

RESPIRATORY VIRUS DETECTION REPORT

June 18 to June 24, 2023
(Surveillance Week 2023-25)



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 25 (week ending June 24, 2023) in Canada, participating RVDSS laboratories reported 1,279 detections of SARS-CoV-2 from 20,797 tests (6.2% positive). Among non-SARS-CoV-2 respiratory viruses, where test volumes are lower (range of 4,063 to 12,555 tests), activity of enterovirus/rhinovirus is highest.

- Activity of enterovirus/rhinovirus is increasing but remains below expected levels typical of this time of year (579 detections; 13.7% positive).
- Activity of influenza remains low at inter-seasonal levels. Both influenza A (71 detections; 0.6% positive) and influenza B (45 detections; 0.4% positive) are within expected levels typical of this time of year.
- Activity of all other non-SARS-CoV-2 respiratory viruses is near or below 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

© 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

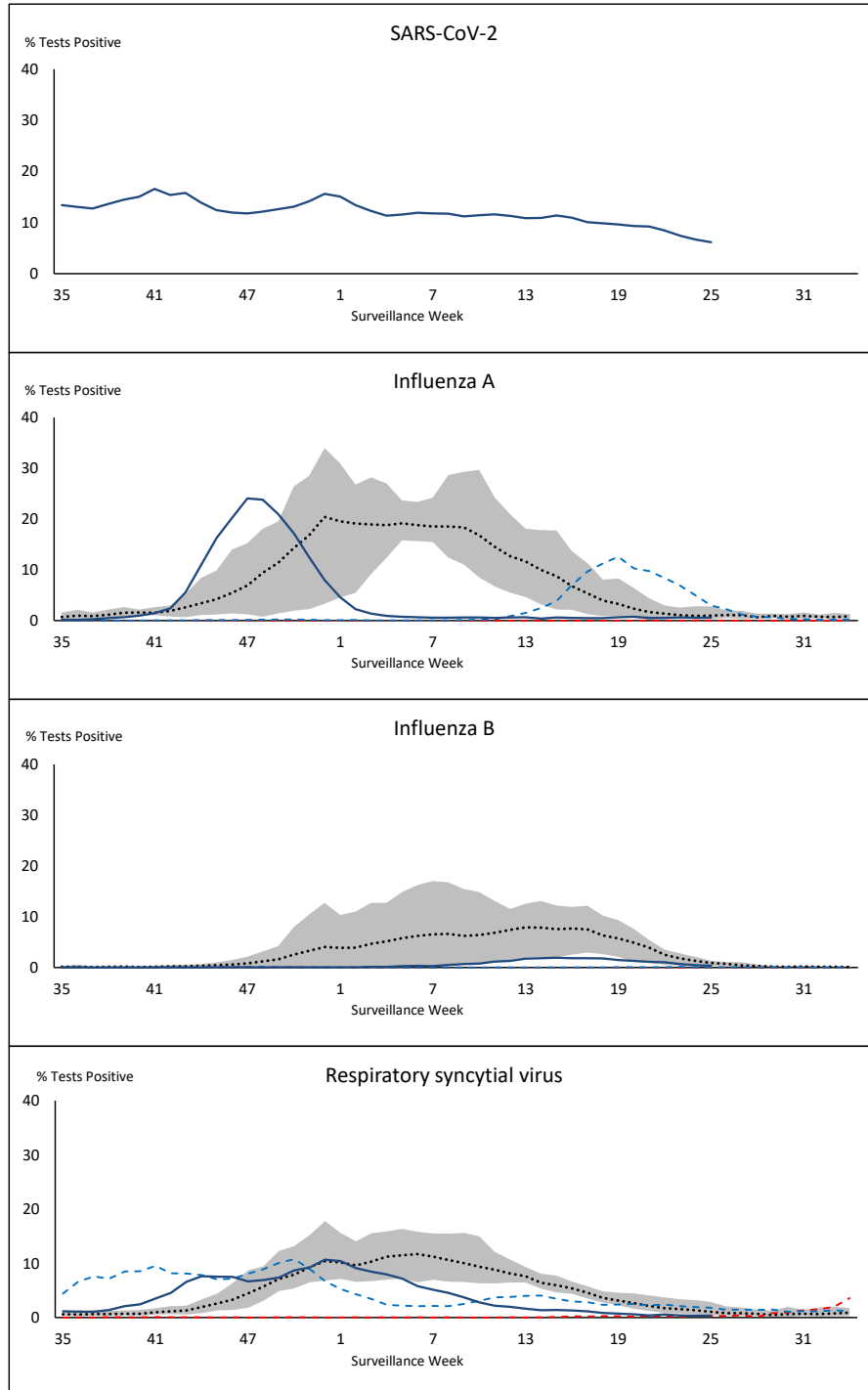


Public Health
Agency of Canada

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



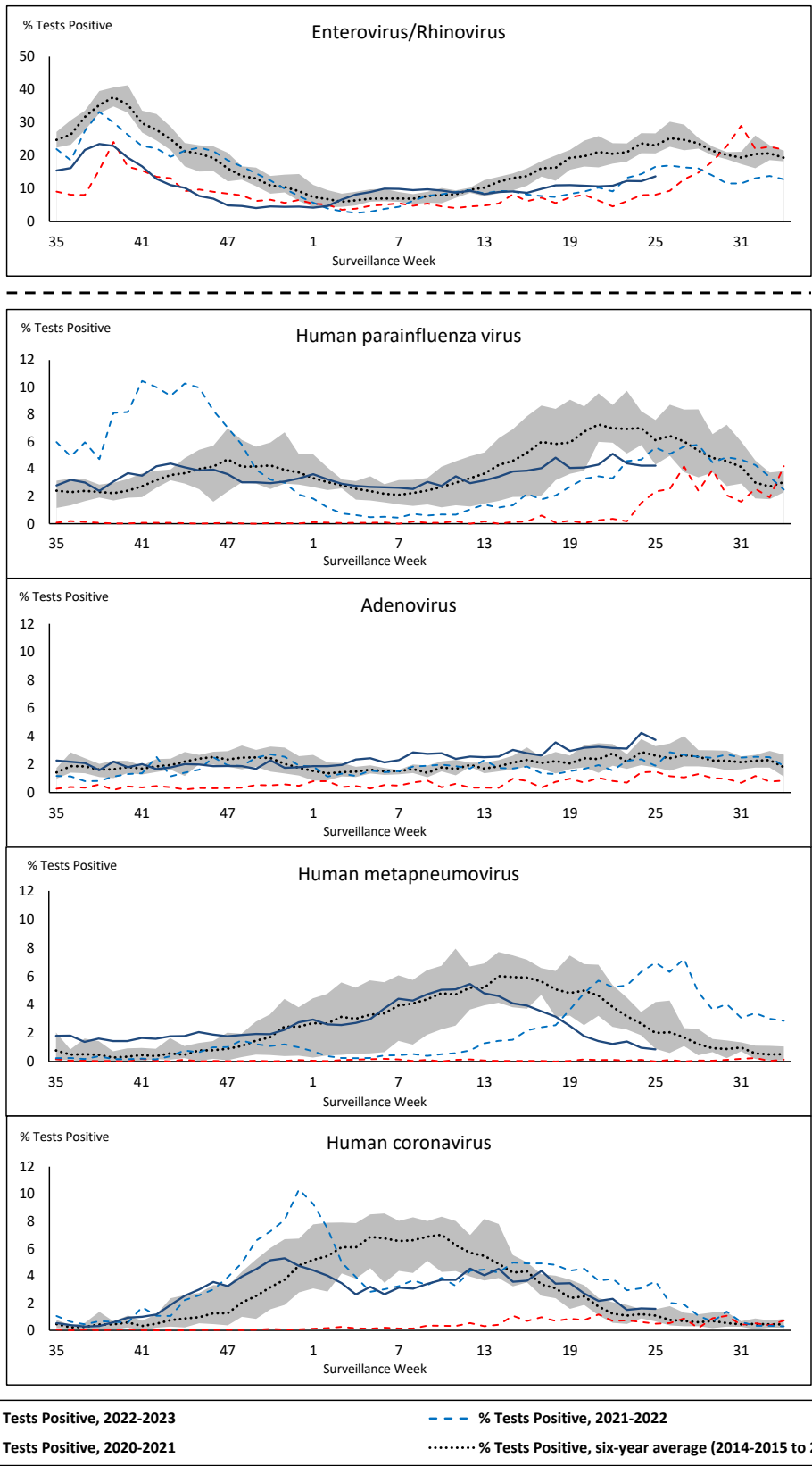
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

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 appropriate 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 June 24, 2023 (surveillance week 2023-25)

