

RESPIRATORY VIRUS DETECTION REPORT

April 7 to April 13, 2024
(Surveillance Week 2024-15)



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 15 (week ending April 13, 2024) in Canada, percent positivity is currently highest for influenza 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 (1,433 detections; 4.9% positive) and below recent peak recorded in October 2023 (19.8% positive).
- Influenza A percent positivity has decreased in recent weeks (525 detections; 1.8% positive) and is lower than influenza B which is currently stable (1,729 detections; 6.0% positive).
- RSV percent positivity continues to decrease (438 detections; 1.8% positive).
- Percent positivity of all other non-SARS-CoV-2 respiratory viruses is within expected levels typical of this time of year.
- 34/35 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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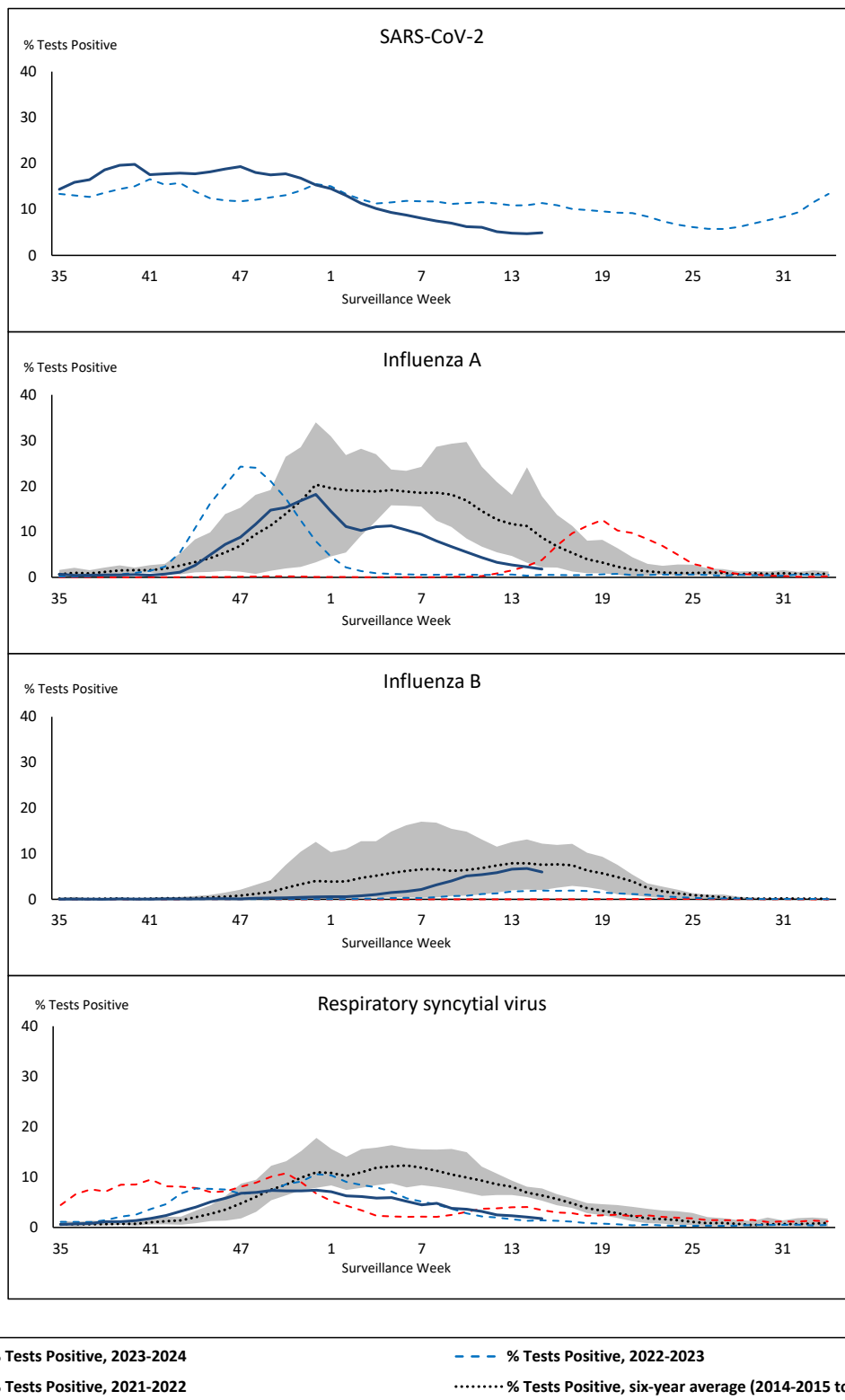


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Figure 1: Positive severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), influenza, and respiratory syncytial virus tests (%) reported by participating laboratories in Canada by surveillance week compared to average and range from 2014-2015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



