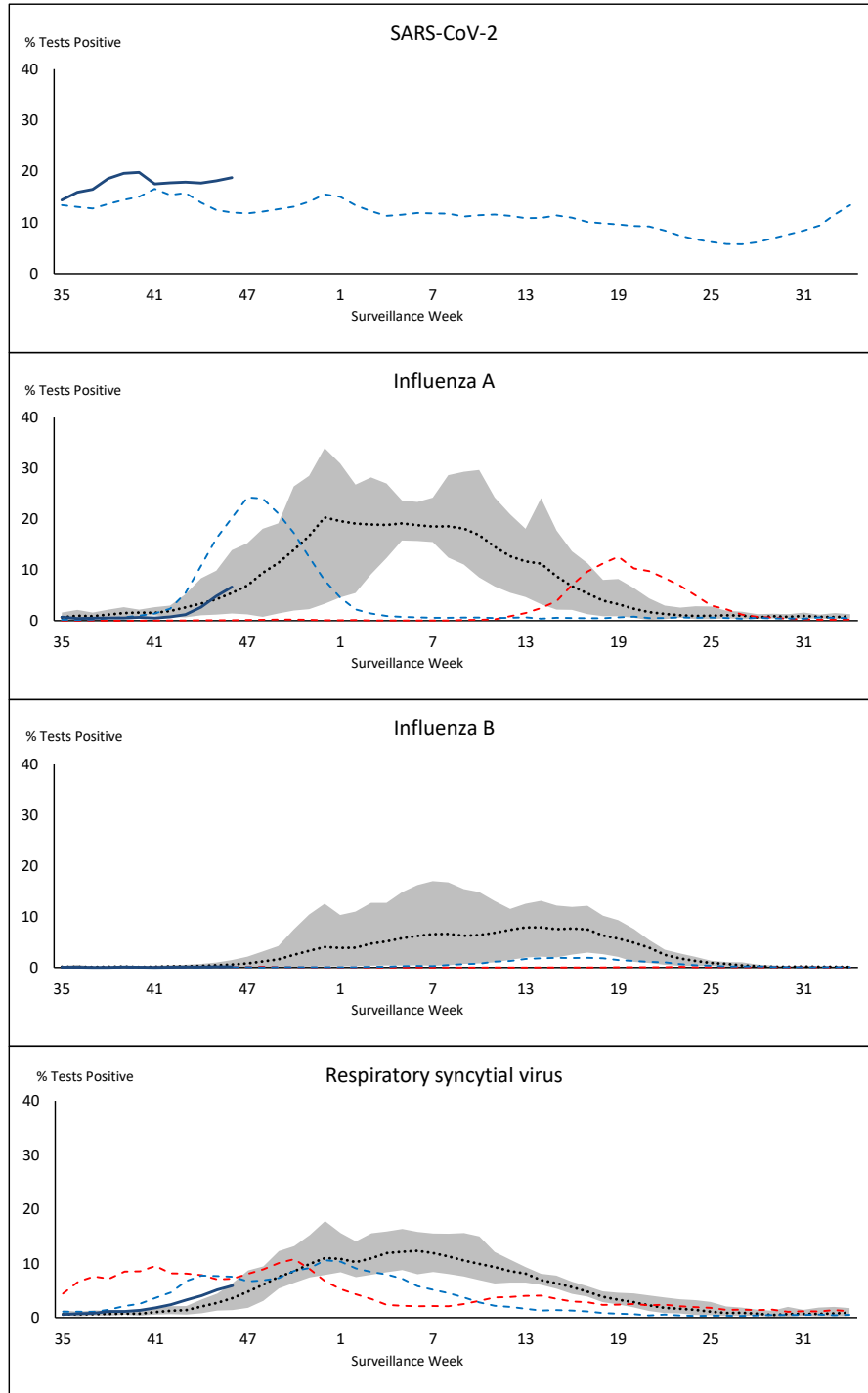
SARS-CoV-2: Severe acute respiratory syndrome coronavirus 2

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



— % Tests Positive, 2023-2024 - - - % Tests Positive, 2022-2023
- - - % Tests Positive, 2021-2022 ⋯ % Tests Positive, six-year average (2014-2015 to 2019-2020)

