

RESPIRATORY VIRUS DETECTION REPORT

April 28 to May 4, 2024
(Surveillance Week 2024-18)



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 18 (week ending May 4, 2024) in Canada, percent positivity is currently highest for enterovirus/rhinovirus among respiratory viruses under surveillance. The following results were reported from RVDSS laboratories:

- After reaching a low in early-April 2024 (4.7% positive), national SARS-CoV-2 percent positivity is showing early signs of increase (1,759 detections; 6.5% positive). Trends currently vary by region.
- Influenza percent positivity is decreasing (1,334 detections; 5.2% positive) as percent positivity has decreased in recent weeks for both influenza A (278 detections; 1.1% positive) and influenza B (1,056 detections; 4.1% positive).
- RSV percent positivity is stable (293 detections; 1.3% positive).
- Percent positivity of all other non-SARS-CoV-2 respiratory viruses is 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

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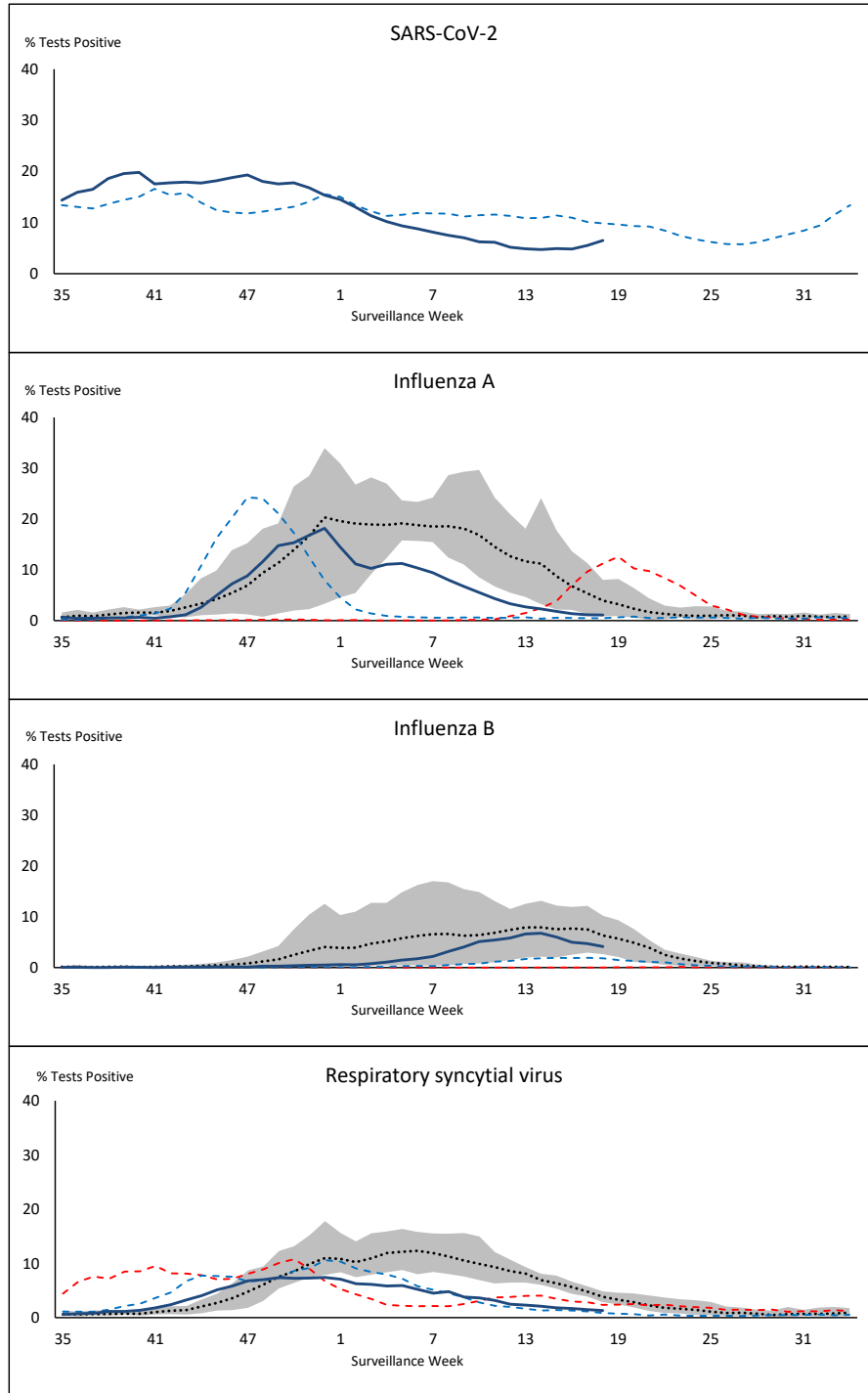


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Figure 1: Positive severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), influenza, and respiratory syncytial virus tests (%) reported by participating laboratories in Canada by surveillance week compared to average and range from 2014-2015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