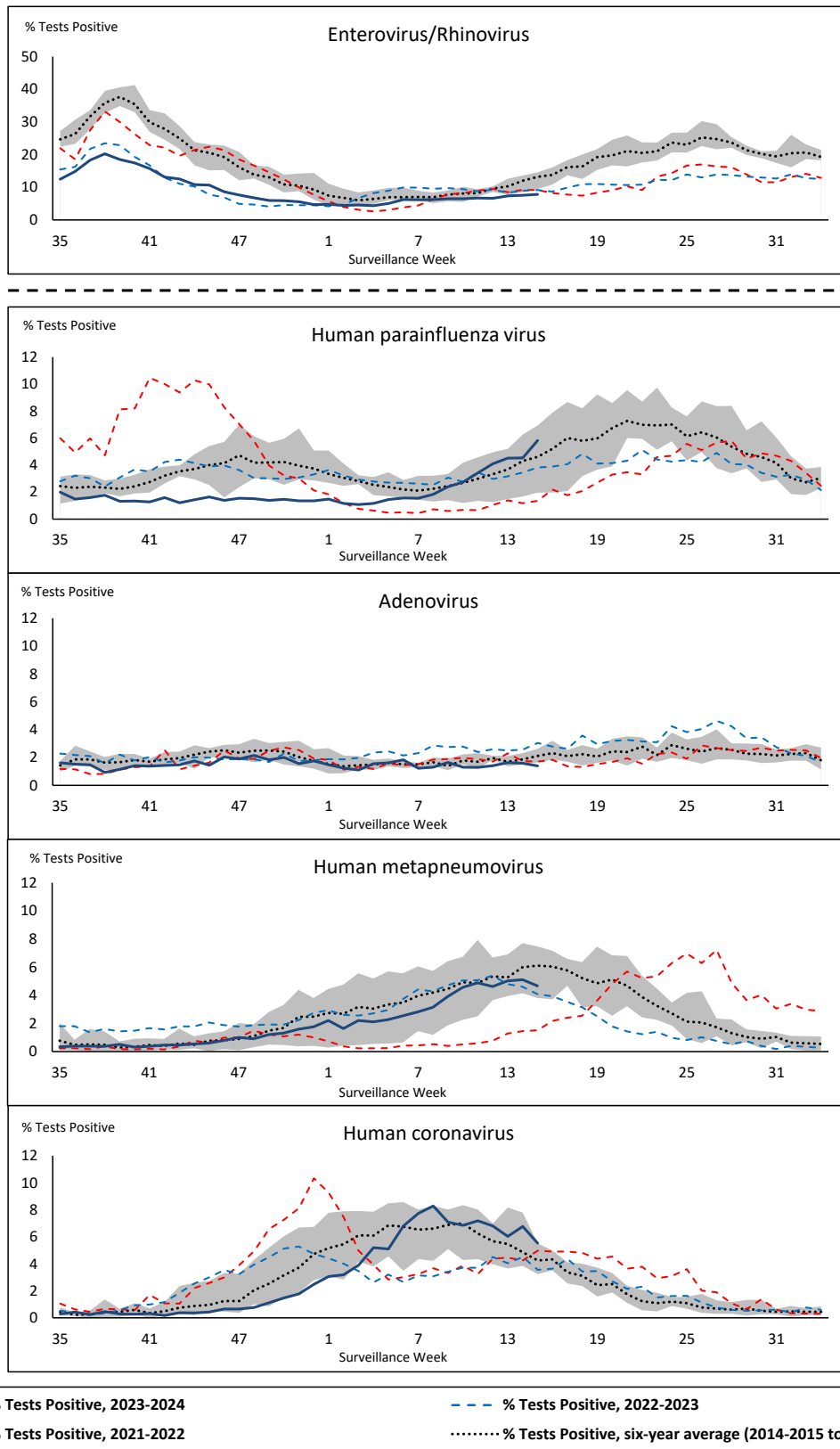
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

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 13, 2024 (surveillance week 2024-15)

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	593	77	467	0	0	6	6	13	467	14	467	1	4	20	1	0	467	5	467	26	467	30	467	15
Prince Edward Island	173	6	142	0	0	1	1	12	142	5	23	0	0	6	0	0	23	3	23	3	23	8	23	3
Nova Scotia	1464	87	1417	0	0	70	70	52	1084	18	31	0	0	1	0	0	31	1	31	0	31	4	31	2
New Brunswick	1013	37	1023	7	0	0	7	76	1023	19	105	1	0	10	2	0	105	4	105	5	105	33	105	7
Atlantic	3243	207	3049	7	0	77	84	153	2716	56	626	2	4	37	3	0	626	13	626	34	626	75	626	27
Région Nord-Est	1377	43	1476	0	0	5	5	164	746	24	88	0	0	7	1	0	88	2	83	5	N.C.	N.C.	88	14
Québec-Chaudière-Appalaches	1280	36	1536	0	0	20	20	185	1450	37	610	0	0	8	0	0	626	12	610	41	N.C.	N.C.	490	36
Centre-du-Québec	1801	34	1777	0	0	36	36	144	786	31	32	0	0	2	0	0	32	3	32	1	N.C.	N.C.	32	1
Montréal-Laval	2012	39	2785	0	0	72	72	167	1519	40	874	0	1	47	0	0	874	17	874	43	N.C.	N.C.	874	32
Ouest du Québec	1085	26	724	0	0	20	20	53	715	8	16	0	0	3	0	0	16	1	16	2	N.C.	N.C.	16	1
Montérégie	1146	21	1449	0	0	39	39	64	1446	30	10	0	0	0	1	0	10	0	10	0	N.C.	N.C.	10	0
Province of Québec	8701	199	9747	0	0	192	192	777	6662	170	1630	0	1	67	2	0	1646	35	1625	92	N.C.	N.C.	1510	84
P.H.O.L. - Ottawa	219	41	206	3	0	4	5	3	206	1	125	0	0	0	0	7	125	0	125	15	125	2	125	20
EORLA	839	32	530	0	0	14	14	28	530	6	50	0	0	7	0	0	50	0	50	4	50	11	50	1
P.H.O.L. - Kingston	180	19	119	3	0	0	3	2	119	0	77	0	0	0	0	4	77	0	77	3	77	1	77	18
UHN / Mount Sinai Hospital	891	20	642	0	0	9	9	6	642	1	113	0	0	3	0	0	113	0	113	6	113	3	113	3
P.H.O.L. - Toronto	396	52	932	16	1	0	17	14	932	7	868	0	0	0	0	73	868	20	868	67	868	86	868	89
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	1448	36	1102	7	6	1	14	42	1102	3	1091	0	0	0	0	13	1091	9	1095	17	1068	37	1095	12
P.H.O.L. - Sault Ste. Marie	13	1	22	0	0	0	0	1	22	0	17	0	0	0	0	0	17	0	17	0	17	5	17	2
P.H.O.L. - Timmins	21	3	39	3	0	0	3	1	39	2	37	0	0	0	0	1	37	0	37	2	37	4	37	5
St. Joseph's - London	642	23	502	0	0	7	7	17	502	11	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.
P.H.O.L. - London	279	39	253	2	1	0	3	6	253	2	201	0	0	0	0	16	201	1	201	17	201	11	201	14
P.H.O.L. - Orillia	5	0	2	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	0	2	0	2	0
P.H.O.L. - Thunder Bay	64	14	58	2	0	0	2	0	58	0	45	0	0	0	0	2	45	0	45	2	45	2	45	0
P.H.O.L. - Sudbury	10	0	20	2	0	0	2	1	20	0	15	0	0	0	0	1	15	1	15	2	15	1	15	2
P.H.O.L. - Hamilton	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P.H.O.L. - Peterborough	68	9	79	0	0	0	0	2	79	0	65	0	0	0	0	7	65	0	65	10	65	1	65	4
St. Joseph's - Hamilton	1571	41	1519	0	0	22	22	79	1519	6	1519	0	0	76	0	0	1519	15	1519	80	1519	97	0	0
Sault Area Hospital	114	17	103	2	2	0	4	5	103	0	89	0	0	6	0	0	89	0	89	12	89	7	89	5
Province of Ontario	6768	349	6128	40	10	57	105	207	6128	39	4314	0	0	92	0	124	4314	46	4318	237	4291	268	2799	175
Manitoba	1355	110	1104	1	0	23	24	77	1104	18	97	1	1	5	1	0	97	1	96	4	97	15	96	3
Saskatchewan	1682	79	1243	0	0	16	16	143	1026	38	397	0	0	24	0	0	397	2	397	9	397	42	397	24
Alberta	4189	198	4323	11	19	1	36	284	4132	65	1149	4	1	98	0	0	1149	8	1064	1	1133	91	1149	52
Prairies	7226	387	6670	12	19	40	76	504	6262	121	1643	5	2	127	1	0	1643	11	1557	14	1627	148	1642	79
British Columbia	2990	275	3019	11	11	0	63	67	2936	38	762	4	3	45	3	0	762	21	762	39	728	78	728	39
Yukon	38	1	27	0	0	0	3	5	27	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	29	1	29	0	1	0	1	3	29	1	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	29	0	29	0	29	4	N.C.	N.C.
Nunavut	203	14	178	1	0	0	1	13	178	13	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	270	16	234	1	1	0	5	21	234	14	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	29	0	29	0	29	4	N.C.	N.C.
CANADA	29198	1433	28847	71	41	366	525	1729	24938	438	8975	11	10	368	9	124	9020	126	8917	416	7301	573	7305	404

