

RESPIRATORY VIRUS DETECTION REPORT

April 21 to April 27, 2024
(Surveillance Week 2024-17)



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 17 (week ending April 27, 2024) in Canada, percent positivity is currently highest for enterovirus/rhinovirus among respiratory viruses under surveillance. The following results were reported from RVDSS laboratories:

- Following several months of decrease, national SARS-CoV-2 percent positivity is currently stable (1,418 detections; 5.5% positive) and below the most recent peak recorded in November 2023 (19.3% positive).
- Influenza percent positivity is decreasing (1,523 detections; 5.9% positive) as percent positivity has decreased in recent weeks for both influenza A (300 detections; 1.2% positive) and influenza B (1,223 detections; 4.7% positive).
- RSV percent positivity is stable (321 detections; 1.4% positive).
- Percent positivity of all other non-SARS-CoV-2 respiratory viruses is near expected levels typical of this time of year.
 - Percent positivity of enterovirus/rhinovirus is increasing (361 detections; 11.1% positive), typical of this time of year.
- 33/35 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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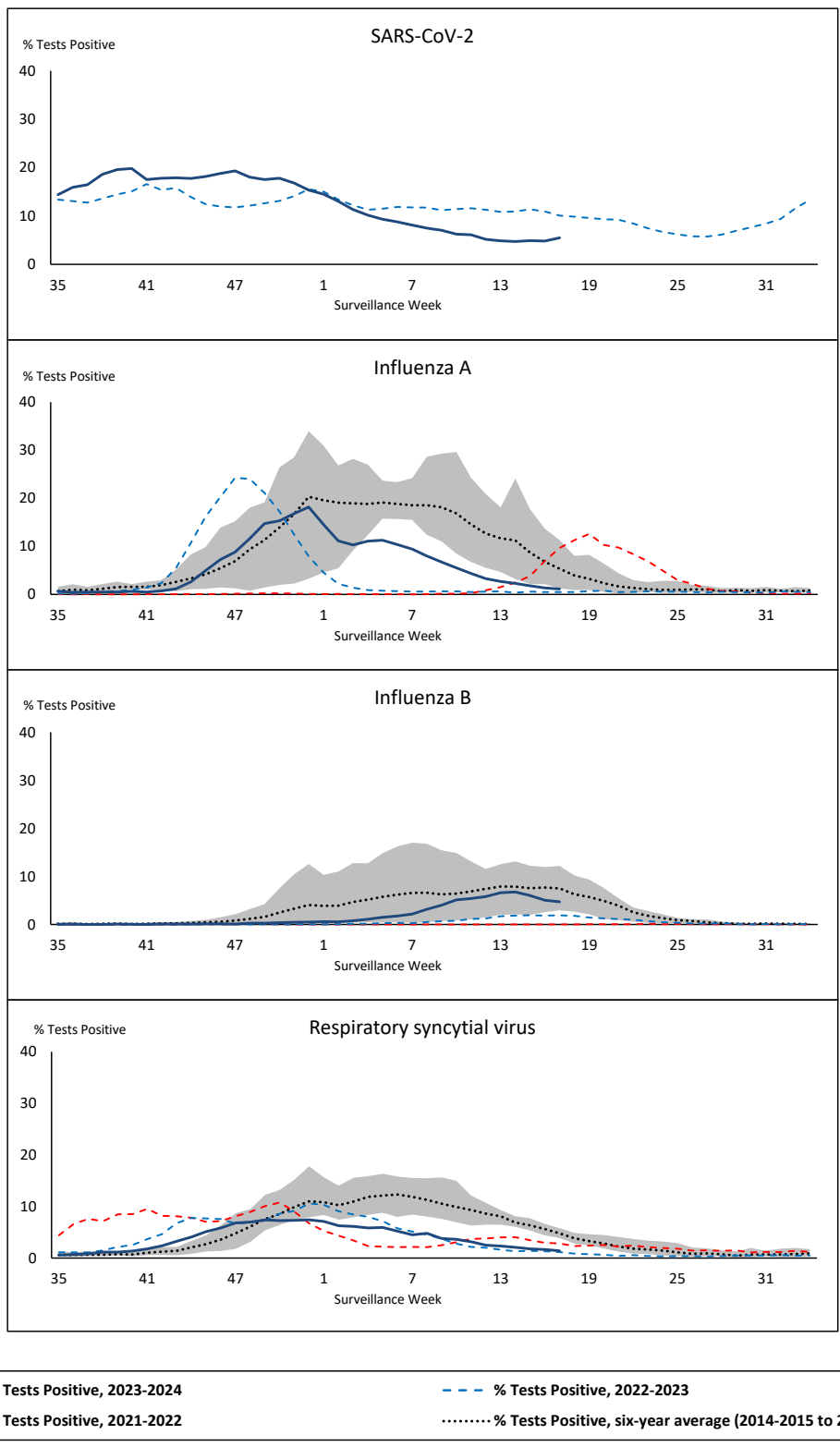


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Figure 1: Positive severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), influenza, and respiratory syncytial virus tests (%) reported by participating laboratories in Canada by surveillance week compared to average and range from 2014-2015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