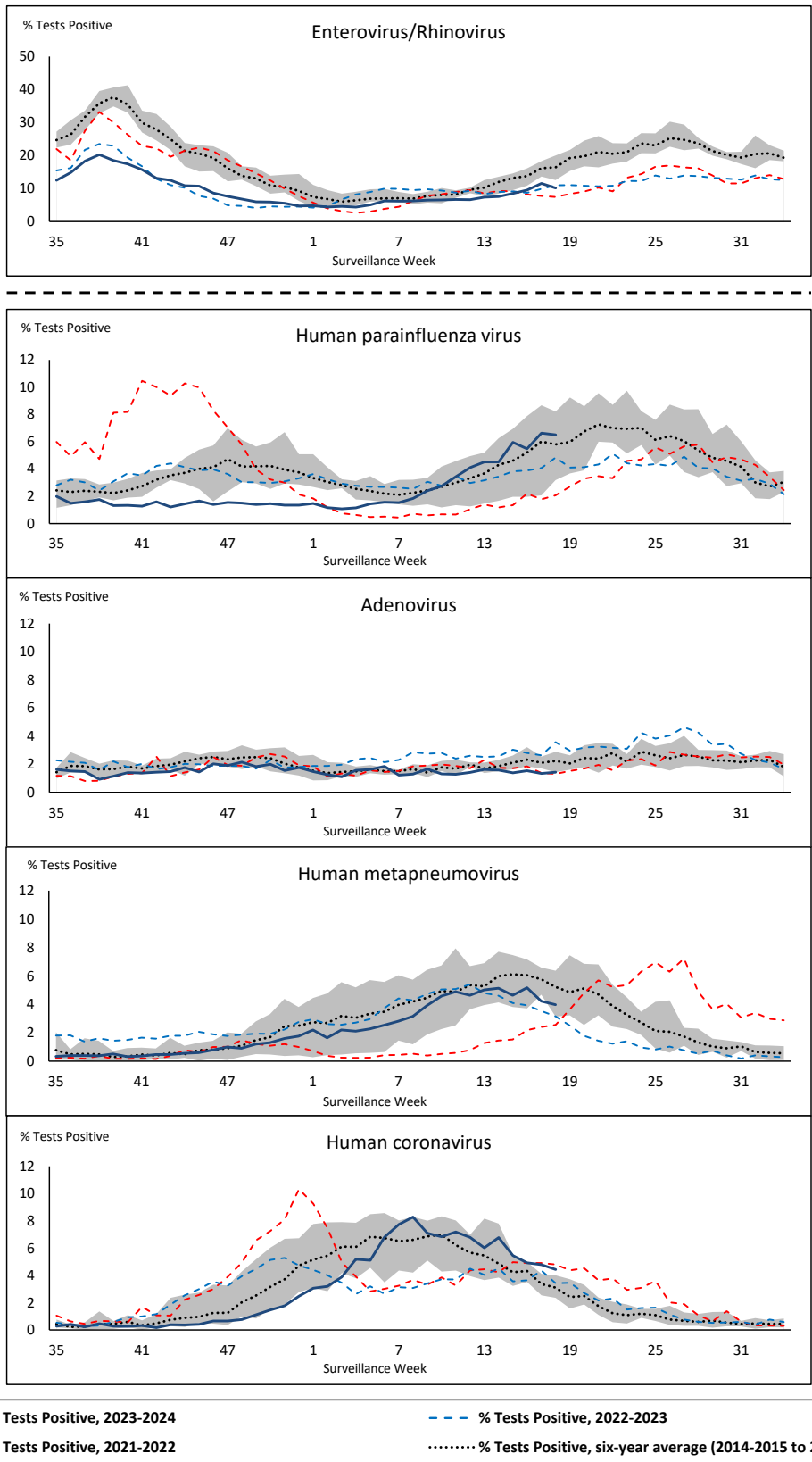
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

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 May 4, 2024 (surveillance week 2024-18)

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	685	65	541	0	0	6	6	12	541	15	541	2	1	45	1	0	541	11	541	27	541	71	541	25
Prince Edward Island	168	7	146	0	0	0	0	5	146	1	26	0	0	4	1	0	26	3	26	5	26	8	26	1
Nova Scotia	1234	79	1198	0	0	35	35	37	1096	14	31	0	0	0	0	0	31	1	31	1	31	2	31	3
New Brunswick	846	24	848	5	1	0	6	30	848	5	113	1	0	16	1	0	113	2	113	0	113	15	113	11
Atlantic	2933	175	2733	5	1	41	47	84	2631	35	711	3	1	65	3	0	711	17	711	33	711	96	711	40
Région Nord-Est	1234	30	1264	0	0	4	4	160	676	21	86	0	0	8	1	0	86	4	82	2	N.C.	N.C.	86	3
Québec-Chaudière-Appalaches	1290	59	1440	0	0	13	13	95	1382	36	657	0	0	22	0	0	679	17	656	41	N.C.	N.C.	564	23
Centre-du-Québec	1499	46	1494	0	0	10	10	79	725	16	29	0	0	2	0	0	29	1	29	2	N.C.	N.C.	29	0
Montréal-Laval	1503	43	2343	0	0	13	13	101	1288	25	754	1	0	53	0	0	754	19	755	37	N.C.	N.C.	754	17
Ouest du Québec	899	28	570	0	0	10	10	28	562	11	14	0	0	1	0	0	14	0	14	0	N.C.	N.C.	14	0
Montérégie	1113	54	1303	0	0	11	11	33	1301	49	5	0	0	0	0	0	5	0	5	0	N.C.	N.C.	5	0
Province of Québec	7538	260	8414	0	0	61	61	496	5934	158	1545	1	0	86	1	0	1567	41	1541	82	N.C.	N.C.	1452	43
P.H.O.L. - Ottawa	256	50	203	0	1	0	1	2	203	3	138	0	0	0	0	9	138	0	138	12	138	7	138	17
EORLA	744	30	451	0	0	2	2	15	451	6	46	0	0	0	0	0	46	1	46	1	46	9	46	2
P.H.O.L. - Kingston	168	33	77	3	0	0	0	0	77	0	55	0	0	0	0	9	55	0	55	1	55	9	55	4
UHN / Mount Sinai Hospital	874	38	588	0	0	3	3	3	588	3	106	0	0	3	0	0	106	0	106	5	106	3	106	9
P.H.O.L. - Toronto	279	56	740	3	4	3	9	4	739	0	724	0	0	0	0	80	724	5	724	50	724	74	724	66
Sick Kids Hospital - Toronto	91	0	89	0	1	0	1	4	89	1	89	0	0	9	0	0	89	3	89	3	89	31	89	4
Shared Hospital Laboratory	1357	69	999	4	4	1	9	18	999	3	1001	0	0	0	0	15	1001	8	1002	15	1002	38	1002	6
P.H.O.L. - Sault Ste. Marie	42	24	44	0	0	0	0	0	44	0	27	0	0	0	0	6	27	0	27	0	27	2	27	0
P.H.O.L. - Timmins	28	2	38	0	1	4	4	1	38	0	28	0	0	0	0	1	28	1	28	6	28	1	28	0
St. Joseph's - London	560	29	431	0	0	2	2	6	431	0	62	0	0	0	0	3	62	5	62	10	62	4	62	4
P.H.O.L. - London	268	37	272	1	1	1	2	5	272	1	226	0	0	0	0	19	226	2	226	26	226	18	226	17
P.H.O.L. - Orillia	17	0	14	0	0	0	0	0	14	0	13	0	0	0	0	3	13	0	13	4	13	1	13	0
P.H.O.L. - Thunder Bay	42	13	44	0	0	0	0	1	44	1	28	0	0	0	0	0	28	0	28	0	28	3	28	6
P.H.O.L. - Sudbury	5	0	8	0	0	0	0	0	8	0	6	0	0	0	0	1	6	0	6	0	6	1	6	0
P.H.O.L. - Hamilton	25	1	63	2	1	1	1	1	59	0	59	0	0	0	0	2	59	3	59	6	59	12	59	1
P.H.O.L. - Peterborough	73	17	88	2	0	1	3	2	88	2	47	0	0	0	0	2	47	0	47	1	47	7	47	7
St. Joseph's - Hamilton	1544	90	1472	0	0	26	26	37	1472	3	1472	0	0	82	0	0	1472	8	1472	46	1472	109	0	0
Sault Area Hospital	114	27	103	0	0	0	0	2	103	0	84	0	1	5	0	0	84	2	84	8	84	12	84	2
Province of Ontario	6487	516	5724	15	13	44	63	101	5719	23	4211	0	1	99	0	150	4211	38	4212	194	4212	341	2740	145
Manitoba	1147	74	913	0	2	13	15	50	913	9	91	0	0	7	0	0	91	1	87	3	91	17	87	1
Saskatchewan	1420	76	1047	0	0	5	5	71	868	14	367	1	0	37	2	0	367	1	367	3	367	44	367	14
Alberta	4199	289	4179	8	18	1	30	205	3985	24	1105	3	1	62	0	0	1105	8	1007	0	1096	101	1105	53
Prairies	6766	439	6139	8	20	19	50	326	5766	47	1563	4	1	106	2	0	1563	10	1461	6	1554	162	1559	68
British Columbia	3202	336	2366	19	16	0	57	43	2272	22	791	1	4	45	1	0	791	21	791	33	767	134	767	24
Yukon	34	6	22	0	0	0	0	2	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	18	0	18	0	0	0	0	2	18	1	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	18	0	18	0	18	4	N.C.	N.C.
Nunavut	187	27	153	0	0	0	0	2	153	7	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	239	33	193	0	0	0	0	6	193	8	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	18	0	18	0	18	4	N.C.	N.C.
CANADA	27165	1759	25569	47	50	165	278	1056	22515	293	8821	9	7	401	7	150	8861	127	8734	348	7262	737	7229	320