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	376	71	231	0	0	1	1	0	231	6	231	1	0	1	7	0	231	5	231	1	231	32	231	12	
Prince Edward Island	69	11	6	0	0	0	0	0	6	0	3	0	0	0	0	0	3	0	3	0	3	0	3	0	
Nova Scotia	1101	114	677	0	0	1	1	0	677	2	26	1	0	2	0	0	26	1	26	0	26	2	26	0	
New Brunswick	580	38	552	0	0	0	0	0	546	1	69	0	1	1	0	0	69	2	69	1	69	27	69	2	
Atlantic	2126	234	1466	0	0	2	2	0	1460	9	329	2	1	4	7	0	329	8	329	2	329	61	329	14	
Région Nord-Est	1084	62	957	0	0	4	4	2	168	1	61	2	2	0	1	0	61	5	60	0	N.C.	N.C.	61	0	
Québec-Chaudière-Appalaches	1470	67	351	0	0	3	3	4	351	5	136	0	0	1	3	0	156	19	136	0	N.C.	N.C.	136	1	
Centre-du-Québec	1063	47	104	0	0	0	0	0	101	0	25	0	0	0	0	0	25	3	25	0	N.C.	N.C.	25	0	
Montréal-Laval	2047	127	1041	0	0	12	12	10	952	7	478	0	2	14	8	0	478	20	479	8	N.C.	N.C.	478	5	
Ouest du Québec	768	45	246	0	0	0	0	2	246	1	12	0	0	0	1	0	12	3	12	1	N.C.	N.C.	12	0	
Montérégie	792	43	634	0	0	2	2	1	626	3	3	0	0	0	0	0	3	0	3	0	N.C.	N.C.	3	0	
Province of Québec	7224	391	3333	0	0	21	21	19	2444	17	715	2	4	15	13	0	735	50	715	9	N.C.	N.C.	715	6	
P.H.O.L. - Ottawa	87	26	42	2	0	0	2	0	42	0	32	0	0	0	0	2	32	1	32	0	32	1	32	2	
EORLA	762	29	238	0	0	0	0	2	238	2	26	0	0	0	2	0	26	2	26	0	26	4	26	0	
P.H.O.L. - Kingston	150	5	26	0	0	0	0	0	26	0	26	0	0	0	0	2	26	0	26	0	26	2	26	0	
UHN / Mount Sinai Hospital	804	34	473	0	0	1	1	1	473	0	17	0	0	1	1	0	17	0	17	0	17	2	17	1	
P.H.O.L. - Toronto	289	40	516	1	0	0	0	2	516	0	482	0	0	0	0	45	482	18	482	14	482	80	482	14	
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	860	32	860	2	0	1	3	6	860	2	860	0	0	0	0	18	860	18	862	1	862	56	862	9	
P.H.O.L. - Sault Ste. Marie	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	3	0	3	0	3	0	3	0	0	
P.H.O.L. - Timmins	15	1	6	0	0	0	0	0	6	0	6	0	0	0	0	6	0	6	0	6	0	6	0	0	
St. Joseph's - London	553	33	28	0	0	0	0	1	28	0	28	0	0	0	0	2	28	0	28	0	28	2	28	0	
P.H.O.L. - London	185	19	120	0	0	0	0	0	120	0	115	0	0	0	0	5	115	2	115	1	115	14	115	3	
P.H.O.L. - Orillia	22	2	32	0	0	0	0	0	32	0	29	0	0	0	0	0	29	3	29	4	29	13	29	0	
P.H.O.L. - Thunder Bay	15	3	5	0	0	0	0	0	5	0	3	0	0	0	0	3	0	3	0	3	2	3	0	0	
P.H.O.L. - Sudbury	3	0	6	0	0	0	0	0	6	0	6	0	0	0	0	6	0	6	0	6	1	6	0	0	
P.H.O.L. - Hamilton	152	38	79	3	0	0	2	0	79	0	77	0	0	0	0	5	77	2	77	0	77	12	77	2	
P.H.O.L. - Peterborough	21	0	34	0	0	0	0	1	34	0	32	0	0	0	0	1	32	1	32	0	32	14	32	0	
St. Joseph's - Hamilton	1023	53	894	0	0	4	4	6	894	0	894	0	0	15	0	0	894	35	894	6	894	57	0	0	
Sault Area Hospital	55	3	55	0	0	0	0	0	55	0	37	0	0	1	0	0	37	0	37	0	37	5	37	0	
Province of Ontario	4999	318	3417	8	0	6	12	19	3417	4	2673	0	0	17	3	80	2673	82	2675	26	2675	265	1781	31	
Manitoba	889	41	744	1	0	0	1	0	744	3	49	0	1	0	0	0	49	3	75	2	49	27	75	1	
Saskatchewan	1112	33	478	0	0	4	4	2	470	0	168	2	0	1	8	0	168	9	168	1	168	44	168	1	
Alberta	2289	94	1805	6	0	1	7	3	1754	1	532	6	5	7	0	0	532	5	531	0	526	76	532	3	
Prairies	4290	168	3027	7	0	5	12	5	2968	4	749	8	6	8	8	0	749	17	774	3	743	147	775	5	
British Columbia	2061	165	1240	12	0	2	24	1	1239	7	476	15	3	6	8	0	476	29	476	2	463	102	463	8	
Yukon	28	1	11	0	0	0	0	0	11	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	15	0	0	0	0	0	15	0	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	15	4	N.C.	N.C.
Nunavut	51	2	46	0	0	0	0	1	46	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.	
Territories	97	3	72	0	0	0	0	1	72	0	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	15	4	N.C.	N.C.
CANADA	20797	1279	12555	27	0	36	71	45	11600	41	4942	27	14	50	39	80	4962	186	4969	42	4225	579	4063	64	