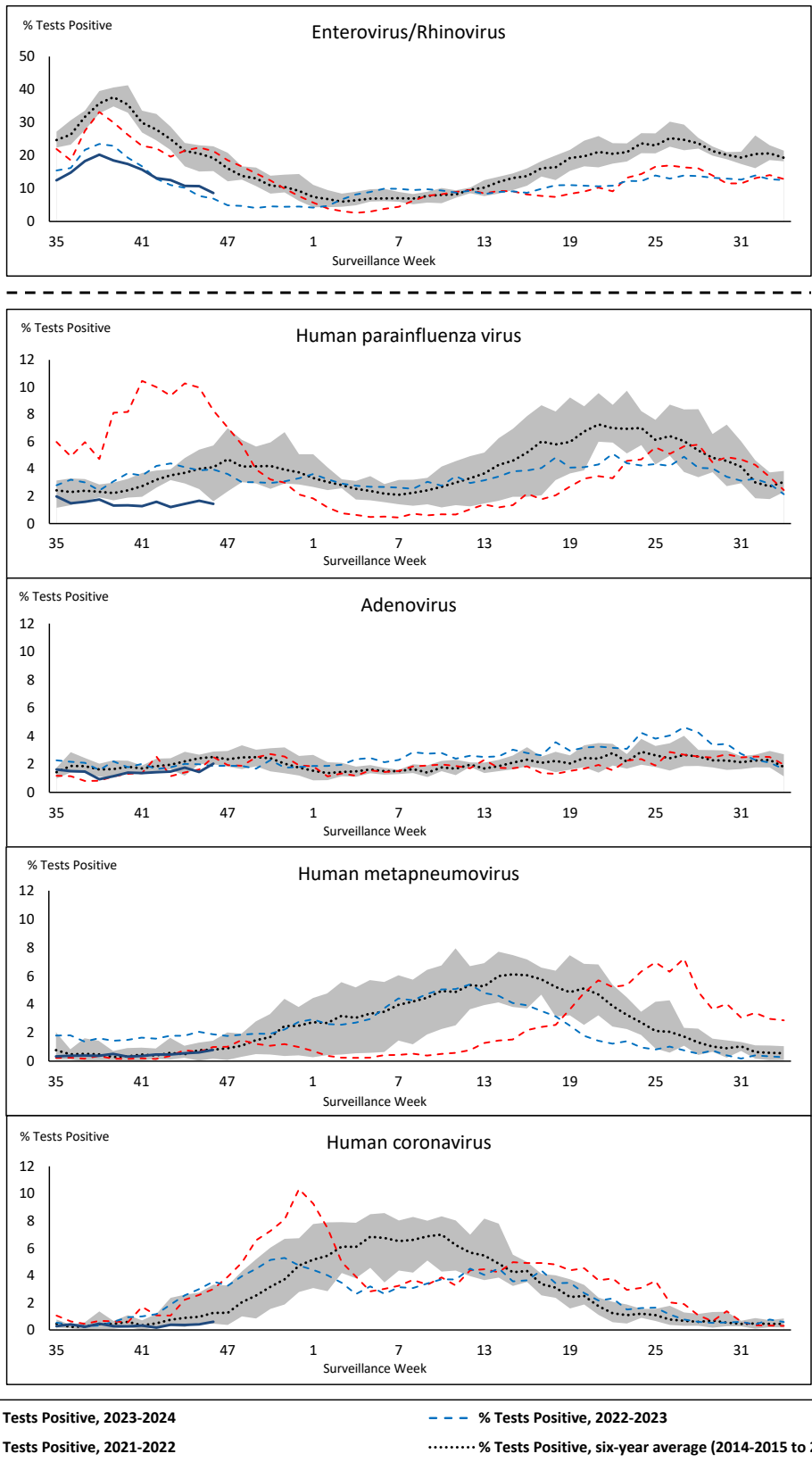
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

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 18, 2023 (surveillance week 2023-46)

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	506	122	367	0	0	26	26	1	367	10	367	1	1	0	6	0	367	17	367	2	367	33	367	1	
Prince Edward Island	185	31	94	0	0	1	1	0	94	0	7	0	0	0	1	0	7	1	7	0	7	2	7	0	
Nova Scotia	1466	392	789	0	0	13	13	1	789	24	42	0	0	0	1	0	42	0	42	0	42	15	42	0	
New Brunswick	1029	171	969	13	2	14	29	0	945	19	84	0	0	0	1	0	84	5	84	0	84	21	84	0	
Atlantic	3186	716	2219	13	2	54	69	2	2195	53	500	1	1	0	9	0	500	23	500	2	500	71	500	1	
Région Nord-Est	1679	354	1356	0	0	7	7	0	472	24	80	0	0	0	0	0	80	7	78	1	N.C.	N.C.	80	0	
Québec-Chaudière-Appalaches	2301	473	768	0	0	5	5	1	768	85	297	2	2	0	0	0	305	19	297	6	N.C.	N.C.	297	1	
Centre-du-Québec	2573	486	901	0	0	17	17	1	556	95	55	0	0	1	0	0	55	3	55	2	N.C.	N.C.	57	1	
Montréal-Laval	3137	591	1603	0	0	24	24	2	1342	142	735	8	1	3	0	0	735	29	736	22	N.C.	N.C.	735	11	
Ouest du Québec	1698	445	634	0	0	15	15	2	630	59	35	1	0	1	0	0	35	2	35	0	N.C.	N.C.	35	0	
Montérégie	1797	315	931	0	0	20	20	0	888	72	3	0	0	0	0	0	3	0	3	0	N.C.	N.C.	3	0	
Province of Québec	13185	2664	6193	0	0	88	88	6	4656	477	1205	11	3	5	0	0	1213	60	1204	31	N.C.	N.C.	1207	13	
P.H.O.L. - Ottawa	326	130	231	6	1	2	3	0	231	11	146	0	0	0	0	3	146	1	146	4	146	12	146	2	
EOURLA	1747	288	669	0	0	33	33	4	699	92	33	2	0	0	2	0	33	2	33	0	33	10	33	1	
P.H.O.L. - Kingston	253	106	145	0	0	0	0	0	145	13	132	0	0	0	0	1	132	0	132	0	132	18	132	0	
UHN / Mount Sinai Hospital	1184	151	749	13	0	1	14	3	749	15	32	0	0	0	1	0	32	0	32	0	32	4	32	1	
P.H.O.L. - Toronto	742	250	1212	56	18	8	68	1	1210	50	1076	0	0	0	0	22	1076	11	1076	10	1076	74	1076	7	
Sick Kids Hospital - Toronto	158	8	136	3	4	5	12	0	136	34	136	0	1	1	1	0	136	4	136	0	136	33	136	0	
Shared Hospital Laboratory	1969	287	1483	8	12	5	25	1	1483	132	1481	0	0	0	0	7	1481	13	1482	2	1482	53	1482	5	
P.H.O.L. - Sault Ste. Marie	13	7	10	0	0	0	0	0	10	1	4	0	0	0	0	0	4	0	4	0	4	1	4	0	
P.H.O.L. - Timmins	57	33	40	0	0	0	0	0	40	2	30	0	0	0	0	0	30	1	30	0	30	4	30	0	
St. Joseph's - London	862	160	489	0	0	6	6	2	489	52	46	0	0	0	0	2	46	2	46	0	46	5	46	0	
P.H.O.L. - London	523	211	346	7	6	1	5	0	346	18	253	0	0	0	0	3	253	0	253	0	253	24	253	0	
P.H.O.L. - Orillia	17	8	47	0	0	0	0	0	47	5	47	0	0	0	0	0	47	0	47	0	47	4	47	0	
P.H.O.L. - Thunder Bay	68	19	23	0	0	0	0	0	23	0	17	0	0	0	0	2	17	0	17	0	17	0	17	0	
P.H.O.L. - Sudbury	26	14	19	0	0	0	0	0	19	1	19	0	0	0	0	2	19	0	19	0	19	1	19	0	
P.H.O.L. - Hamilton	306	136	279	1	0	0	0	0	279	22	195	0	0	0	0	6	195	1	195	0	195	14	195	0	
P.H.O.L. - Peterborough	70	27	112	0	0	0	0	0	112	26	95	0	0	0	0	0	95	1	95	0	95	11	95	0	
St. Joseph's - Hamilton	1941	265	1667	0	0	42	42	1	1667	142	1667	0	0	8	0	0	1667	12	1667	4	1667	97	0	0	
Sault Area Hospital	209	32	141	2	0	0	2	0	141	1	90	3	1	0	1	0	90	3	90	0	90	9	90	0	
Province of Ontario	10471	2132	7798	96	41	103	210	12	7826	617	5499	5	1	9	5	48	5499	51	5500	20	5500	374	3833	16	
Manitoba	1771	443	1386	0	0	77	77	0	1386	11	85	0	0	0	1	0	85	5	127	1	85	16	127	0	
Saskatchewan	3009	411	1915	0	0	590	590	4	1780	28	596	1	0	1	0	0	596	16	596	5	596	45	596	0	
Alberta	6281	1012	4604	590	22	51	663	11	4355	178	1070	6	0	7	0	0	1070	10	1021	0	1046	92	1070	14	
Prairies	11061	1866	7905	590	22	718	1330	15	7521	217	1751	7	0	8	1	0	1751	31	1744	6	1727	153	1793	14	
British Columbia	3237	383	3132	39	14	5	111	3	3132	129	704	10	7	3	5	0	704	32	704	17	664	127	664	4	
Yukon	67	4	36	0	0	0	1	0	36	3	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	12	0	2	0	2	0	12	0	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	12	0	N.C.	N.C.
Nunavut	126	6	73	0	0	0	0	0	73	6	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	215	11	121	0	2	0	3	0	121	9	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	12	0	N.C.	N.C.
CANADA	41355	7772	27368	738	81	968	1811	38	25451	1502	9659	34	12	25	20	48	9667	197	9652	76	8403	725	7997	48	