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 May 4, 2024 (surveillance weeks 2023-35 to 2024-18)

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	22262	3163	16460	0	0	1344	1344	160	16460	994	16460	22	76	179	108	0	16460	277	16460	420	16460	1352	16460	497
Prince Edward Island	7961	800	5321	0	0	542	542	237	5321	375	605	3	0	28	9	0	604	39	594	27	605	161	589	33
Nova Scotia	50938	8751	37357	0	0	2869	2869	599	30660	1474	1233	16	3	10	10	0	1233	44	1226	14	1233	241	1232	29
New Brunswick	38610	4027	36583	915	27	1906	2848	975	36179	1917	3341	10	4	75	34	0	3341	120	3341	107	3341	655	3341	141
Atlantic	119771	16741	95721	915	27	6661	7603	1971	88620	4760	21639	51	83	292	161	0	21638	480	21621	568	21639	2409	21622	700
Région Nord-Est	59065	7226	54567	5	0	4736	4741	1432	22330	1522	2885	17	12	51	19	0	2885	122	2808	129	N.C.	N.C.	2885	142
Québec-Chaudière-Appalaches	67913	9512	49483	0	0	5597	5597	1967	47411	2861	19173	22	9	78	14	0	19750	581	19172	698	N.C.	N.C.	15703	604
Centre-du-Québec	85008	12622	46157	0	0	4615	4615	1310	25987	1696	1267	15	8	29	7	0	1267	61	1267	58	N.C.	N.C.	1299	48
Montréal-Laval	100700	14096	88629	5	2	6771	6778	1207	56166	3043	30025	97	44	469	25	0	30025	602	30106	841	N.C.	N.C.	30025	1059
Ouest du Québec	55539	10138	24937	4	0	2141	2145	467	24694	1131	687	11	3	32	7	0	687	53	687	29	N.C.	N.C.	687	29
Monterégie	54532	8172	46454	0	0	3280	3280	525	45368	1933	248	1	0	1	2	0	248	8	248	5	N.C.	N.C.	248	3
Province of Québec	422757	61766	310227	14	2	27140	27156	6908	221956	12186	54285	163	76	660	74	0	54862	1427	54288	1760	N.C.	N.C.	50847	1885
P.H.O.L. - Ottawa	11822	3935	8431	300	56	199	429	48	8425	158	5050	0	0	0	0	153	5050	13	5048	159	5050	457	5048	325
EORLA	43249	4626	20895	0	0	1632	1632	475	20895	1153	1427	3	5	38	4	0	1402	15	1427	39	1427	258	1427	48
P.H.O.L. - Kingston	8081	2212	4679	150	20	97	229	8	4679	168	3205	0	0	0	0	96	3205	12	3205	40	3205	346	3205	172
UHN / Mount Sinai Hospital	38035	3162	24309	41	10	574	625	93	24309	235	1788	0	0	29	2	0	1788	3	1788	22	1788	81	1788	56
P.H.O.L. - Toronto	20152	5632	38031	1216	927	366	1849	273	38021	1058	3500	0	0	0	0	1438	35025	414	35000	981	35017	3257	35000	1906
Sick Kids Hospital - Toronto	4453	319	4062	106	102	20	228	81	4062	314	4062	15	12	110	21	0	4062	108	4062	133	4062	807	4062	129
Shared Hospital Laboratory	60899	4720	50668	877	542	296	1715	478	50675	1350	50425	0	0	0	0	371	44771	364	50515	348	50533	1664	50537	563
P.H.O.L. - Sault Ste. Marie	562	234	697	55	3	17	69	3	697	46	477	0	0	0	0	18	477	1	477	0	477	29	477	47
P.H.O.L. - Timmins	1220	333	1279	67	11	37	103	13	1279	67	1020	0	0	0	0	32	1020	6	1020	20	1020	61	1020	55
St. Joseph's - London	30436	3569	17325	0	0	1003	1003	272	17311	738	2381	0	0	0	0	44	2400	45	2400	59	2402	263	2400	78