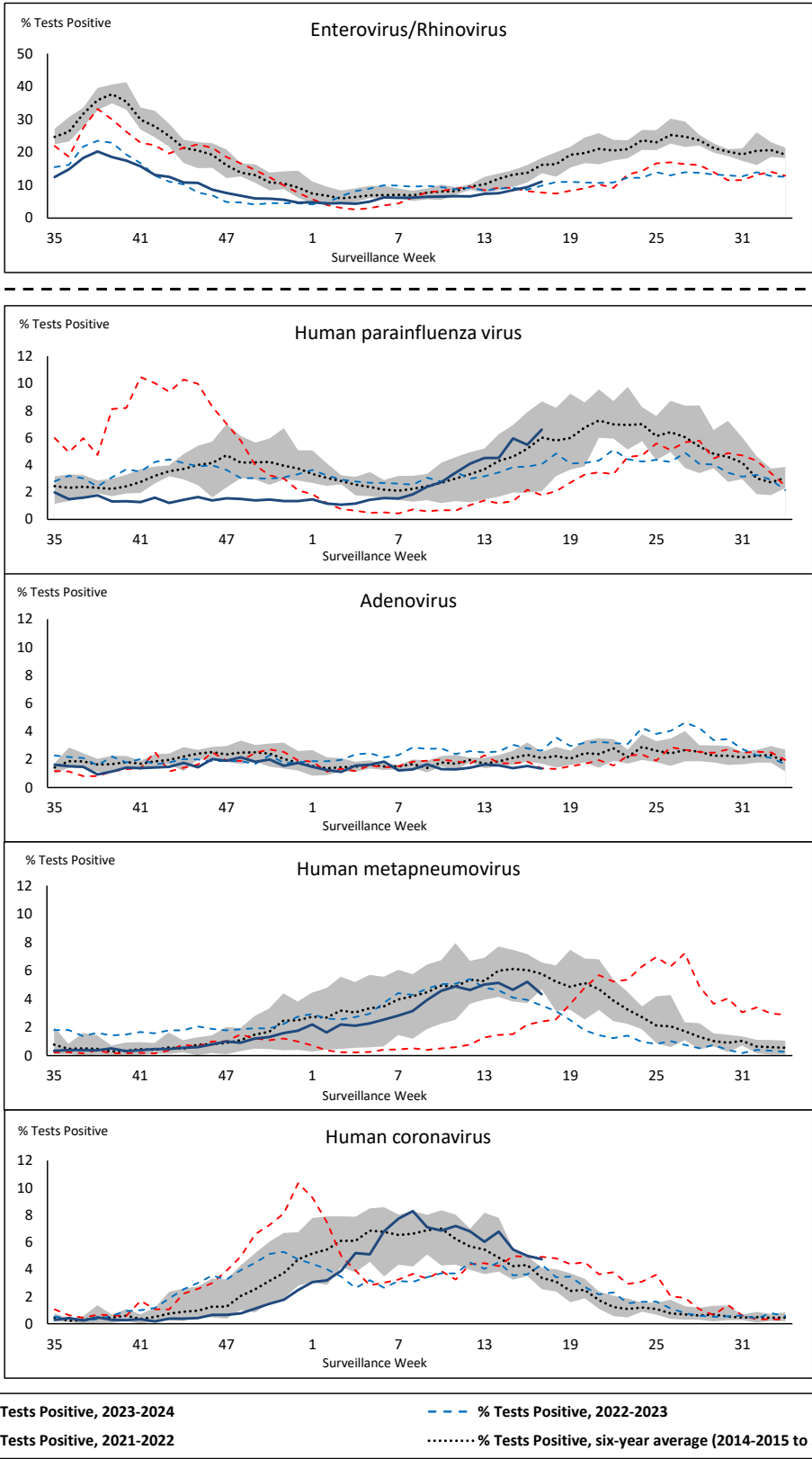
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

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 April 27, 2024 (surveillance week 2024-17)

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	617	87	515	0	0	3	3	8	515	14	515	1	1	33	1	0	515	11	515	24	515	65	515	28
Prince Edward Island	148	4	137	0	0	0	0	1	137	1	16	0	0	5	0	0	16	1	16	0	16	8	16	4
Nova Scotia	1155	84	1143	0	0	39	39	47	961	7	26	0	0	4	0	0	26	0	26	0	26	7	26	0
New Brunswick	870	35	873	11	0	0	11	34	873	6	101	1	0	15	1	0	101	3	101	10	101	24	101	2
Atlantic	2790	210	2668	11	0	42	53	90	2486	28	658	2	1	57	2	0	658	15	658	34	658	104	658	34
Région Nord-Est	1299	39	1370	0	0	3	3	173	645	22	90	1	0	5	0	0	90	4	88	5	N.C.	N.C.	90	6
Québec-Chaudière-Appalaches	1282	56	1586	0	0	13	13	106	1499	44	682	0	0	11	0	0	692	14	682	43	N.C.	N.C.	539	33
Centre-du-Québec	1626	68	1524	0	0	10	10	93	665	12	26	0	0	3	0	0	26	0	26	2	N.C.	N.C.	26	3
Montréal-Laval	1567	45	2275	0	0	22	22	107	1314	32	770	1	1	53	0	0	770	21	772	47	N.C.	N.C.	770	28
Ouest du Québec	940	24	593	0	0	11	11	34	589	4	23	0	0	6	0	0	23	2	23	1	N.C.	N.C.	23	0
Montérégie	1009	42	1140	0	0	8	8	38	1140	37	3	0	0	0	0	0	3	0	3	0	N.C.	N.C.	3	0
Province of Québec	7723	274	8488	0	0	67	67	551	5852	151	1594	2	1	78	0	0	1604	41	1594	98	N.C.	N.C.	1451	70
P.H.O.L. - Ottawa	195	24	170	0	1	2	2	2	170	8	98	0	0	0	0	7	98	0	98	13	98	14	98	8
EOURLA	752	18	443	0	0	2	2	13	443	7	41	0	0	1	0	0	41	0	41	1	41	11	41	2
P.H.O.L. - Kingston	117	28	88	8	1	1	1	0	88	0	52	0	0	0	0	2	52	0	52	2	52	2	52	4
UHN / Mount Sinai Hospital	873	39	622	0	0	3	3	2	622	3	83	0	0	1	0	0	83	0	83	0	83	1	83	0
P.H.O.L. - Toronto	290	40	896	10	6	6	18	5	896	2	850	0	0	0	0	93	850	12	850	71	850	91	850	54
Sick Kids Hospital - Toronto	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
Shared Hospital Laboratory	1206	26	902	4	1	1	6	15	902	2	895	0	0	0	0	10	895	4	897	12	897	41	897	5
P.H.O.L. - Sault Ste. Marie	5	3	8	0	0	0	0	0	8	0	8	0	0	0	0	2	8	0	8	0	8	0	8	1
P.H.O.L. - Timmins	24	0	29	0	0	3	3	1	29	0	24	0	0	0	0	2	24	0	24	0	24	1	24	5
St. Joseph's - London	553	18	426	0	0	1	1	9	426	2	45	0	0	0	0	1	45	1	45	2	45	9	45	1
P.H.O.L. - London	261	32	240	9	0	1	5	3	240	1	216	0	0	0	0	18	216	1	216	23	216	21	216	25
P.H.O.L. - Orillia	17	1	6	0	0	0	0	1	6	0	6	0	0	0	0	0	6	0	6	0	6	1	6	0
P.H.O.L. - Thunder Bay	36	12	23	0	1	0	0	0	23	1	19	0	0	0	0	0	19	0	19	2	19	1	19	1
P.H.O.L. - Sudbury	14	0	18	0	0	0	0	0	18	0	14	0	0	0	0	1	14	0	14	0	14	4	14	1
P.H.O.L. - Hamilton	40	5	54	4	0	1	1	0	54	0	41	0	0	0	0	6	41	0	41	4	41	14	41	3
P.H.O.L. - Peterborough	79	17	81	3	0	0	0	3	81	0	37	0	0	0	0	5	37	1	37	3	37	13	37	2
St. Joseph's - Hamilton	1491	53	1401	0	0	13	13	44	1401	10	1401	0	0	70	0	0	1401	9	1401	30	1401	124	0	0
Sault Area Hospital	96	18	71	0	1	0	1	2	71	0	64	0	0	5	0	0	64	0	64	10	64	11	64	1
Province of Ontario	6049	334	5478	38	11	34	56	100	5478	36	3894	0	0	77	0	147	3894	28	3896	173	3896	359	2495	113
Manitoba	1284	70	1014	0	1	13	14	81	1014	10	100	1	0	11	2	0	100	2	100	5	100	19	100	3
Saskatchewan	1285	59	1064	0	0	5	5	69	894	21	396	0	0	26	0	0	396	6	396	17	396	35	396	29
Alberta	3714	196	4198	5	13	0	18	251	3987	44	1062	8	0	73	0	0	1062	10	964	1	1052	108	1062	56
Prairies	6283	325	6276	5	14	18	37	401	5895	75	1558	9	0	110	2	0	1558	18	1460	23	1548	162	1558	88
British Columbia	2970	272	3018	28	14	1	87	78	2901	30	681	3	1	58	3	0	681	12	681	32	657	123	657	19
Yukon	29	1	22	0	0	0	0	1	22	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	25	2	25	0	0	0	0	2	25	0	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	25	0	25	1	25	3	N.C.	N.C.
Nunavut	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	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	54	3	47	0	0	0	0	3	47	1	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	25	0	25	1	25	3	N.C.	N.C.
CANADA	25869	1418	25975	82	39	162	300	1223	22659	321	8385	16	3	380	7	147	8420	114	8314	361	6784	751	6819	324