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 18, 2023 (surveillance weeks 2023-35 to 2023-46)

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	6114	1146	4003	0	0	79	79	1	4003	48	4003	5	11	6	42	0	4003	70	4003	13	4003	706	4003	14
Prince Edward Island	2261	291	621	0	0	7	7	0	621	3	107	0	0	0	4	0	106	5	96	0	106	49	90	0
Nova Scotia	17048	4242	7266	0	0	52	52	6	7266	130	454	14	2	1	8	0	454	22	447	1	454	150	453	0
New Brunswick	10489	1568	8071	27	4	20	51	1	7930	78	774	6	2	0	14	0	774	17	774	0	774	221	774	1
Atlantic	35912	7247	19961	27	4	158	189	8	19820	259	5338	25	15	7	68	0	5337	114	5320	14	5337	1126	5320	15
Région Nord-Est	19527	3750	14129	0	0	28	28	1	3913	115	731	11	7	2	14	0	731	30	723	14	N.C.	N.C.	731	1
Québec-Chaudière-Appalaches	26144	4707	7039	0	0	27	27	7	7046	358	2993	14	6	1	9	0	3151	153	2993	44	N.C.	N.C.	2993	3
Centre-du-Québec	26979	5509	6301	0	0	41	41	5	5271	338	433	11	7	5	3	0	433	21	433	8	N.C.	N.C.	438	2
Montréal-Laval	37295	6119	15788	0	0	94	94	8	14036	691	8242	76	26	36	19	0	8242	167	8261	111	N.C.	N.C.	8242	62
Ouest du Québec	21360	5304	6396	1	0	45	46	8	6379	299	265	9	3	2	5	0	265	18	265	3	N.C.	N.C.	265	1
Monterégie	18681	3616	9904	0	0	78	78	10	9239	358	64	1	0	0	1	0	64	1	64	0	N.C.	N.C.	64	0
Province of Québec	149986	29005	59557	1	0	313	314	39	45884	2159	12728	122	49	46	51	0	12886	390	12739	180	N.C.	N.C.	12733	69
P.H.O.L. - Ottawa	4580	1696	2720	16	2	3	15	0	2720	38	1632	0	0	0	0	24	1632	2	1632	8	1632	296	1632	21
EORLA	15815	1920	5672	0	0	59	59	8	5702	539	387	2	3	2	3	0	362	4	387	1	387	101	387	2
P.H.O.L. - Kingston	3158	984	1528	1	0	0	0	0	1528	29	1181	0	0	0	0	26	1181	5	1181	0	1181	237	1181	1
UHN / Mount Sinai Hospital	12126	1042	7085	13	0	14	27	12	7085	48	273	0	0	4	1	0	273	1	273	0	273	17	273	1
P.H.O.L. - Toronto	7308	2470	11436	152	50	11	162	4	11434	188	10314	0	0	0	0	287	10315	103	10311	54	10314	1841	10311	29
Sick Kids Hospital - Toronto	1446	93	1237	16	14	20	50	1	1237	153	1237	11	6	9	7	0	1237	33	1237	6	1237	250	1237	4
Shared Hospital Laboratory	15639	1680	14816	39	30	7	76	3	14819	585	14801	0	0	0	0	95	14799	111	14798	14	14825	884	14800	27
P.H.O.L. - Sault Ste. Marie	188	142	145	0	0	0	0	0	145	1	81	0	0	0	0	1	81	0	81	0	81	15	81	0
P.H.O.L. - Timmins	444	166	326	0	0	0	0	0	326	5	264	0	0	0	0	12	264	4	264	0	264	34	264	0
St. Joseph's - London	9580	1444	2026	0	0	12	12	3	2026	133	980	0	0	0	0	12	997	8	997	1	997	147	997	4
P.H.O.L. - London	6028	2035	3978	15	10	1	13	1	3978	102	3114	0	0	0	0	66	3114	15	3114	0	3114	495	3114	0
P.H.O.L. - Orillia	228	53	524	2	1	0	3	0	523	29	510	0	0	0	0	15	510	11	510	2	510	120	510	0
P.H.O.L. - Thunder Bay	762	282	381	0	0	0	0	0	381	0	297	0	0	0	0	9	297	1	297	1	297	42	297	1
P.H.O.L. - Sudbury	270	130	254	0	0	0	0	0	252	1	188	0	0	0	0	4	189	1	188	0	188	34	188	0
P.H.O.L. - Hamilton	3050	994	2447	10	1	0	5	1	2447	60	1785	0	0	0	0	50	1785	24	1785	14	1785	350	1785	2
P.H.O.L. - Peterborough	853	320	860	0	0	1	1	1	860	113	751	0	0	0	0	17	751	13	751	2	751	180	751	2
St. Joseph's - Hamilton	20591	2264	17585	0	0	91	91	14	17585	664	17585	0	0	50	0	0	17585	106	17585	39	17585	1524	0	0
Sault Area Hospital	1734	231	1163	4	1	1	6	0	1156	5	866	5	0	2	6	0	866	11	866	0	866	132	876	0
Province of Ontario	103800	17946	74183	268	109	220	520	48	74204	2693	56246	18	9	67	17	618	56238	453	56257	142	56287	6699	38684	94
Manitoba	18253	3463	14115	0	3	138	141	5	14115	67	855	0	5	4	28	0	855	46	1332	4	855	309	1332	4
Saskatchewan	25171	3445	12247	23	4	1355	1382	14	11727	107	4585	8	4	2	8	0	4585	131	4585	48	4585	757	4585	8
Alberta	61473	9614	42639	1393	132	95	1620	69	39626	523	12935	56	38	33	3	0	12933	146	12781	3	12680	1857	12934	68
Prairies	104897	16522	69001	1416	139	1588	3143	88	65468	697	18375	64	47	39	39	0	18373	323	18698	55	18120	2923	18851	80
British Columbia	41357	7491	38002	451	80	27	723	27	37984	561	8642	54	50	29	85	0	8642	216	8642	89	8206	1766	8183	37
Yukon	686	87	396	0	1	0	3	0	396	8	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	248	32	199	5	4	0	9	0	199	0	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	199	52	N.C.
Nunavut	1183	162	754	0	1	0	1	0	754	14	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	2117	281	1349	5	6	0	13	0	1349	22	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	199	52	N.C.	N.C.
CANADA	438069	78492	262053	2168	338	2306	4902	210	244709	6391	101329	283	170	188	260	618	101476	1496	101656	480	88149	12566	83771	295