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 April 13, 2024 (surveillance weeks 2023-35 to 2024-15)

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	20378	2941	14967	0	0	1328	1328	133	14967	949	14967	18	73	71	106	0	14967	246	14967	338	14967	1180	14967	415
Prince Edward Island	7537	784	4940	0	0	542	542	225	4940	372	549	3	0	16	8	0	548	35	538	22	549	140	533	28
Nova Scotia	47224	8508	33623	0	0	2734	2734	453	27618	1438	1141	16	3	5	10	0	1141	42	1134	12	1141	228	1140	20
New Brunswick	35939	3930	33912	896	25	1906	2827	852	33508	1895	3045	8	4	36	32	0	3045	111	3045	94	3045	595	3045	127
Atlantic	111078	16163	87442	896	25	6510	7431	1663	81033	4654	19702	45	80	128	156	0	19701	434	19684	466	19702	2143	19685	590
Région Nord-Est	55281	7128	50611	5	0	4729	4734	958	20336	1453	2604	16	12	33	18	0	2604	110	2538	111	N.C.	N.C.	2604	126
Québec-Chaudière-Appalaches	64058	9353	44915	0	0	5560	5560	1629	43079	2750	17223	22	9	43	14	0	17745	537	17223	571	N.C.	N.C.	14131	521
Centre-du-Québec	80303	12478	41681	0	0	4578	4578	1034	23964	1649	1190	15	8	23	7	0	1190	60	1190	53	N.C.	N.C.	1222	45
Montréal-Laval	95901	13964	81636	5	2	6699	6706	871	52136	2939	27683	95	43	323	24	0	27683	543	27756	695	N.C.	N.C.	27683	984
Ouest du Québec	52662	10065	23094	4	0	2105	2109	364	22865	1112	628	11	3	24	7	0	628	48	628	22	N.C.	N.C.	628	29
Montréal	51387	8055	42778	0	0	3250	3250	402	41697	1818	231	1	0	1	2	0	231	8	231	5	N.C.	N.C.	231	3
Province of Québec	399592	61043	284715	14	2	26921	26937	5258	204077	11721	49559	160	75	447	72	0	50081	1306	49566	1457	N.C.	N.C.	46499	1708
P.H.O.L. - Ottawa	11118	3819	7886	299	54	195	423	41	7880	138	4706	0	0	0	0	128	4706	13	4704	122	4706	432	4704	290
EOULA	40991	4569	19490	0	0	1618	1618	423	19490	1133	1298	2	5	35	4	0	1273	14	1298	36	1298	234	1298	42
P.H.O.L. - Kingston	7670	2132	4401	138	19	96	227	7	4401	168	3028	0	0	0	0	81	3028	11	3028	28	3028	332	3028	154
UHN / Mount Sinai Hospital	35418	3057	22440	41	10	561	612	85	22440	226	1517	0	0	23	2	0	1517	3	1517	17	1517	73	1517	47
P.H.O.L. - Toronto	19258	5506	35521	1191	912	345	1798	256	35512	1054	32623	0	0	0	0	1175	32631	388	32608	784	32623	3012	32608	1716
Sick Kids Hospital - Toronto	4087	311	3676	105	100	20	225	58	3676	312	3676	15	12	87	21	0	3676	99	3676	115	3676	666	3676	112
Shared Hospital Laboratory	57020	4582	47797	866	531	294	1691	428	47804	1344	47561	0	0	0	0	332	41907	346	47646	294	47664	1539	47668	541
P.H.O.L. - Sault Ste. Marie	492	207	611	55	3	17	69	2	611	46	421	0	0	0	0	5	421	1	421	0	421	26	421	44
P.H.O.L. - Timmins	1149	329	1187	66	10	30	95	8	1187	67	945	0	0	0	0	27	945	5	945	14	945	58	945	48
St. Joseph's - London	28734	3513	15977	0	0	987	987	247	15977	730	2080	0	0	0	0	34	2099	33	2099	32	2101	236	2099	58
P.H.O.L. - London	14840	4169	11147	487	143	169	614	106	11144	474	8989	0	0	0	0	286	8989	40	8987	145	8989	776	8987	372
P.H.O.L. - Orillia	580	150	1262	72	17	11	100	0	1259	74	1193	0	0	0	0	31	1193	16	1193	19	1193	145	1193	26
P.H.O.L. - Thunder Bay	1914	515	1221	64	0	8	44	5	1218	30	1016	0	0	0	0	30	1016	6	1016	32	1016	59	1016	28
P.H.O.L. - Sudbury	764	239	921	45	1	23	69	2	919	26	655	0	0	0	0	24	656	2	655	11	655	52	655	63
P.H.O.L. - Hamilton	7133	2112	5915	149	66	98	258	40	5914	172	4461	0	0	0	0	144	4461	85	4460	118	4461	565	4460	214
P.H.O.L. - Peterborough	2395	679	2467	207	205	73	155	31	2457	222	1924	0	0	0	0	75	1924	39	1924	58	1924	298	1924	59
St. Joseph's - Hamilton	62172	5873	55547	0	0	3230	3230	810	55547	1775	55547	0	0	595	0	0	55547	352	55547	781	55547	3188	0	0
Sault Area Hospital	6040	806	4123	182	20	55	257	20	4116	205	3248	27	0	28	17	0	3199	40	3199	49	3199	274	3209	72
Province of Ontario	301775	42568	241589	3967	2091	7830	12472	2569	241552	8196	174888	44	17	768	44	2372	169188	1493	174923	2655	174963	11965	119408	3886
Manitoba	52814	7424	39887	146	12	1880	2038	522	39887	1386	3084	3	11	30	42	0	3084	125	3858	155	3084	549	3858	143
Saskatchewan	67703	7456	46781	142	22	5422	5586	1898	41659	1653	15124	30	9	142	25	0	15124	281	15124	790	15124	1436	15124	424
Alberta	176420	20053	155569	11810	803	587	13274	3775	145475	6224	42865	141	93	677	3	0	42853	492	41392	31	42183	3865	42864	1146
Prairies	296937	34933	242237	12098	837	7889	20898	6195	227021	9263	61073	174	113	849	70	0	61061	898	60374	976	60391	5850	61846	1713
British Columbia	125035	16517	126800	4088	831	262	8755	1180	123741	5931	29793	119	185	397	187	0	29795	928	29680	1197	28621	4258	28598	921
Yukon	1754	180	1149	34	15	0	63	12	1140	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	1236	77	1174	167	7	1	175	54	1174	173	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	975	45	975	10	1174
Nunavut	4606	384	3332	433	33	52	518	214	3332	483	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	7596	641	5655	634	55	53	756	280	5646	702	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	975	45	975	10	1174	142	N.C.
CANADA	1242013	171865	988438	21697	3841	49465	77249	17145	883070	40467	335015	542	470	2589	529	2372	330801	5104	335202	6761	284851	24358	276036	8818