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

Delays in the reporting of data may cause data to change retrospectively.

Table 2: Cumulative respiratory virus detections from August 27, 2023 to April 27, 2024 (surveillance weeks 2023-35 to 2024-17)

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	21577	3098	15919	0	0	1338	1338	148	15919	979	15919	20	75	134	107	0	15919	266	15919	393	15919	1281	15919	472
Prince Edward Island	7793	793	5175	0	0	542	542	232	5175	374	579	3	0	24	8	0	578	36	568	22	579	153	563	32
Nova Scotia	49704	8672	36159	0	0	2834	2834	562	29564	1460	1202	16	3	10	10	0	1202	43	1195	13	1202	239	1201	26
New Brunswick	37764	4003	35735	910	26	1906	2842	945	35331	1912	3228	9	4	59	33	0	3228	118	3228	107	3228	640	3228	130
Atlantic	116838	16566	92988	910	26	6620	7556	1887	85989	4725	20928	48	82	227	158	0	20927	463	20910	535	20928	2313	20911	660
Région Nord-Est	57831	7196	53302	5	0	4732	4737	1272	21653	1501	2798	17	12	43	18	0	2798	118	2725	127	N.C.	N.C.	2798	139
Québec-Chaudière-Appalaches	66623	9453	48062	0	0	5584	5584	1873	46048	2825	18529	22	9	57	14	0	19080	563	18529	657	N.C.	N.C.	15148	583
Centre-du-Québec	83509	12576	44666	0	0	4605	4605	1231	25265	1680	1238	15	8	27	7	0	1238	60	1238	56	N.C.	N.C.	1270	48
Montréal-Laval	99197	14053	86284	5	2	6758	6765	1106	54874	3017	29267	96	44	415	25	0	29267	582	29347	804	N.C.	N.C.	29267	1041
Ouest du Québec	54642	10110	24367	4	0	2131	2135	439	24132	1120	673	11	3	31	7	0	673	53	673	29	N.C.	N.C.	673	29
Montérégie	53419	8118	45151	0	0	3269	3269	492	44067	1884	243	1	0	1	2	0	243	8	243	5	N.C.	N.C.	243	3
Province of Québec	415221	61506	301832	14	2	27079	27095	6413	216039	12027	52748	162	76	574	73	0	53299	1384	52755	1678	N.C.	N.C.	49399	1843
P.H.O.L. - Ottawa	11566	3885	8228	300	55	199	428	46	8222	155	4912	0	0	0	0	144	4912	13	4910	147	4912	450	4910	308
EORLA	42505	4596	20444	0	0	1630	1630	460	20444	1147	1381	3	5	38	4	0	1356	14	1381	38	1381	249	1381	46
P.H.O.L. - Kingston	7913	2179	4602	147	20	97	229	8	4602	168	3150	0	0	0	0	87	3150	12	3150	39	3150	337	3150	168
UHN / Mount Sinai Hospital	37161	3124	23721	41	10	571	622	90	23721	232	1682	0	0	26	2	0	1682	3	1682	17	1682	78	1682	47
P.H.O.L. - Toronto	19873	5576	37291	1213	923	365	1840	269	37282	1058	34289	0	0	0	0	1357	34297	409	34274	931	34289	3183	34274	1839
Sick Kids Hospital - Toronto	4293	319	3867	106	100	20	226	72	3867	313	3867	15	12	97	21	0	3867	103	3867	128	3867	739	3867	119
Shared Hospital Laboratory	59543	4651	49670	873	538	296	1707	460	49677	1347	49425	0	0	0	0	356	43771	356	49514	333	49532	1626	49536	557
P.H.O.L. - Sault Ste. Marie	520	210	653	55	3	17	69	3	653	46	450	0	0	0	0	12	450	1	450	0	450	27	450	47
P.H.O.L. - Timmins	1192	331	1241	67	10	33	99	12	1241	67	992	0	0	0	0	31	992	5	992	14	992	60	992	55