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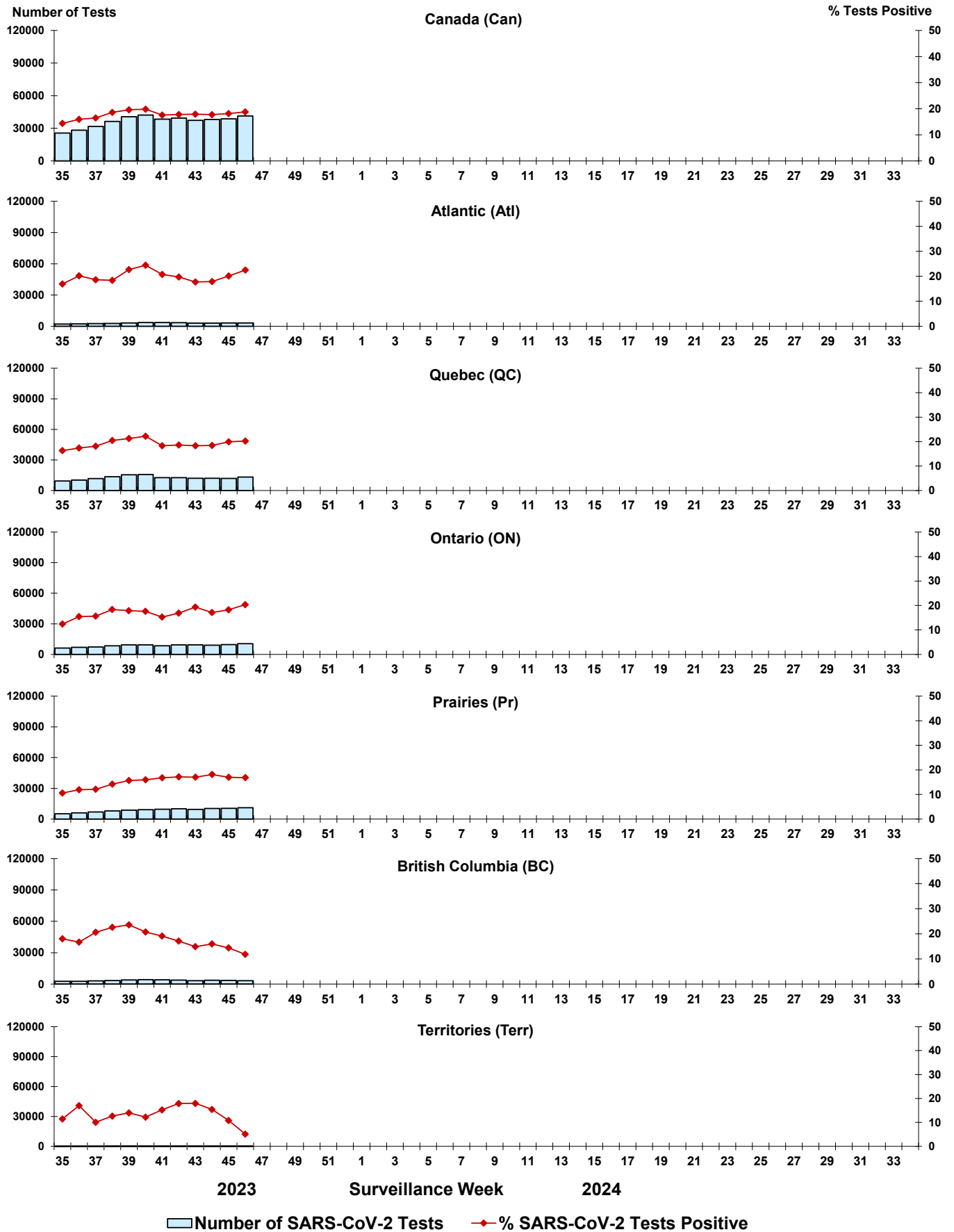
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Results from British Columbia comprise of specimens from the following sites: Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Vancouver Coastal Health sites, Victoria 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