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.

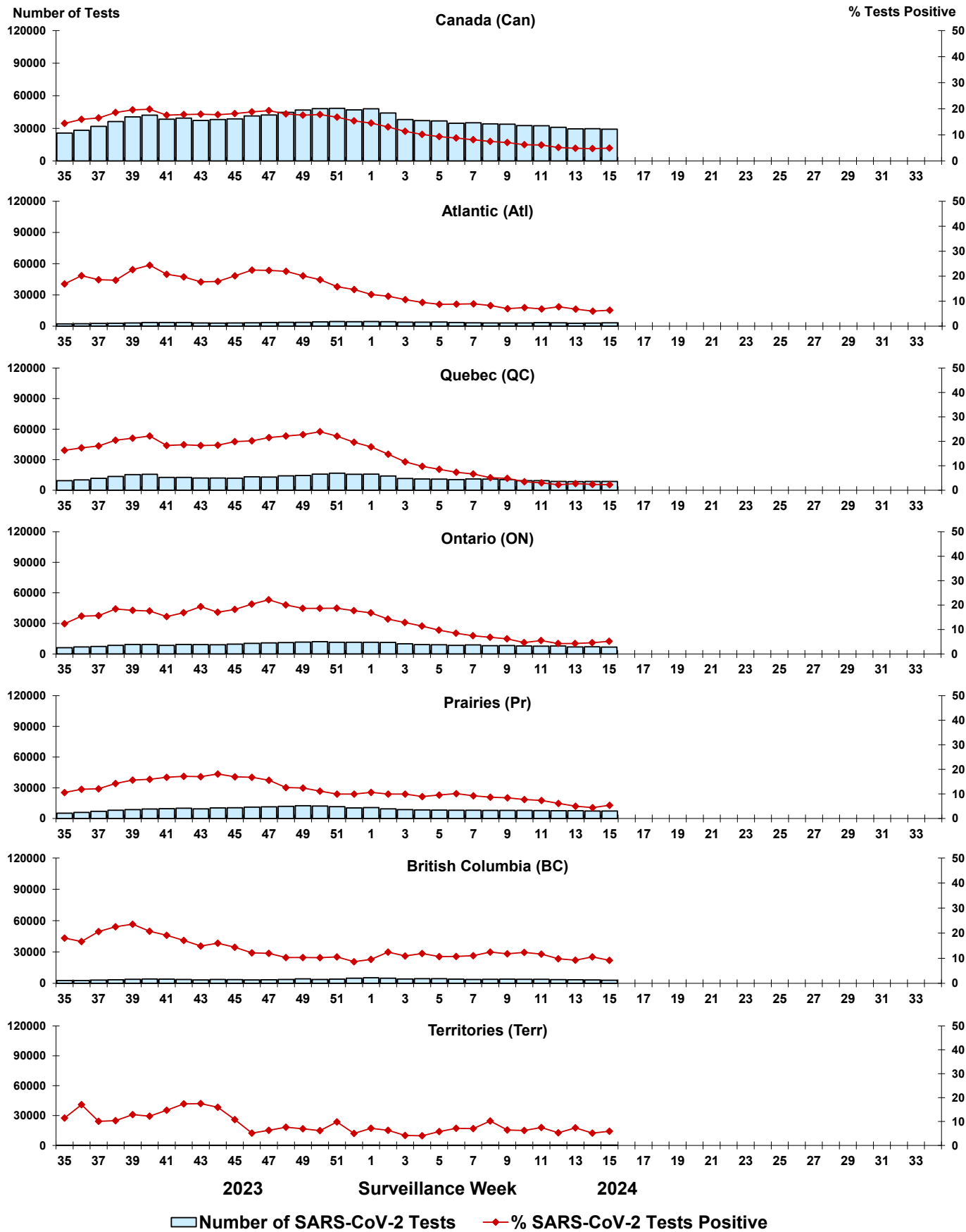
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Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts. Total influenza A and B positive counts are used to calculate percentage of tests positive.