St. Joseph's - London	29876	3540	16894	0	0	1001	1001	266	16880	738	2319	0	0	0	0	41	2338	40	2338	49	2340	259	2338	74
P.H.O.L. - London	15342	4226	11605	501	146	170	623	115	11602	477	9407	0	0	0	0	322	9407	43	9405	185	9407	808	9405	419
P.H.O.L. - Orillia	611	153	1278	73	17	11	101	1	1275	74	1208	0	0	0	0	31	1208	16	1208	20	1208	146	1208	27
P.H.O.L. - Thunder Bay	1994	541	1278	64	2	8	45	11	1275	31	1066	0	0	0	0	32	1066	6	1066	34	1066	63	1066	30
P.H.O.L. - Sudbury	807	243	978	45	1	23	69	2	976	26	704	0	0	0	0	26	705	2	704	14	704	64	704	66
P.H.O.L. - Hamilton	7223	2121	6060	153	66	99	259	41	6059	172	4586	0	0	0	0	153	4586	89	4585	127	4586	594	4585	221
P.H.O.L. - Peterborough	2541	715	2628	210	205	73	155	35	2618	222	2019	0	0	0	0	91	2019	41	2019	65	2019	314	2019	62
St. Joseph's - Hamilton	65165	5957	58408	0	0	3259	3259	904	58408	1796	58408	0	0	733	0	0	58408	375	58408	886	58408	3407	0	0
Sault Area Hospital	6278	840	4315	182	25	56	263	23	4308	205	3418	28	0	40	17	0	3369	40	3369	70	3369	299	3379	75
Province of Ontario	314403	43207	253161	4030	2121	7928	12625	2818	253110	8274	183283	46	17	934	44	2683	177583	1568	183322	3097	183362	12703	124946	4160
Manitoba	55358	7588	41770	146	14	1904	2064	654	41770	1406	3292	5	11	45	44	0	3292	130	4067	166	3292	582	4067	152
Saskatchewan	70335	7565	48998	142	22	5433	5597	2056	43532	1709	15953	31	9	209	25	0	15953	294	15953	818	15953	1519	15953	485
Alberta	184173	20447	164462	11824	838	588	13319	4296	153914	6327	45370	154	93	824	3	0	45358	513	43655	36	44648	4110	45369	1263
Prairies	309866	35600	255230	12112	874	7925	20980	7006	239216	9442	64615	190	113	1078	72	0	64603	937	63675	1020	63893	6211	65389	1900
British Columbia	131015	17062	132226	4147	860	269	8896	1315	128968	5998	31332	125	187	510	191	0	31329	965	31214	1268	30115	4515	30092	972
Yukon	1824	181	1198	35	15	0	63	18	1189	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	1290	79	1227	167	7	1	175	60	1227	173	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	1028	46	1028	11	1227	151
Nunavut	4770	397	3468	433	34	52	519	226	3468	504	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	7884	657	5893	635	56	53	757	304	5884	724	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	1028	46	1028	11	1227	151
CANADA	1295227	174598	1041330	21848	3939	49874	77909	19743	929206	41190	352906	571	475	3323	538	2683	348769	5363	352904	7609	299525	25893	290737	9535

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.

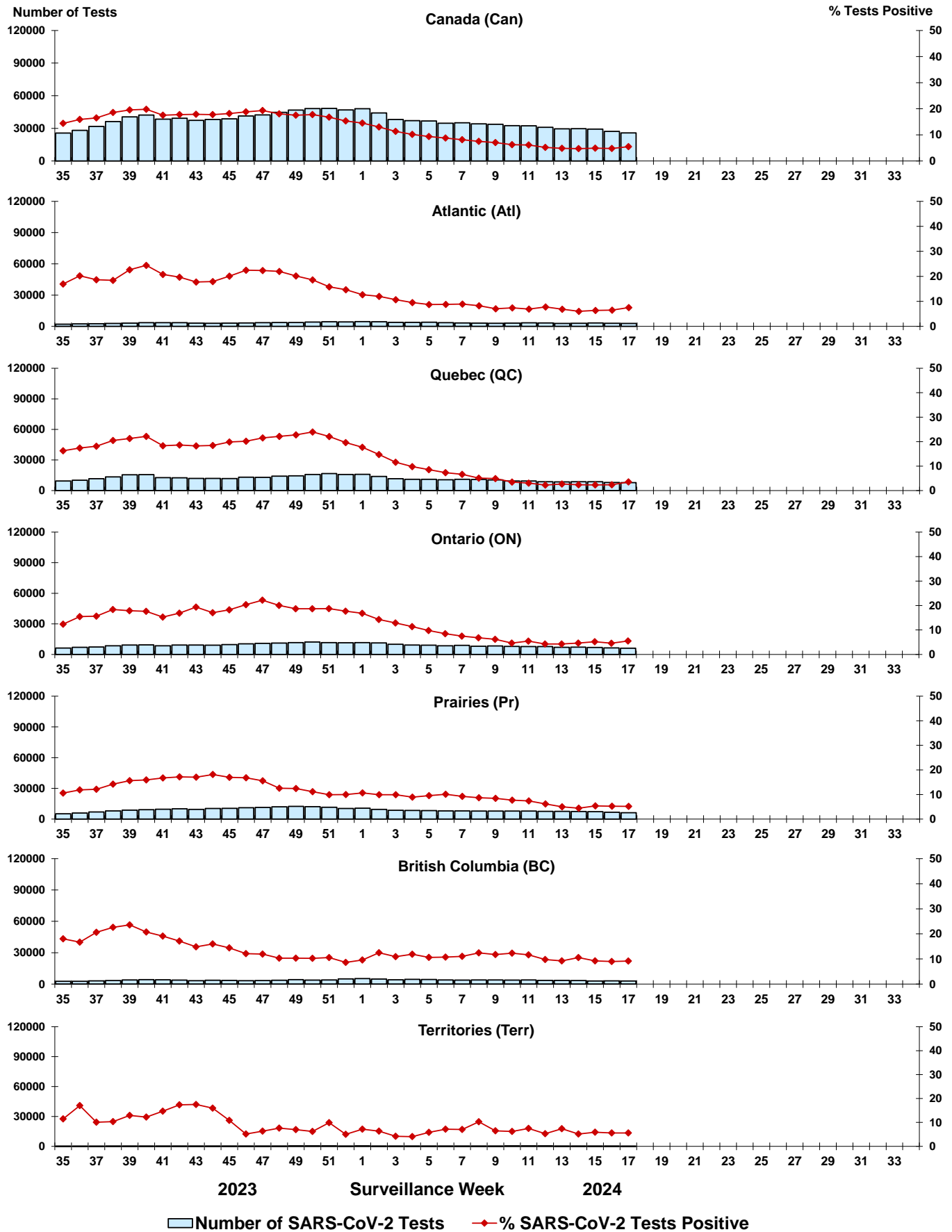
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Results from British Columbia comprise of specimens from the following sites: Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Vancouver Coastal Health sites, Victoria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