P.H.O.L. - London	15610	4263	11877	502	147	171	625	120	11874	478	9633	0	0	0	0	341	9633	45	9631	211	9633	826	9631	436
P.H.O.L. - Orillia	628	153	1292	73	17	11	101	1	1289	74	1221	0	0	0	0	34	1221	16	1221	24	1221	147	1221	27
P.H.O.L. - Thunder Bay	2036	554	1322	64	2	8	45	12	1319	32	1095	0	0	0	0	32	1095	6	1095	34	1095	66	1095	36
P.H.O.L. - Sudbury	812	243	986	45	1	23	69	2	984	26	710	0	0	0	0	27	711	2	710	14	710	65	710	66
P.H.O.L. - Hamilton	7248	2122	6123	155	68	99	260	42	6118	172	4645	0	0	0	0	155	4645	92	4644	133	4645	606	4644	222
P.H.O.L. - Peterborough	2614	732	2716	212	205	74	158	37	2706	224	2066	0	0	0	0	93	2066	41	2066	66	2066	321	2066	69
St. Joseph's - Hamilton	66709	6047	59880	0	0	3285	3285	941	59880	1799	59880	0	0	815	0	0	59880	383	59880	932	59880	3516	0	0
Sault Area Hospital	6392	867	4418	182	25	56	263	25	4411	205	3502	28	1	45	17	0	3453	42	3453	78	3453	311	3463	77
Province of Ontario	320958	43723	258990	4045	2136	7968	12688	2924	258934	8297	187604	46	18	1037	44	2834	181904	1608	187642	3293	187684	13081	127794	4312
Manitoba	56505	7662	42683	146	16	1917	2079	704	42683	1415	3383	5	11	52	44	0	3383	131	4154	169	3383	599	4154	153
Saskatchewan	71755	7641	50111	142	22	5438	5602	2130	44462	1726	16361	33	9	250	27	0	16361	295	16361	822	16361	1567	16361	503
Alberta	188924	20771	169001	11832	857	590	13351	4520	158225	6352	46694	157	94	903	3	0	46682	521	44864	36	45956	4245	46693	1330
Prairies	317184	36074	261795	12120	895	7945	21032	7354	245370	9493	66438	195	114	1205	74	0	66426	947	65379	1027	65700	6411	67208	1986
British Columbia	134217	17402	135706	4178	889	271	8974	1391	132354	6038	32344	126	192	566	192	0	32346	990	32231	1309	31108	4676	31085	997
Yukon	1858	187	1220	35	15	0	63	20	1211	47	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	1308	79	1245	167	7	1	175	62	1245	174	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	1046	46	1046	11	1245	155	N.C.
Nunavut	5141	441	3775	433	34	52	519	233	3775	528	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	8307	707	6240	635	56	53	757	315	6231	749	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	1046	46	1046	11	1245	155	N.C.	N.C.
CANADA	1323194	176413	1068679	21907	4005	50038	78210	20863	953465	41523	362310	581	483	3760	545	2834	358222	5498	362207	7968	307376	26732	298556	9880

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.

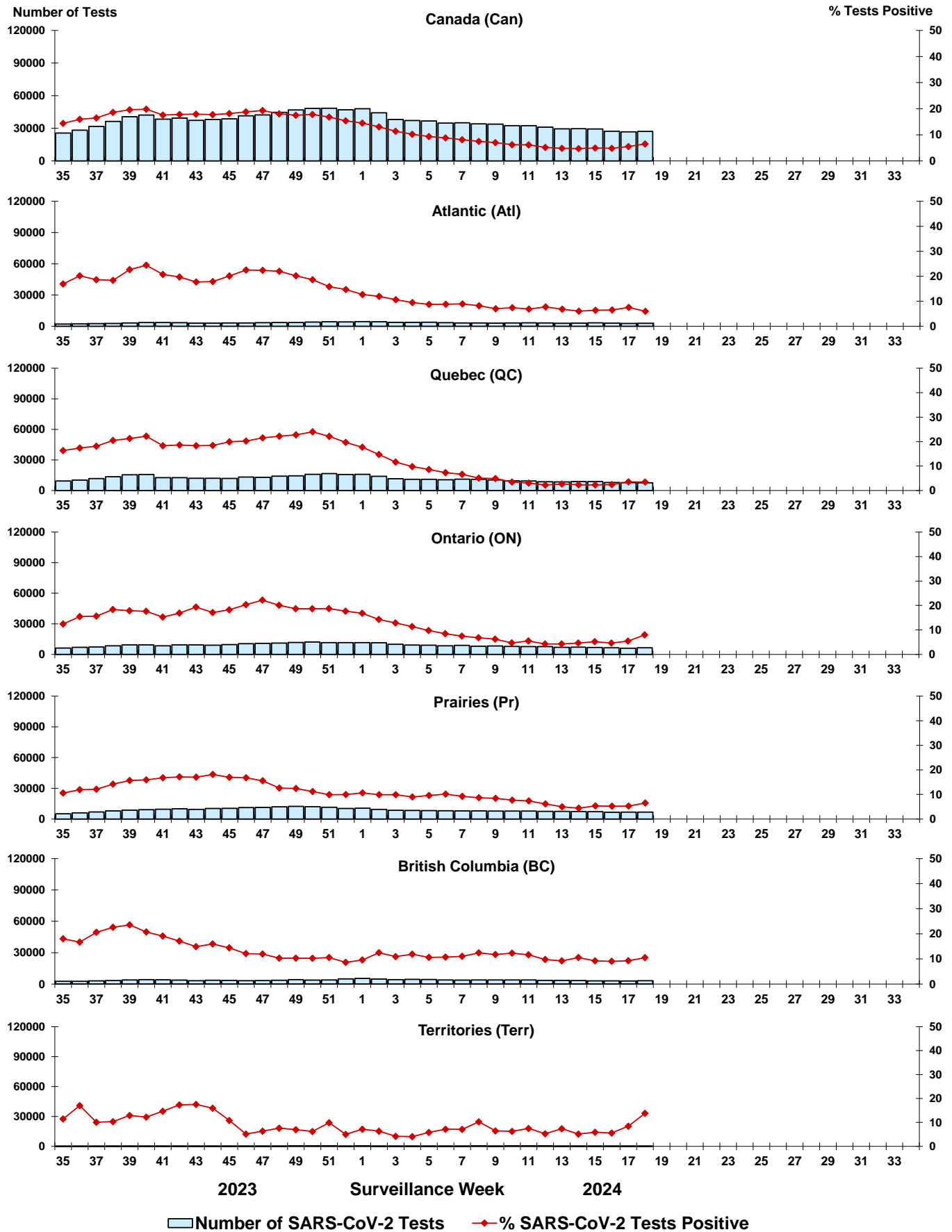
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Results from British Columbia comprise of specimens from the following sites: Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Vancouver Coastal Health sites, Victoria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