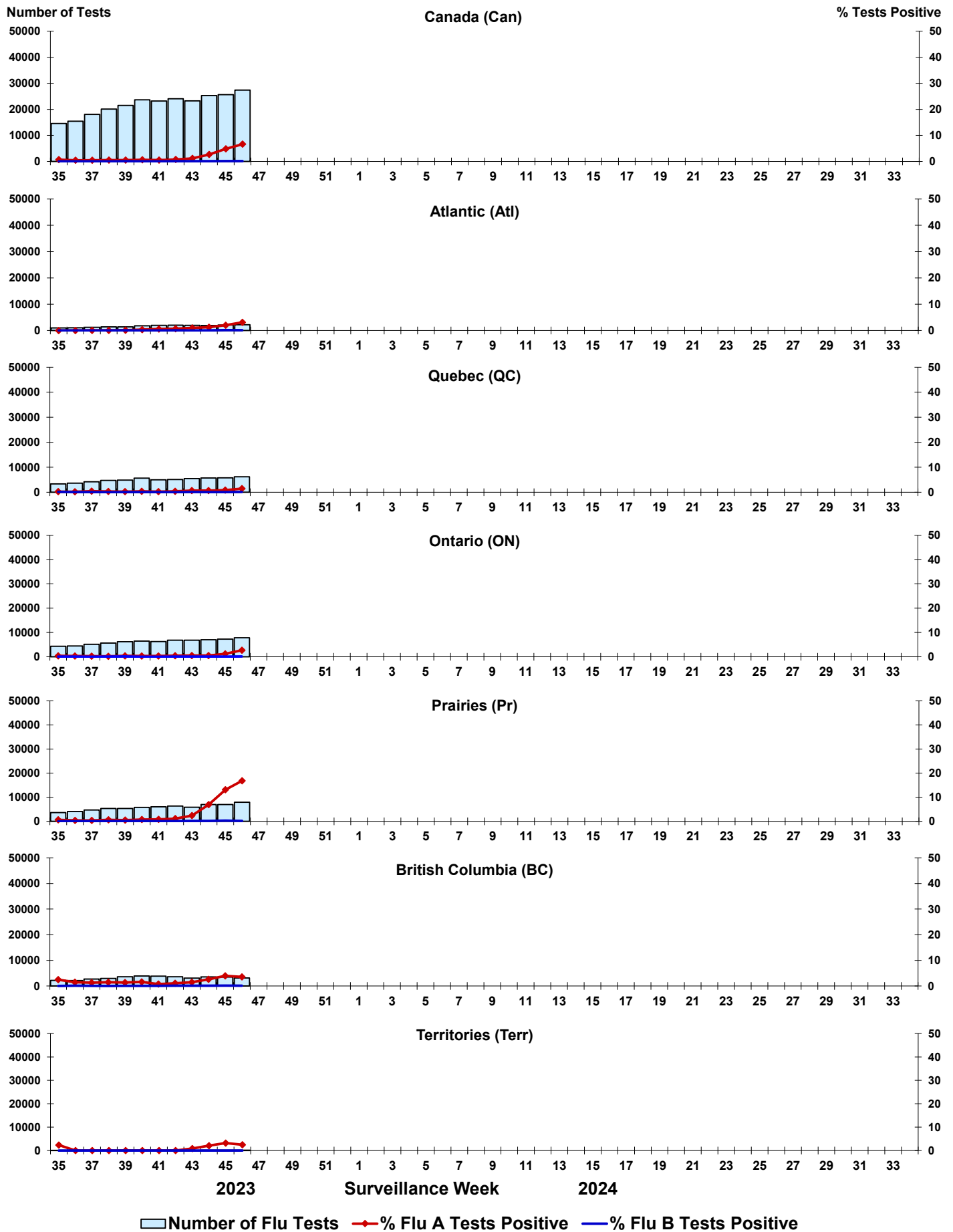


Figure 5: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

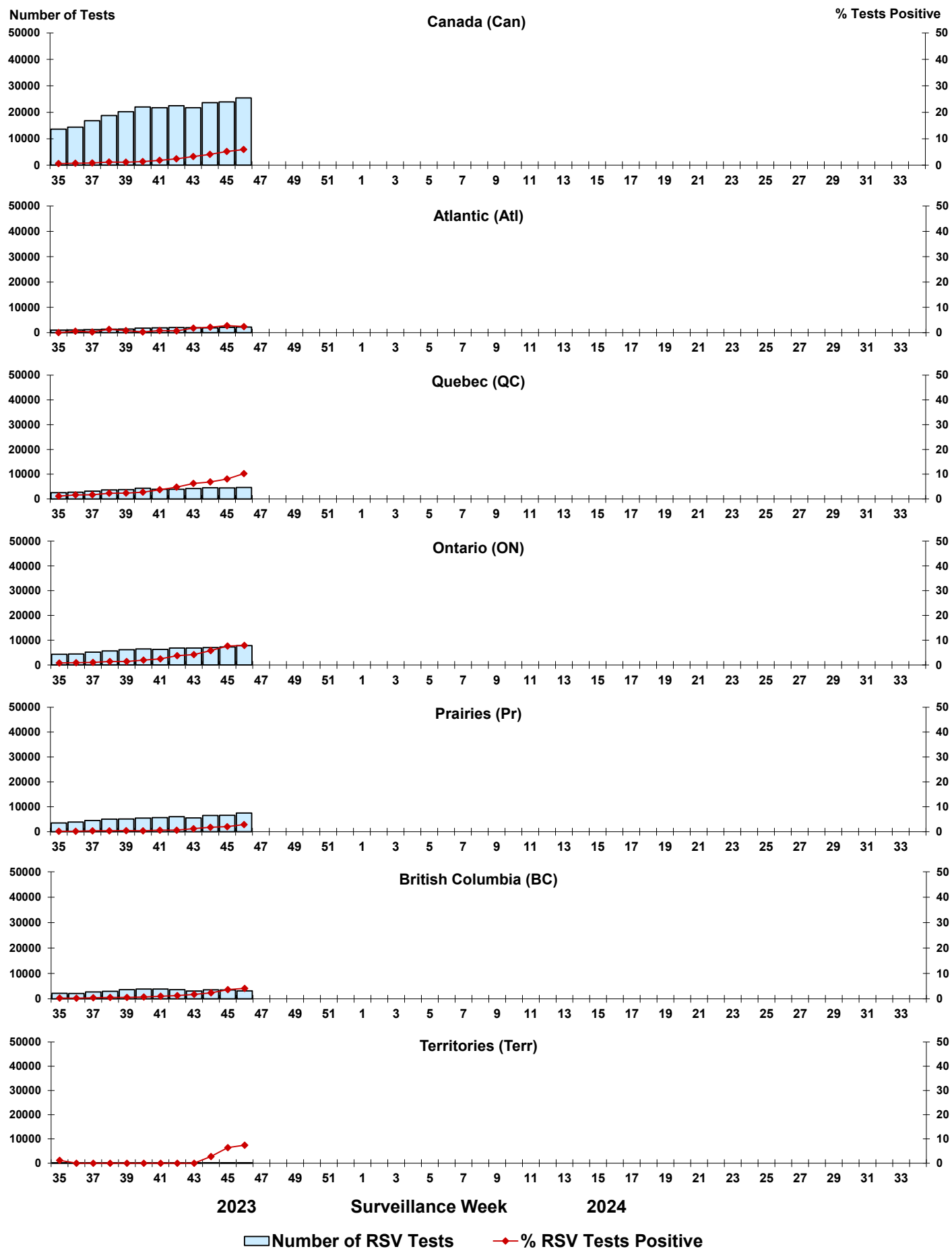