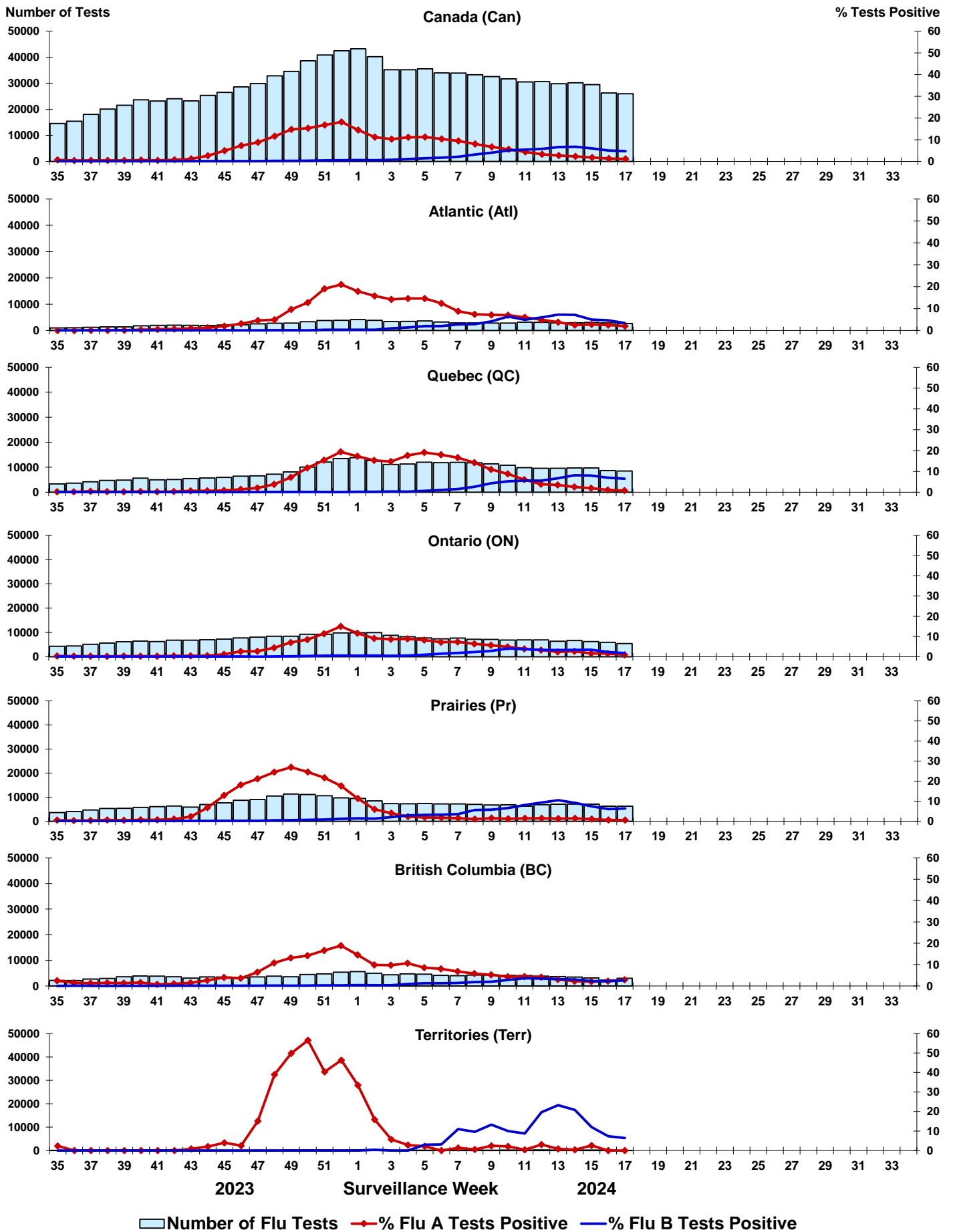


Figure 5: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

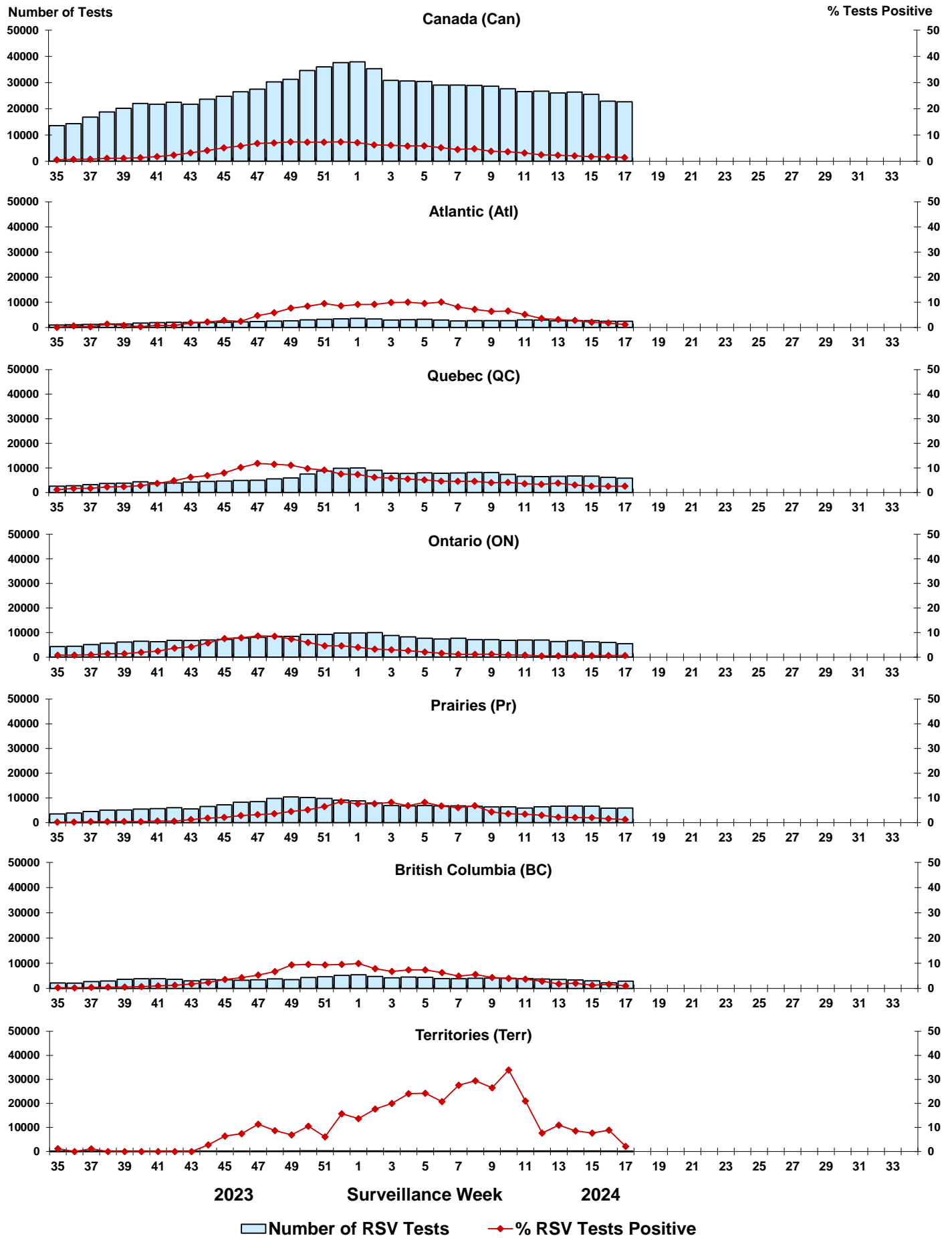