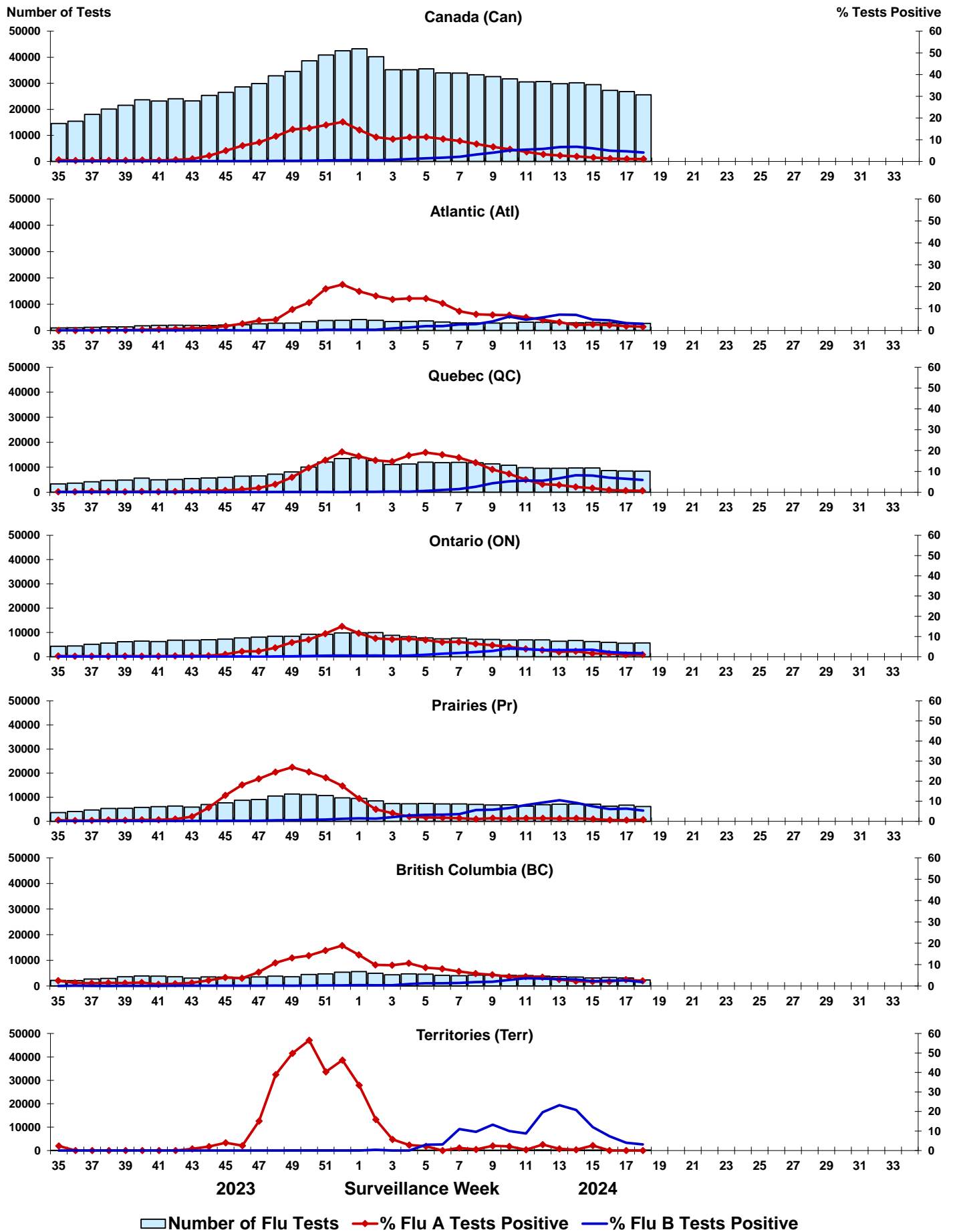


Figure 5: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

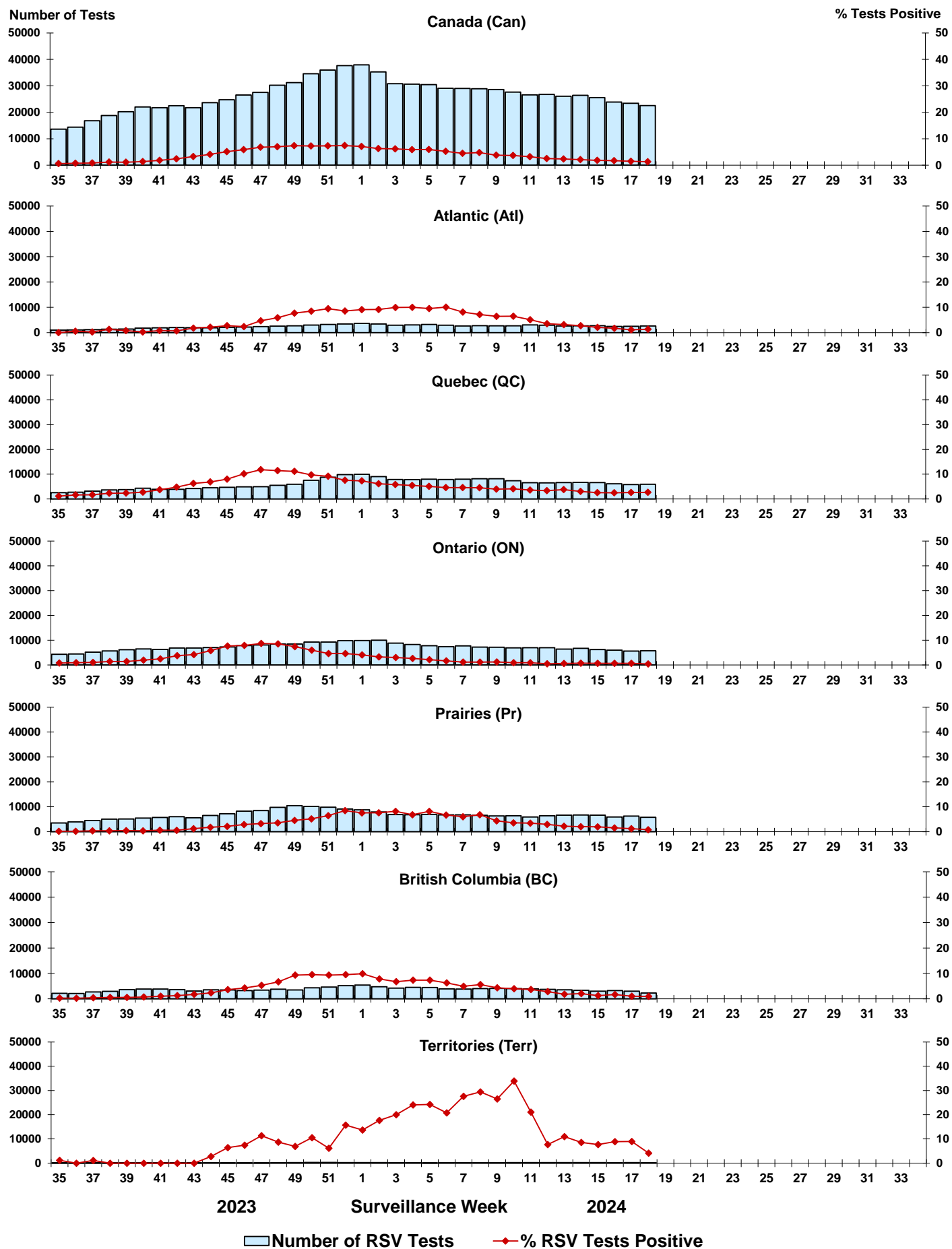