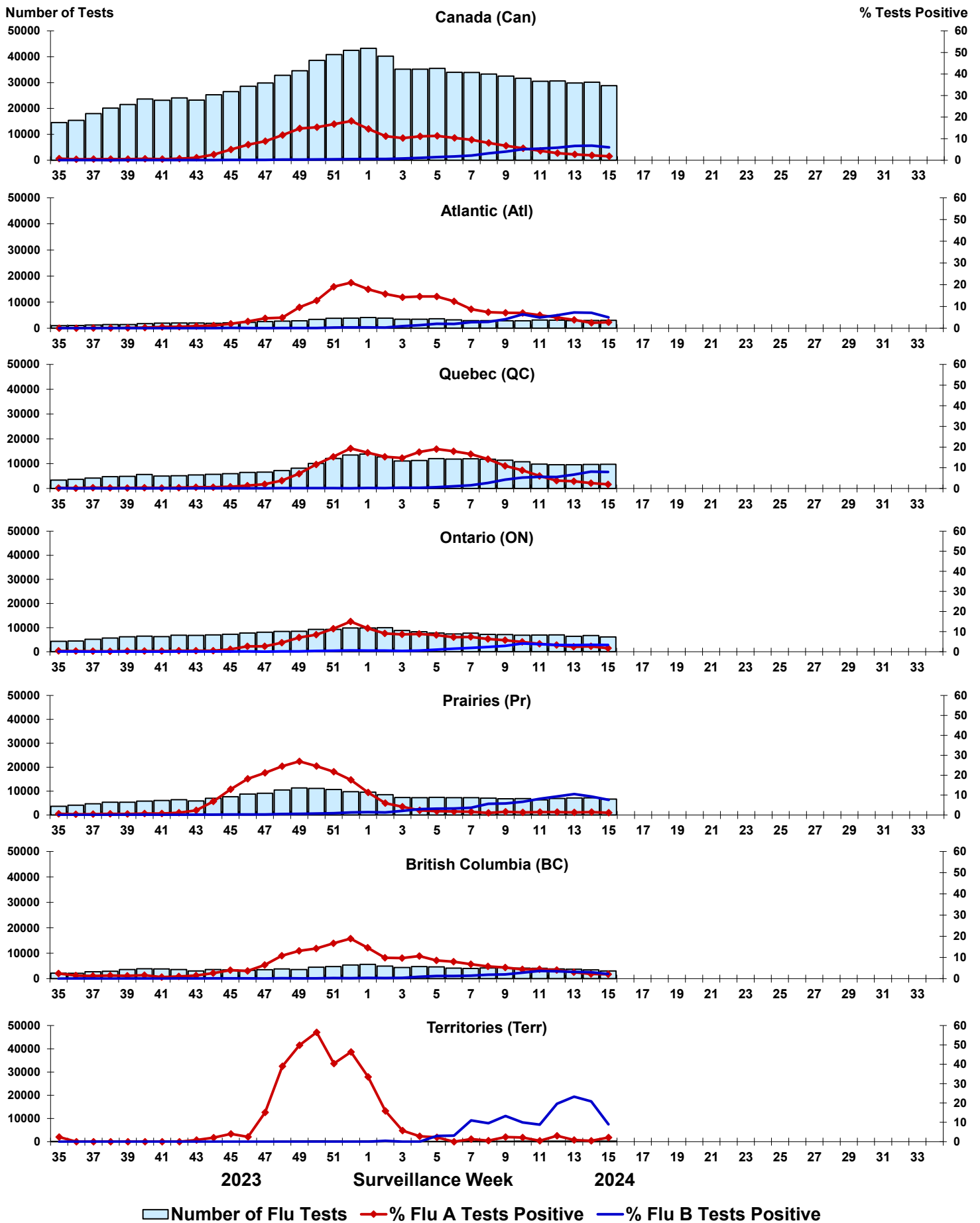
Delays in the reporting of data may cause data to change retrospectively. Due to these delays, the sum of weekly report totals do not add up to cumulative totals.