Figure 6: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

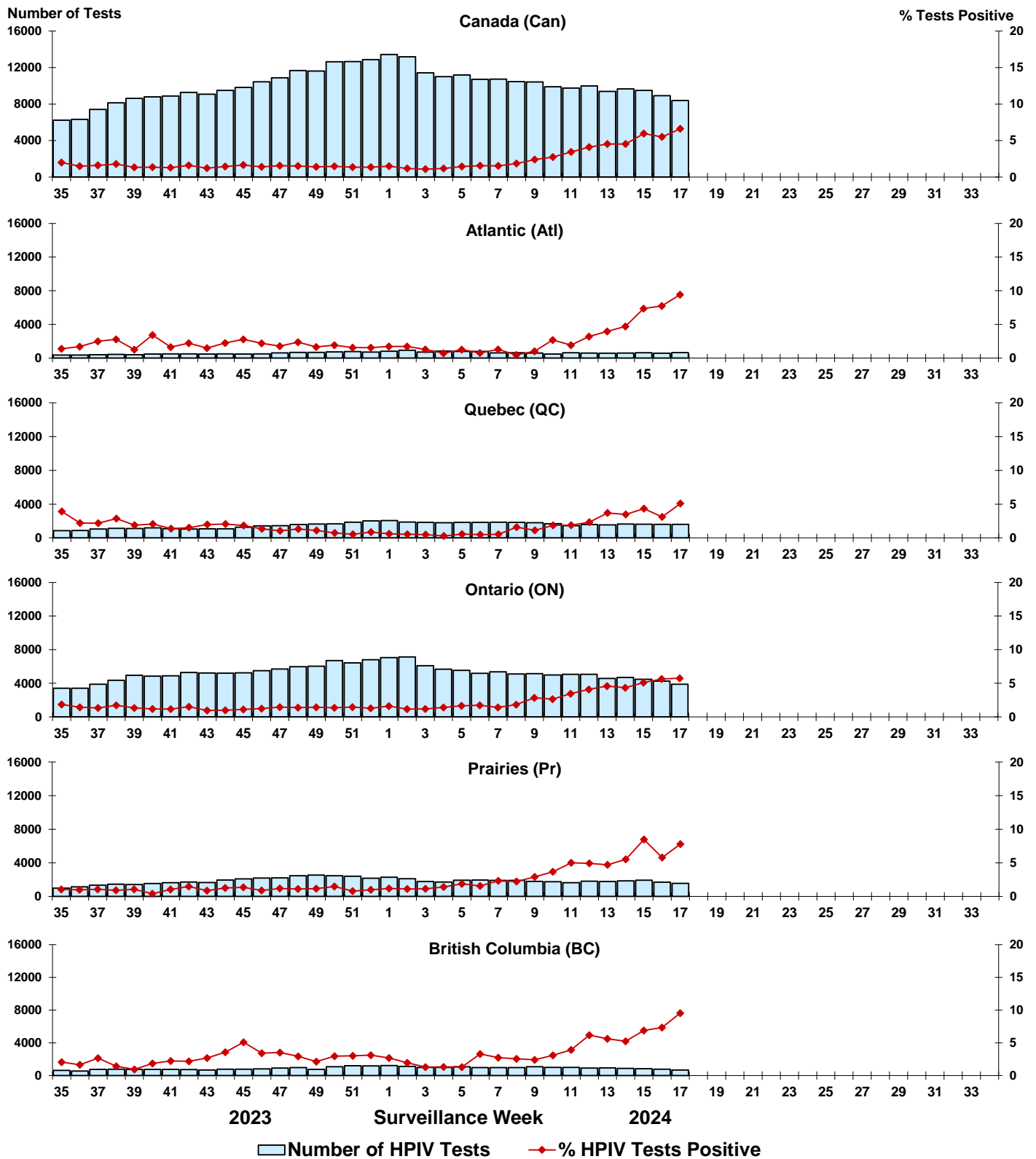


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