Figure 6: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

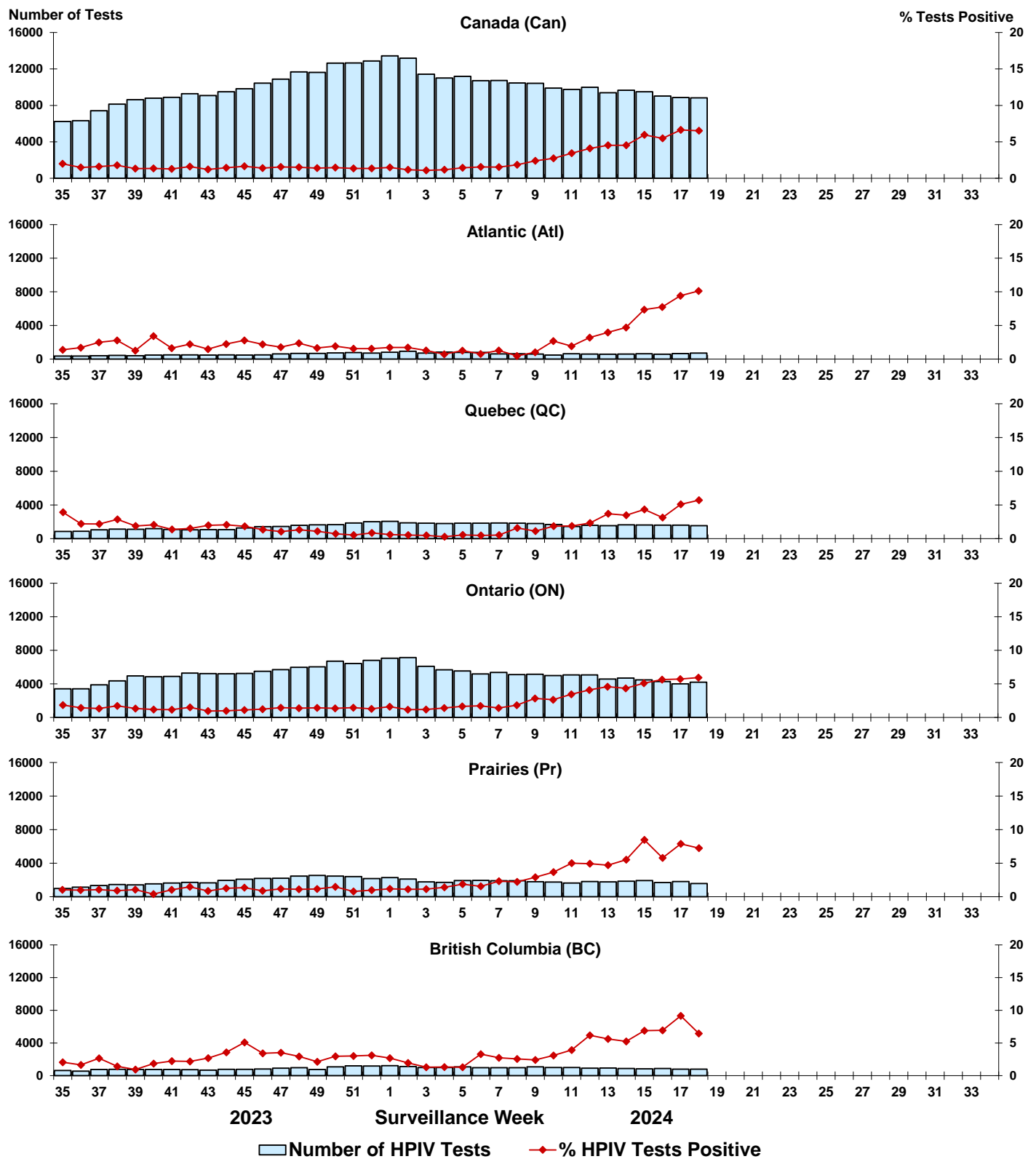


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