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



Number of Flu Tests % Flu A Tests Positive % Flu B Tests Positive

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

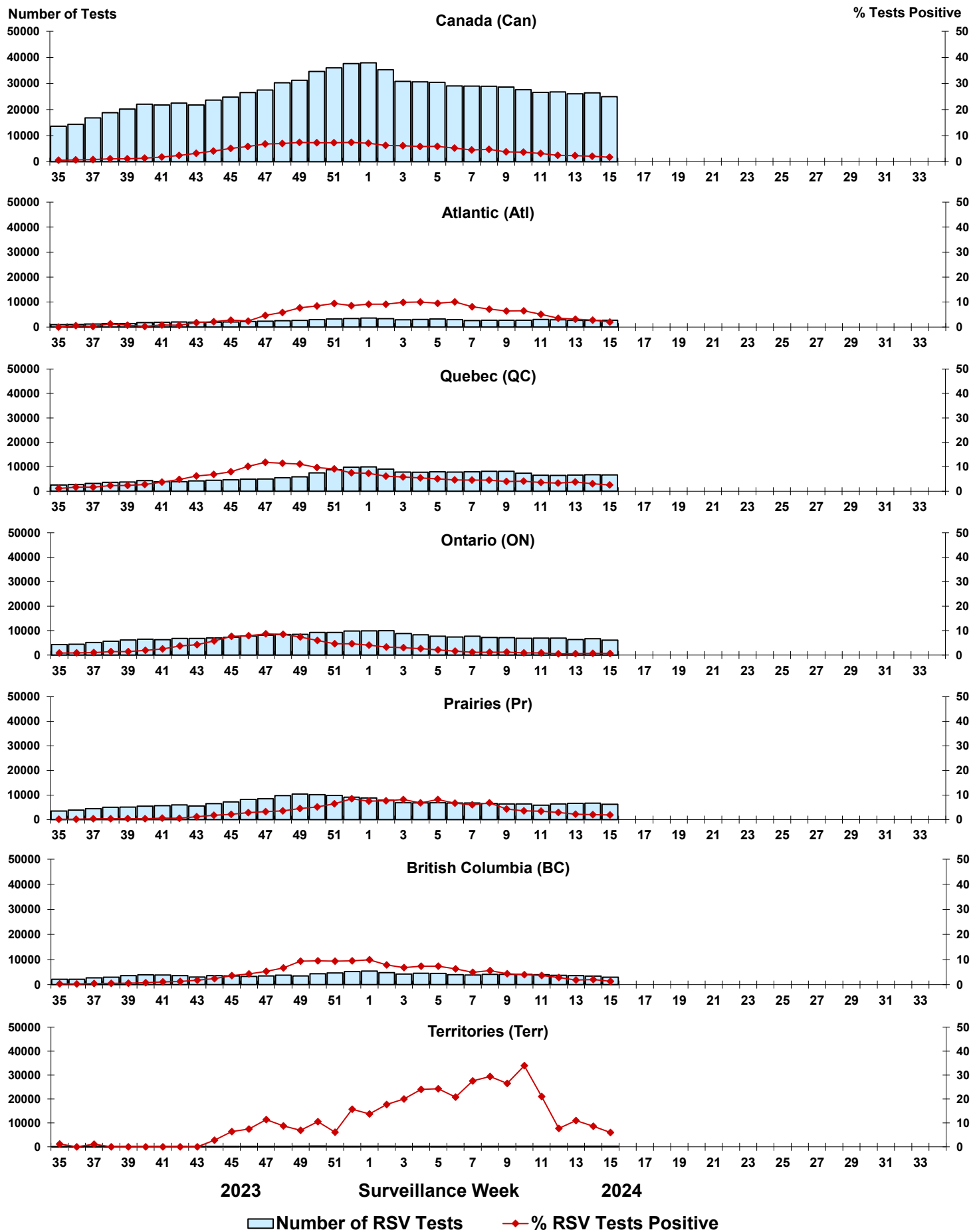