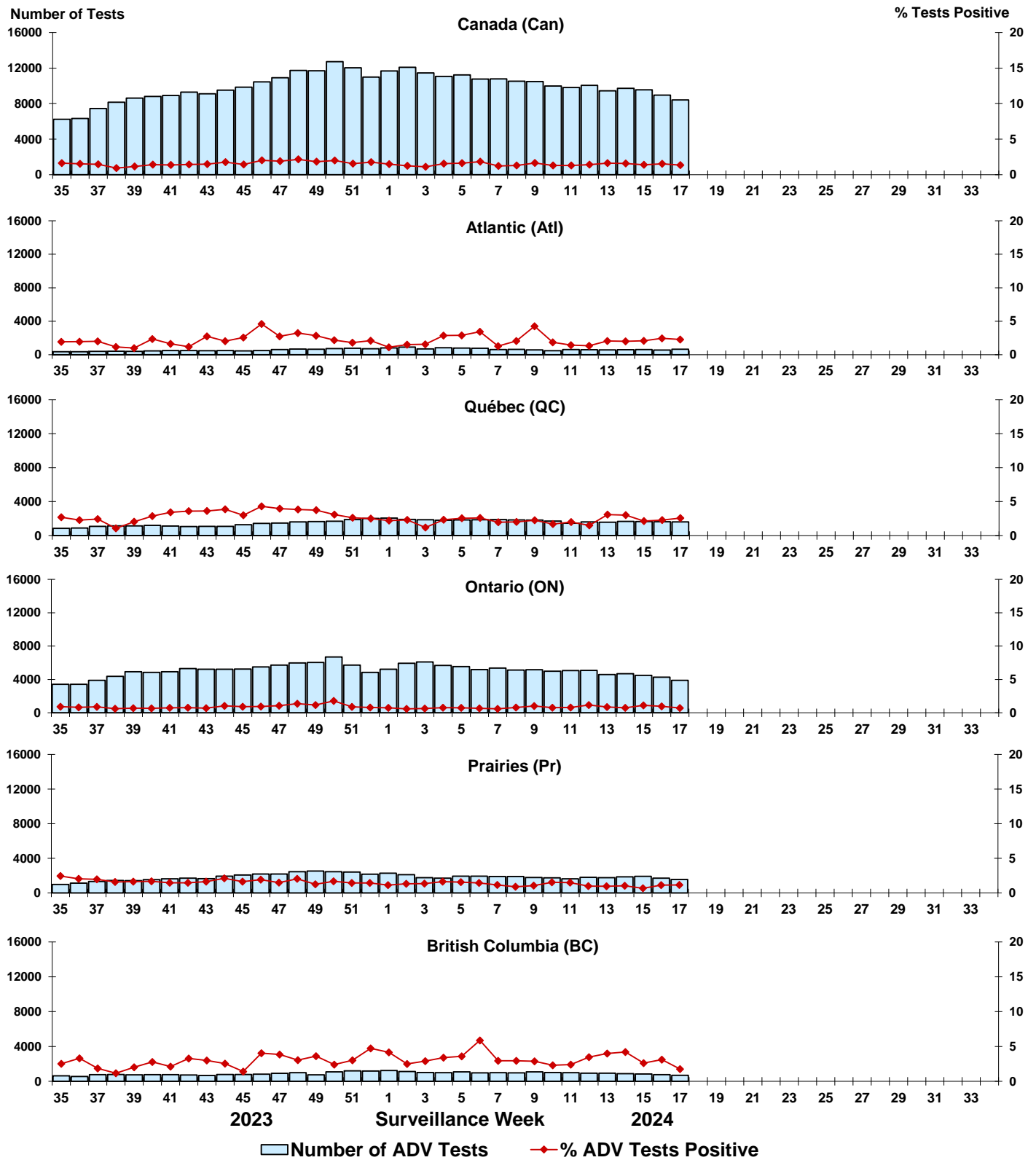


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

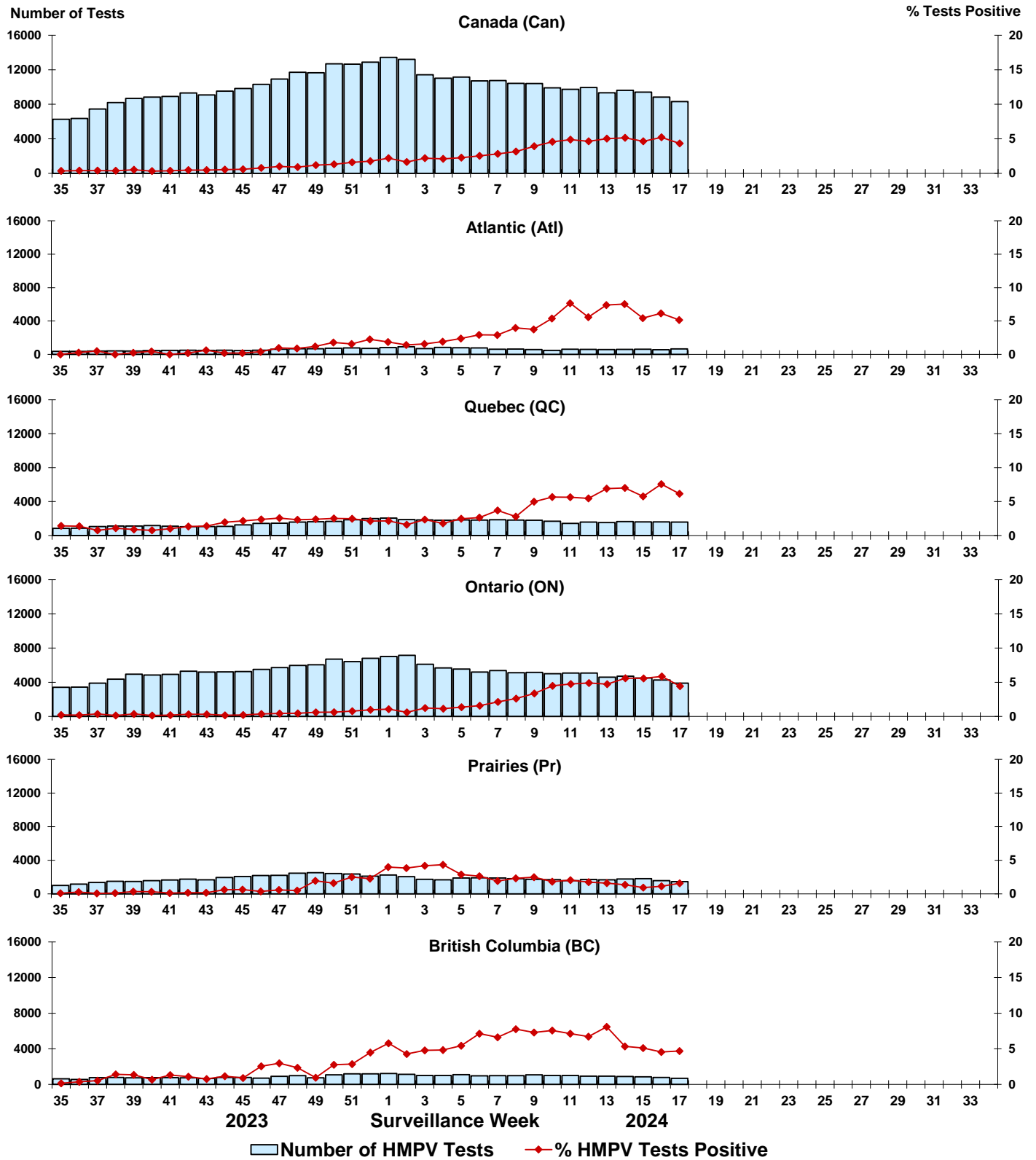