Figure 6: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

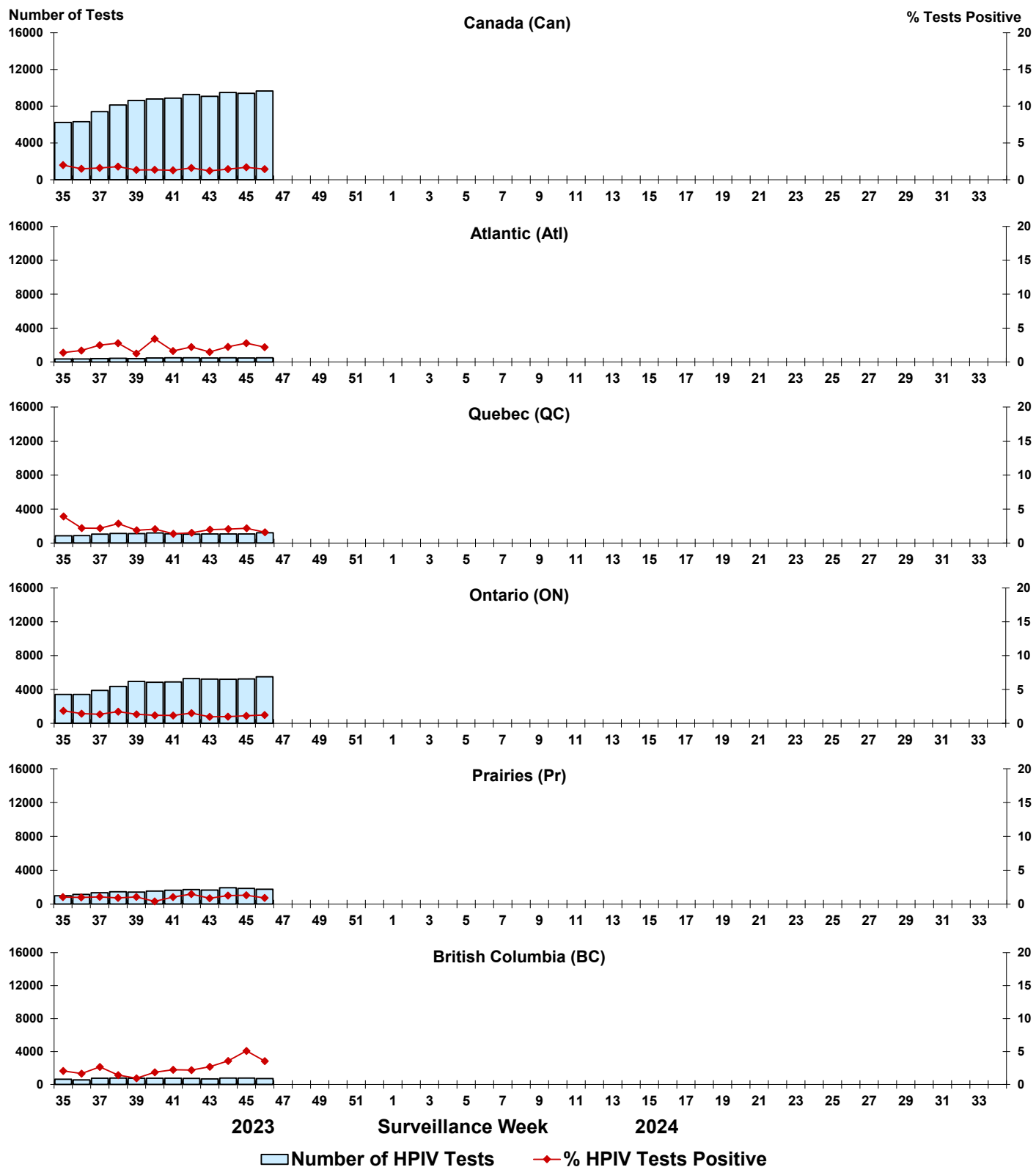


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