Figure 6: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

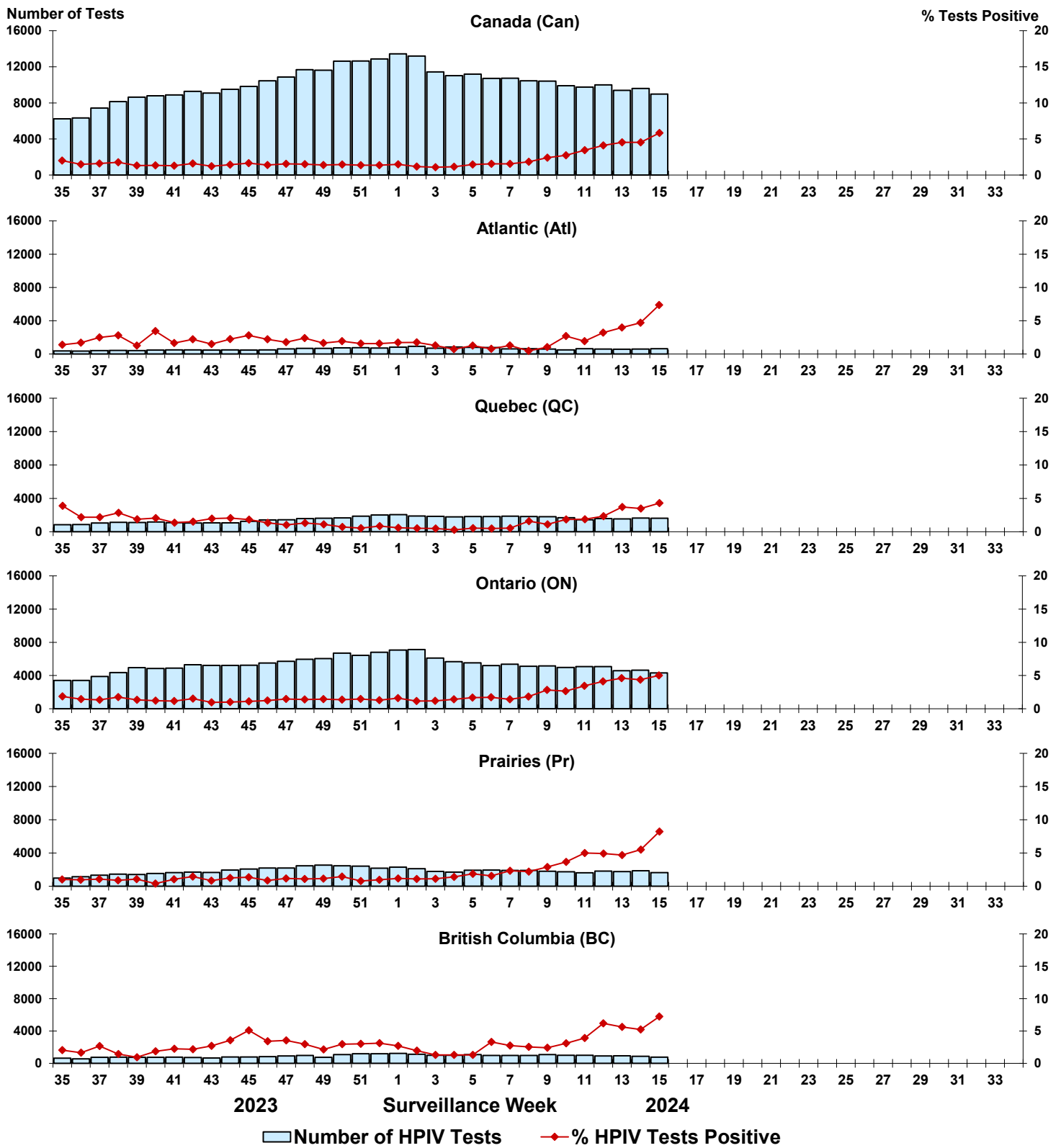


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

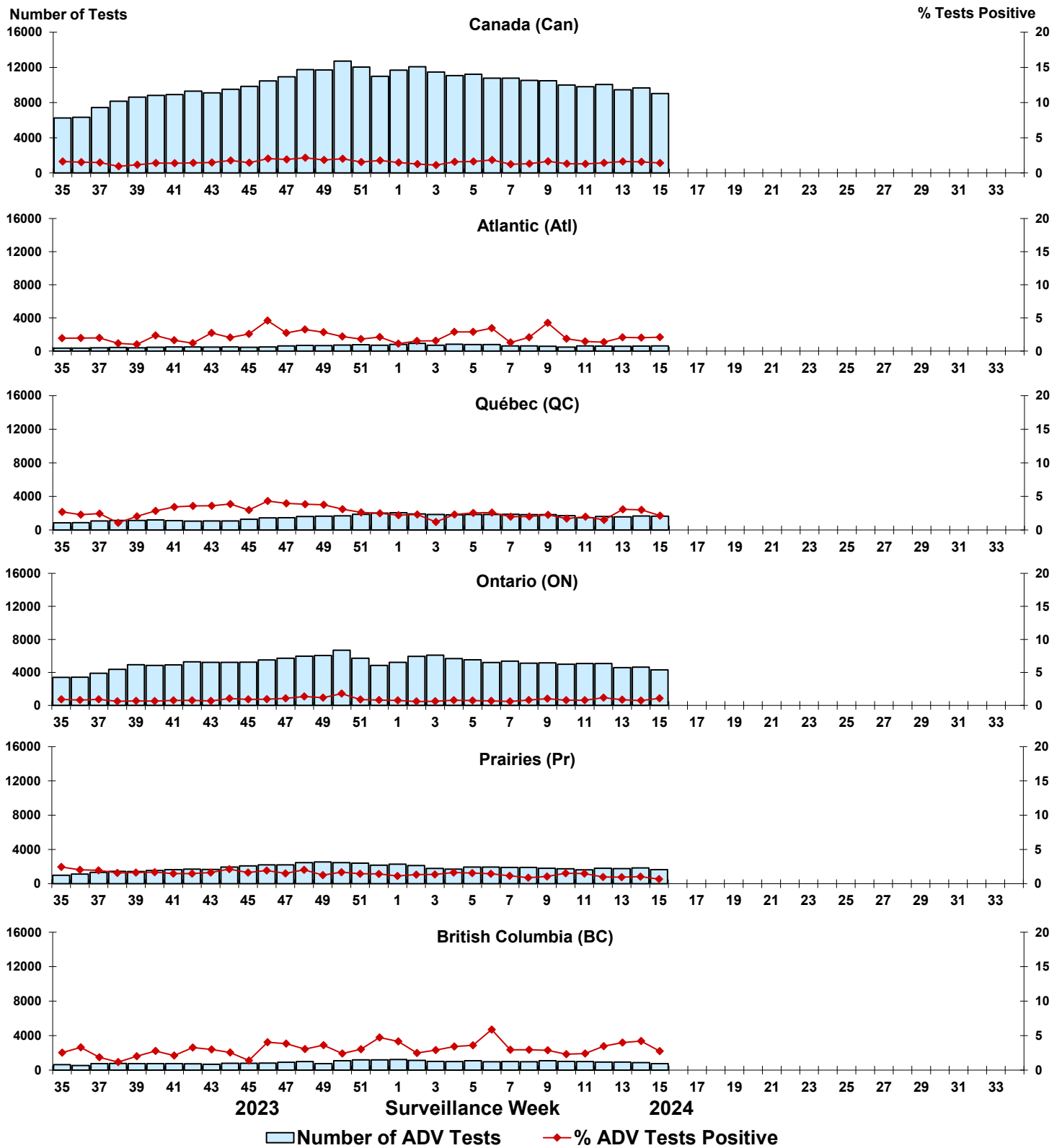