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

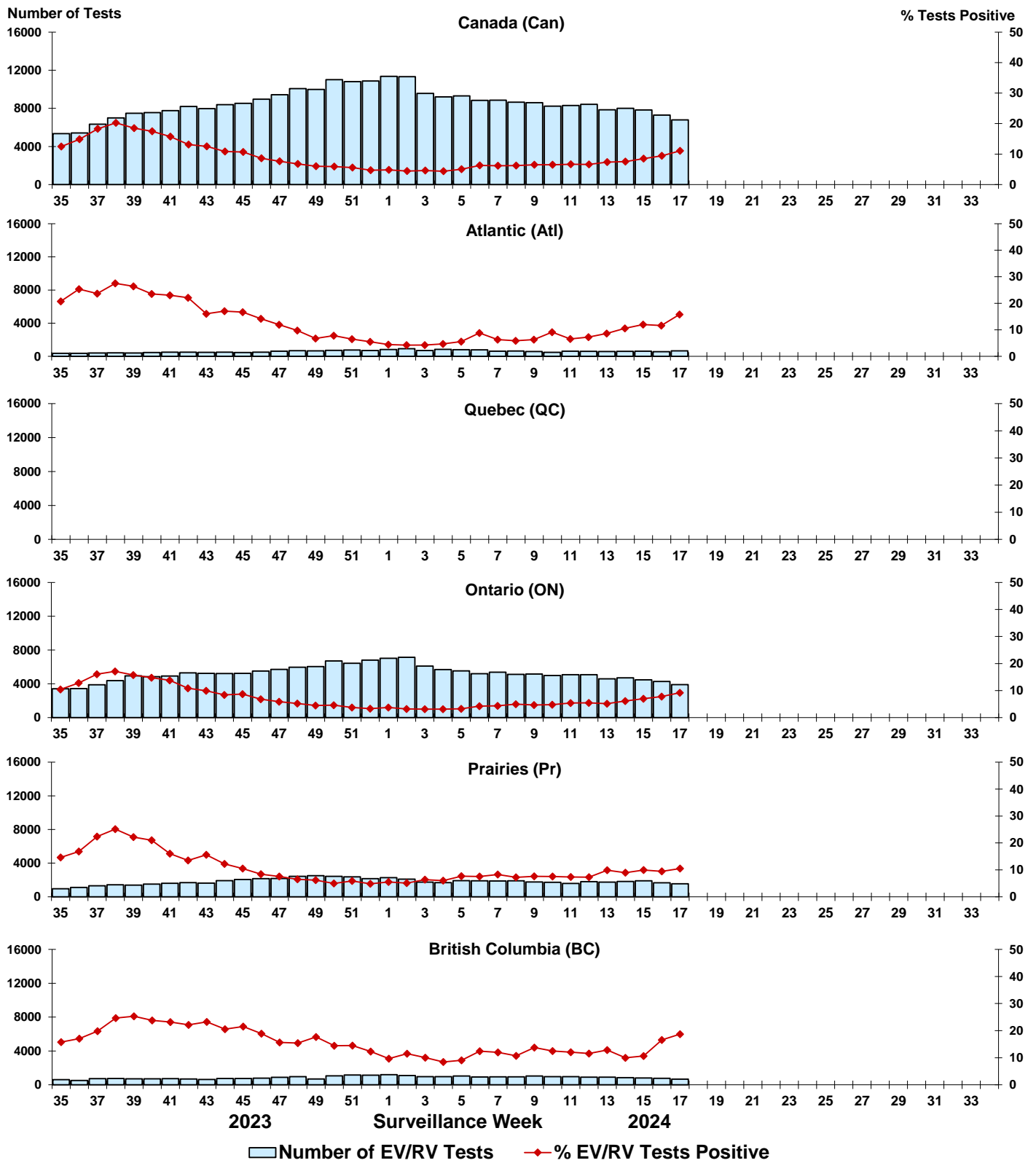


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