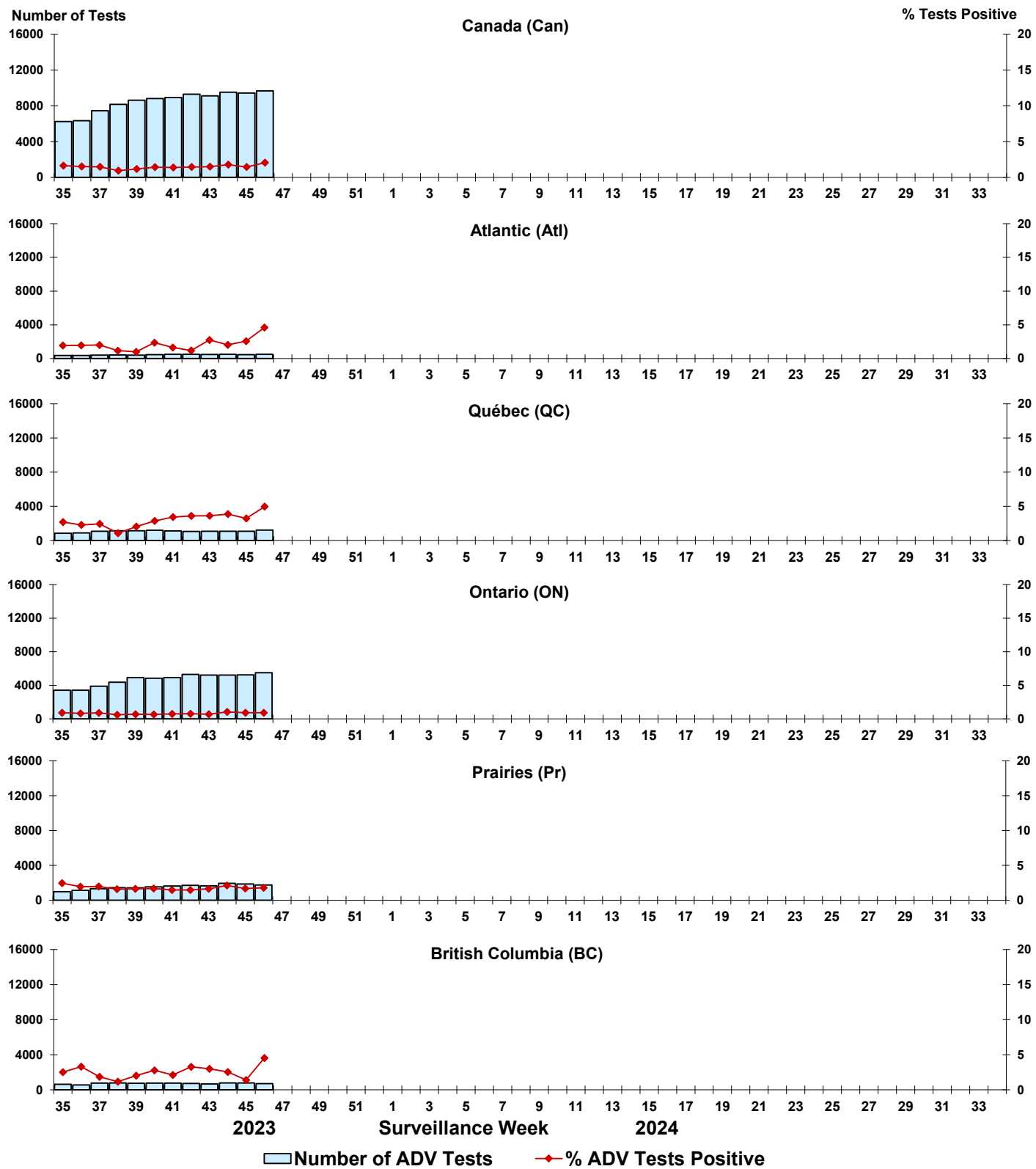


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

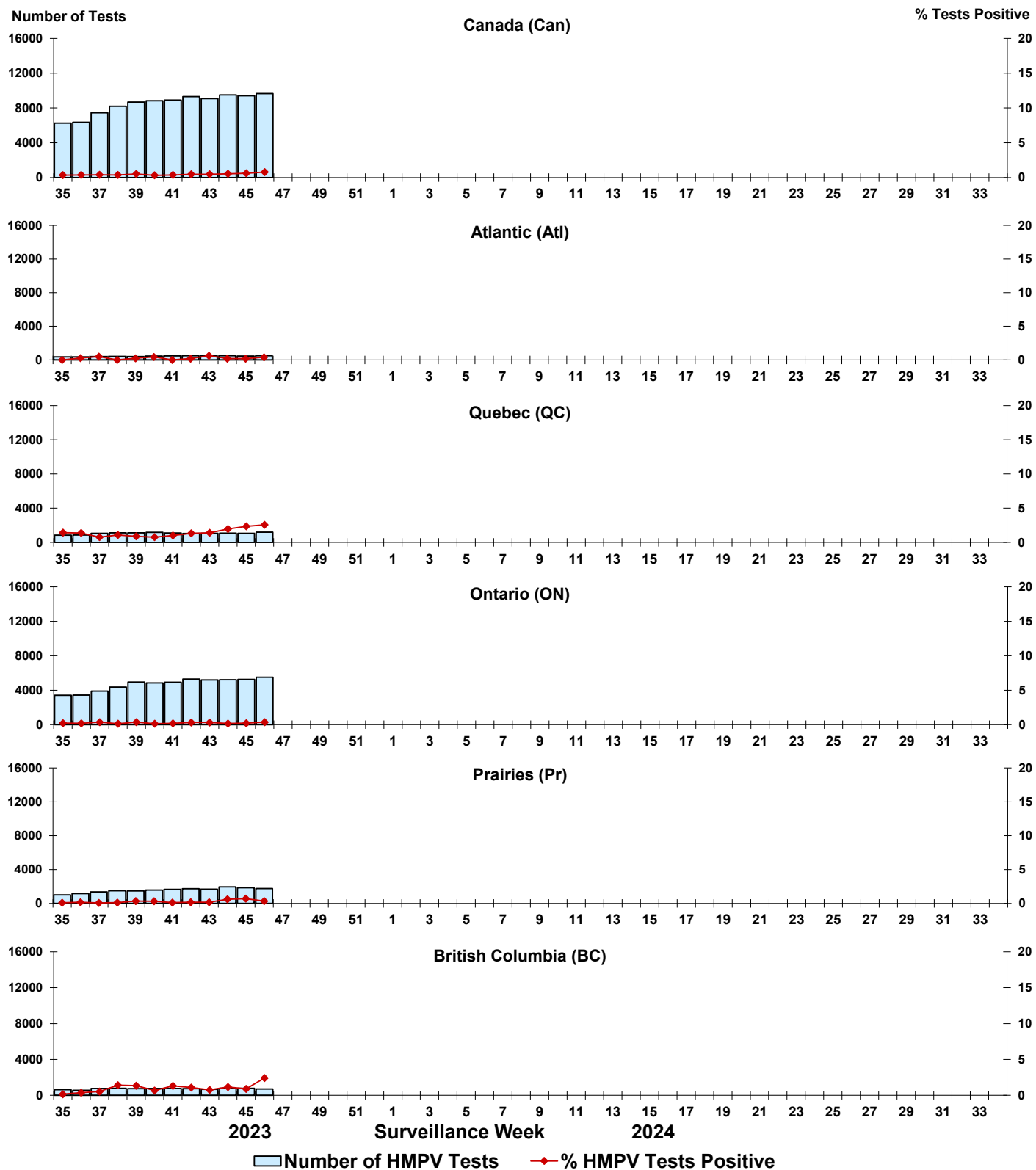