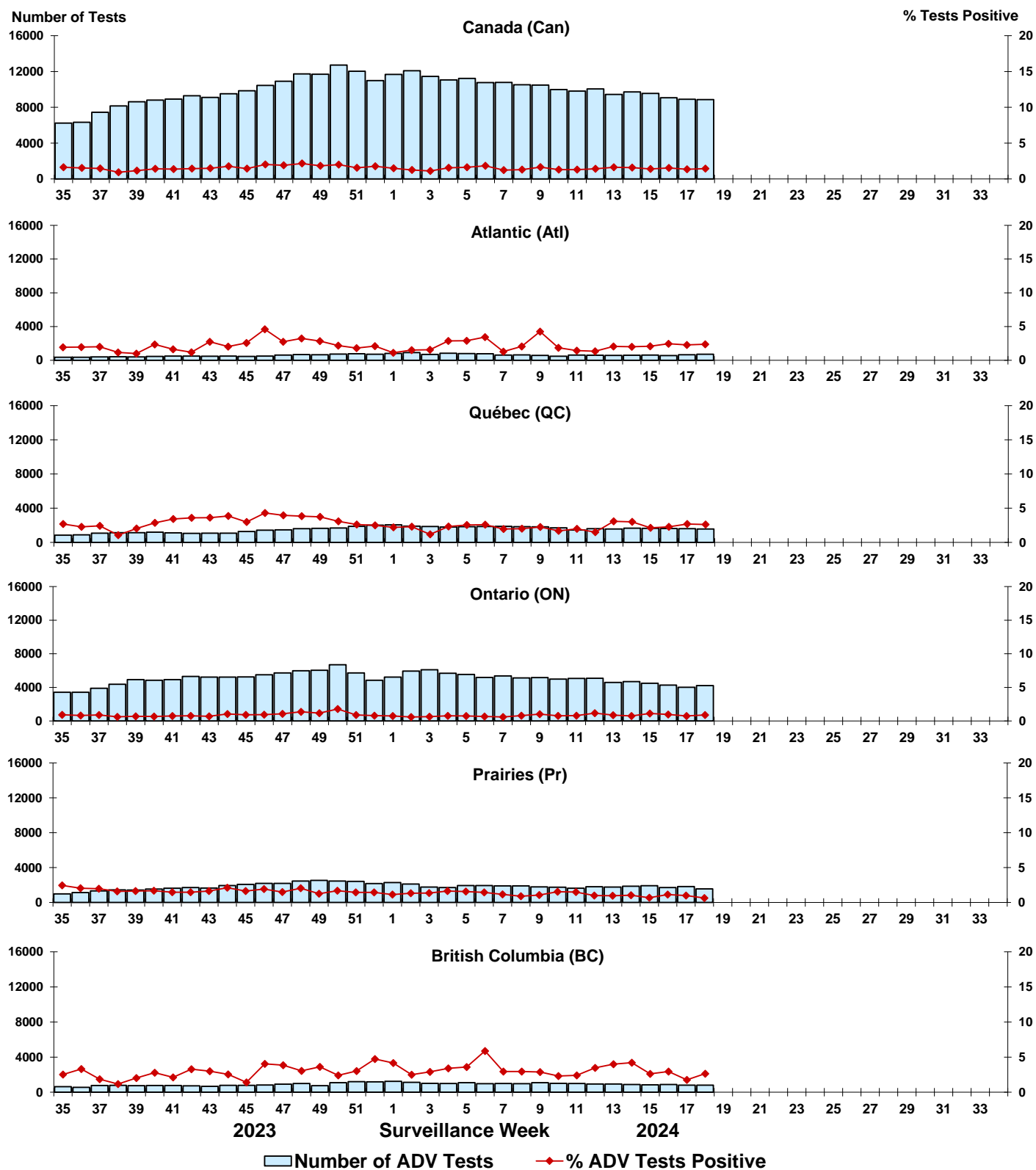


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

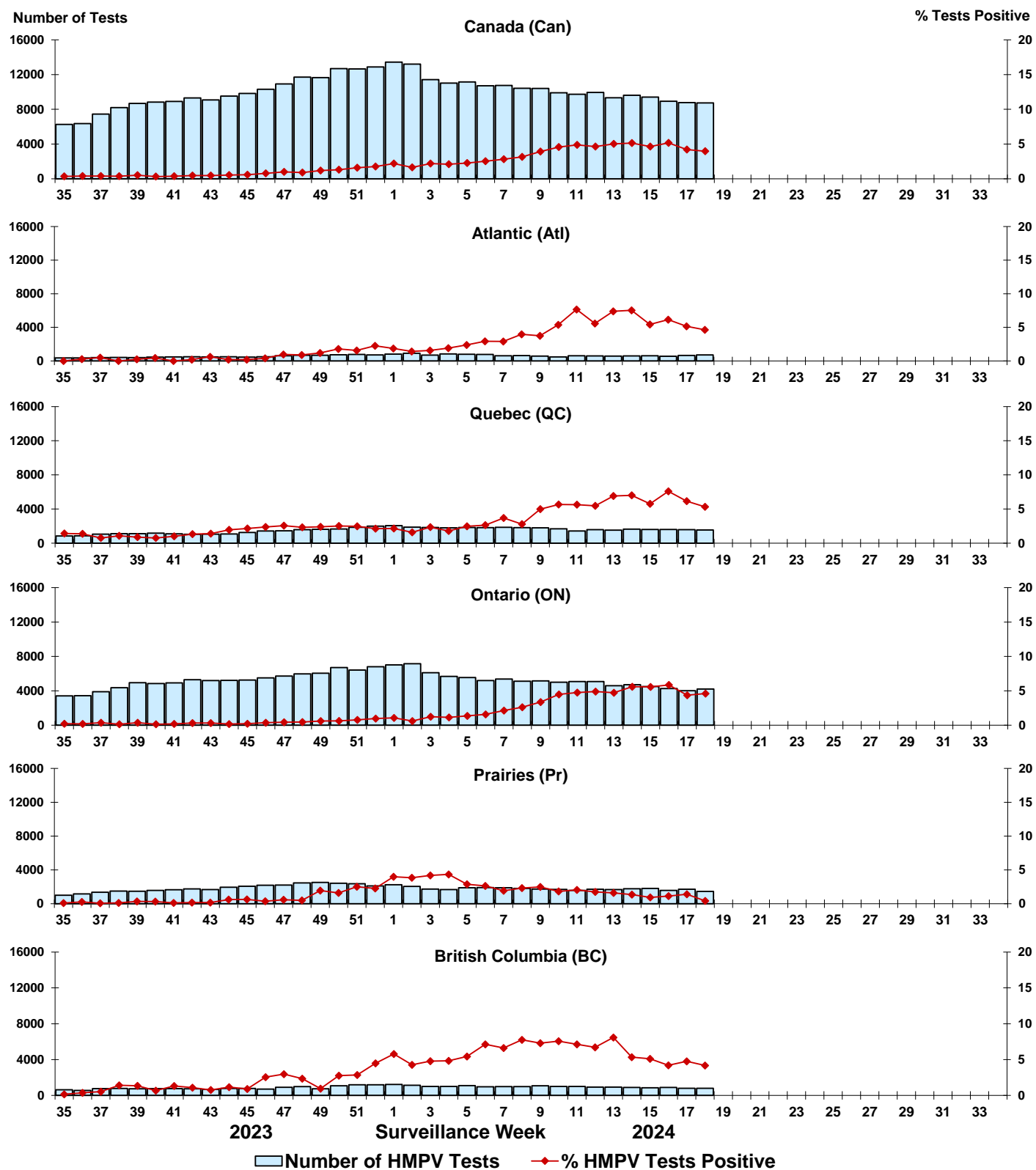