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

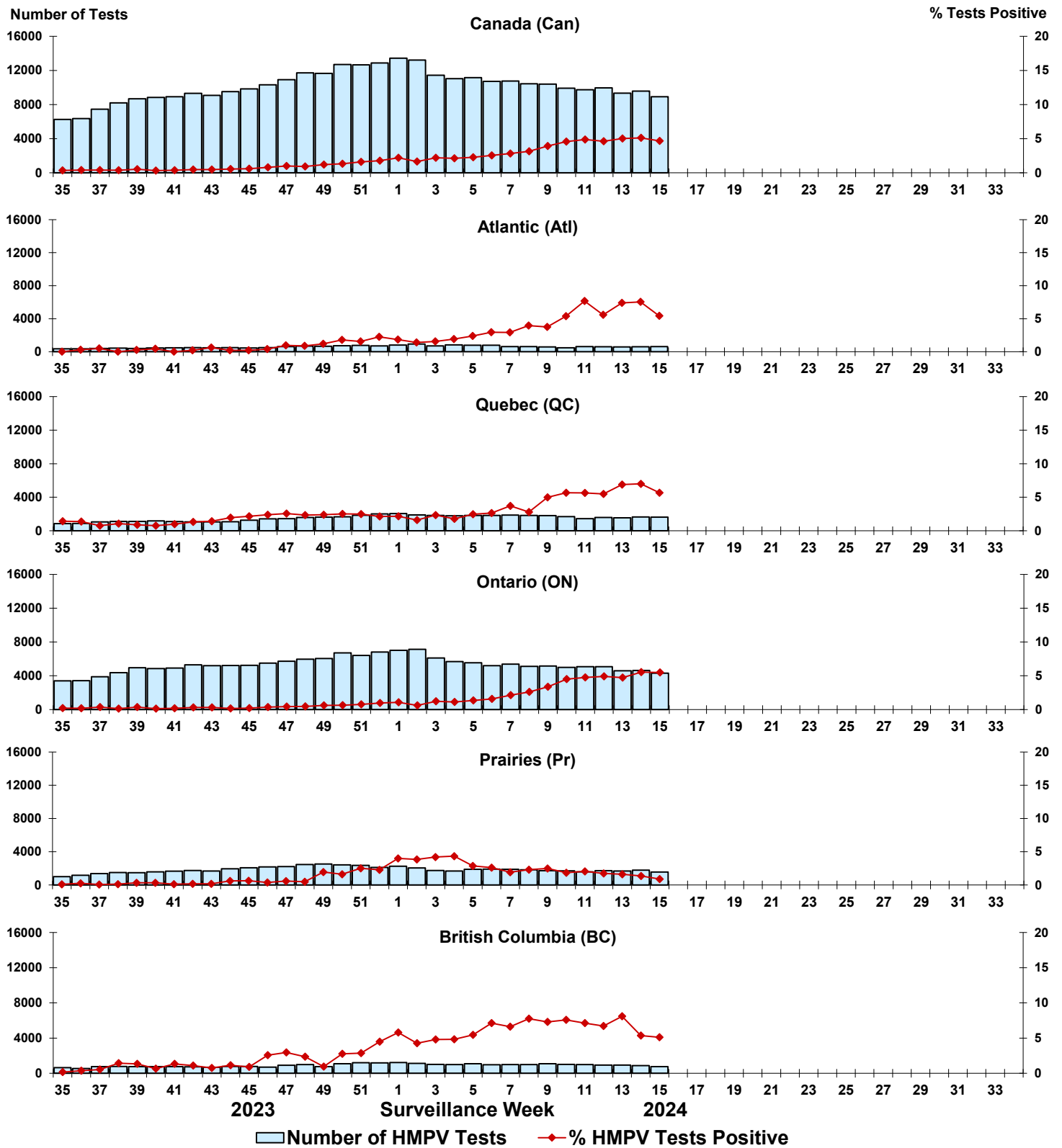


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

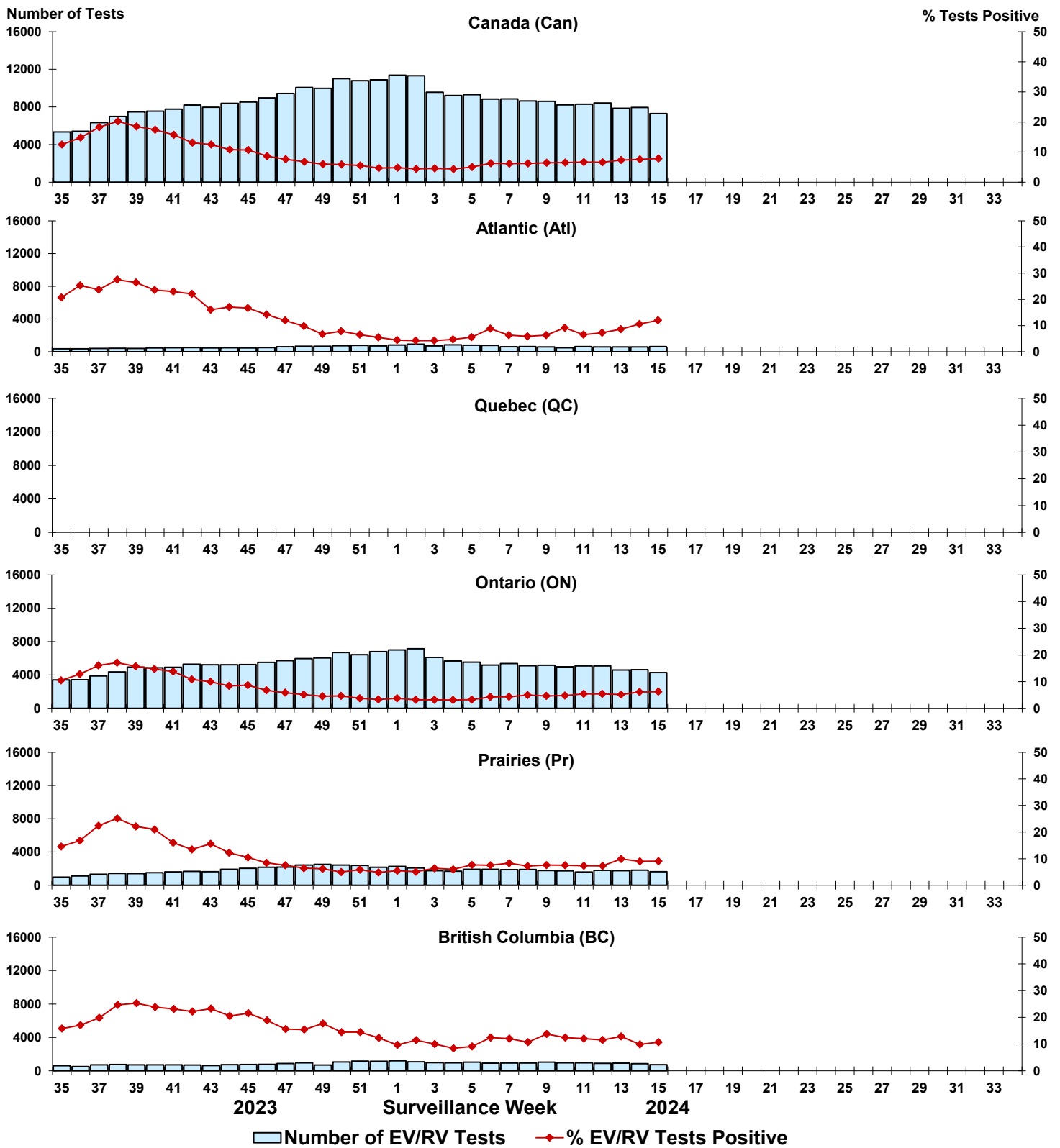


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