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

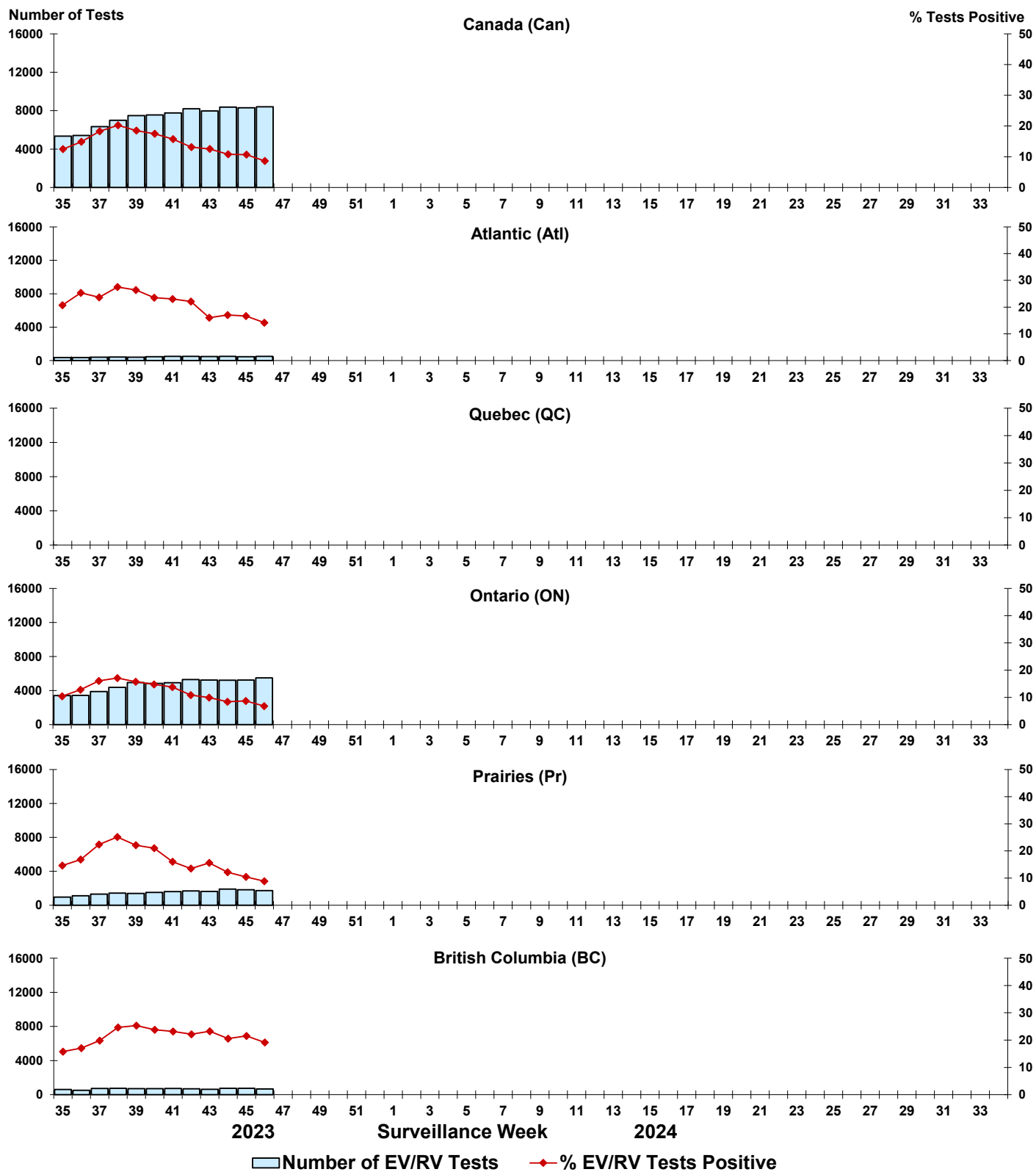


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