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

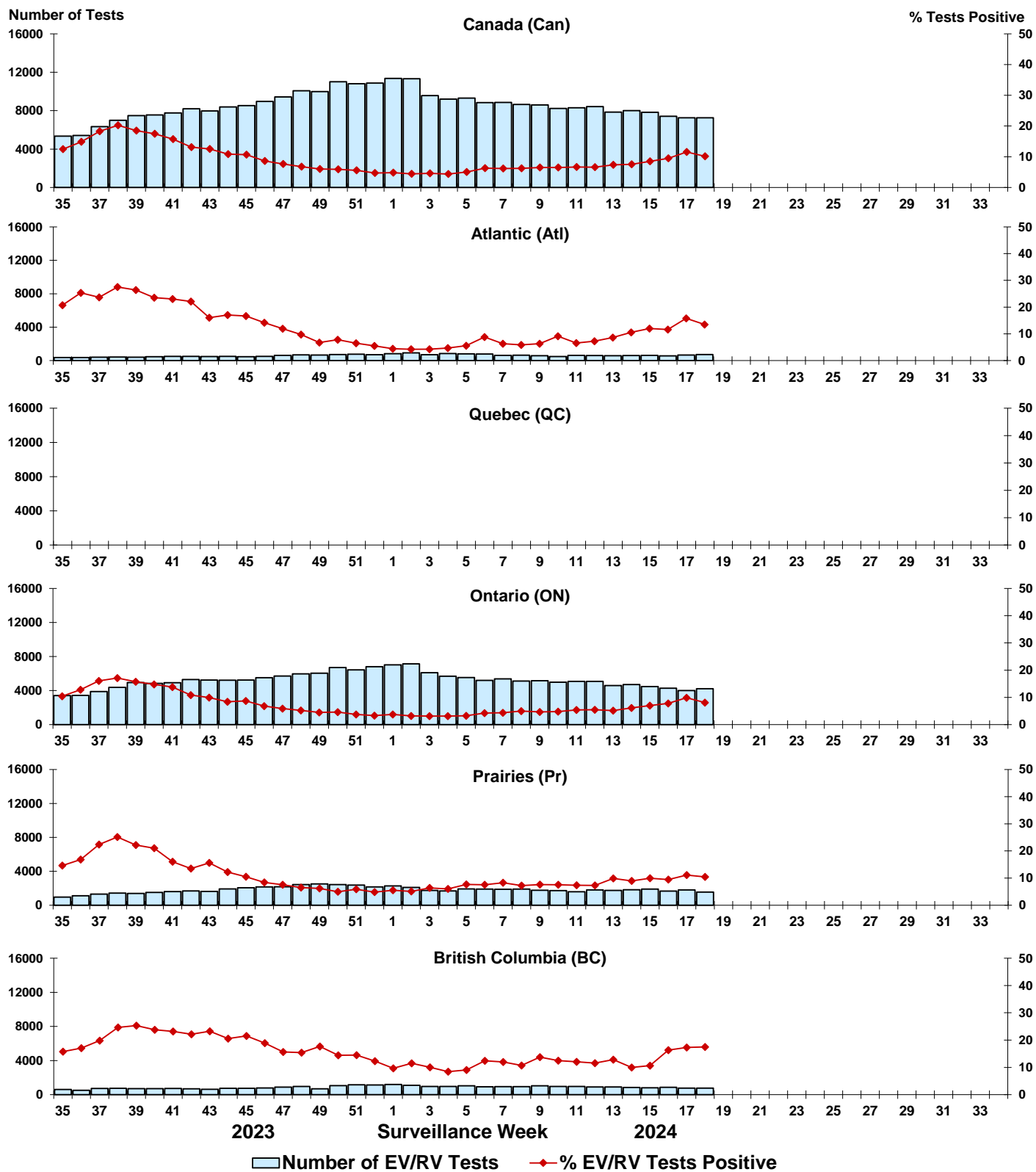


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