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 28, 2022 to June 24, 2023 (surveillance weeks 2022-35 to 2023-25)

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/IV Tested	EV/IV Positive	HCoV Tested	HCoV Positive
Newfoundland	23165	4030	13457	8	246	676	930	10	13457	620	13457	64	33	382	139	0	13457	268	13457	385	13457	1157	13457	554
Prince Edward Island	33344	7299	4071	1	119	248	368	4	4071	384	1167	20	27	81	7	0	1167	79	1167	39	1167	342	1167	35
Nova Scotia	135089	26258	45171	0	4	3649	3653	15	45162	2423	1423	10	16	34	4	0	1430	57	1420	45	1430	265	1430	61
New Brunswick	109419	15976	51235	23	133	4435	4591	30	43187	2056	3966	33	32	166	8	0	3966	273	3966	186	3966	741	3911	235
Atlantic	301017	53563	113934	32	502	9008	9542	59	105877	5483	20013	127	108	663	158	0	20020	677	20010	655	20020	2505	19965	885
Région Nord-Est	97954	11678	58917	0	4	3885	3889	91	17240	1387	1828	31	7	94	2	0	1829	147	1817	98	N.C.	N.C.	1829	112
Québec-Chaudière-Appalaches	198079	18527	27747	0	0	2908	2908	179	27057	1943	8169	25	5	96	13	0	8836	730	8169	361	N.C.	N.C.	8169	342
Centre-du-Québec	162654	21774	16682	0	0	1782	1782	117	14922	993	1172	15	1	53	13	0	1172	133	1172	74	N.C.	N.C.	1172	72
Montréal-Laval	224149	26961	109949	0	9	6300	6309	1580	60689	2782	24809	142	26	578	66	0	24818	1088	24968	824	N.C.	N.C.	24494	805
Ouest du Québec	121449	15319	25233	0	7	2200	2207	191	22935	1326	1136	22	0	68	7	0	1135	202	1136	63	N.C.	N.C.	1137	63
Montréal	153469	17175	34303	0	0	1813	1813	260	31060	1218	173	0	0	2	0	0	173	4	173	6	N.C.	N.C.	173	5
Province of Québec	957754	111434	272831	0	20	18888	18908	2418	173903	9649	37287	235	39	891	101	0	37963	2304	37435	1426	N.C.	N.C.	36974	1399
P.H.O.L. - Ottawa	29693	7481	6008	23	136	66	219	3	6008	355	4218	0	0	0	0	130	4218	19	4218	115	4218	397	4218	210
EOURLA	93316	8892	17789	0	0	1417	1417	56	17789	1303	1476	11	5	59	19	0	1476	53	1476	61	1476	323	1476	102
P.H.O.L. - Kingston	31630	4982	3323	5	92	38	135	3	3322	180	2655	0	0	0	0	121	2656	30	2656	81	2656	338	2656	104
UHN / Mount Sinai Hospital	101769	7648	26149	7	44	358	409	58	26149	319	2266	2	2	42	4	0	2233	7	2266	15	2266	83	2266	91
P.H.O.L. - Toronto	53812	11373	31671	157	2415	156	1161	73	31639	1353	28121	0	0	0	0	1236	28125	597	28119	1067	28121	2792	28119	1354
Sick Kids Hospital - Toronto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shared Hospital Laboratory	90660	6282	90660	131	1472	728	2331	384	90661	2218	67947	4	0	16	0	834	67960	720	68243	961	68191	2432	68083	1058
P.H.O.L. - Sault Ste. Marie	1875	346	733	1	52	15	58	0	733	25	643	0	0	0	0	54	643	4	643	31	643	52	643	44
P.H.O.L. - Timmins	9462	907	1131	0	161	6	156	0	1129	98	1040	0	0	0	0	56	1040	14	1040	29	1040	88	1040	49
St. Joseph's - London	127402	15352	21269	0	0	886	886	70	21269	1016	2433	0	0	0	0	90	2467	84	2467	72	2467	348	2056	108
P.H.O.L. - London	38853	8110	12101	15	586	63	646	27	12100	888	9785	0	0	0	0	506	9786	141	9786	253	9785	964	9786	330
P.H.O.L. - Orillia	637	271	2506	6	261	23	290	15	2506	233	2428	0	0	0	0	140	2429	79	2428	83	2428	367	2428	108
P.H.O.L. - Thunder Bay	8705	1726	1123	0	107	3	110	0	1122	96	992	0	0	0	0	38	992	19	992	29	992	119	993	38
P.H.O.L. - Sudbury	2175	321	839	1	65	14	67	0	839	79	718	0	0	0	0	30	718	9	718	45	718	45	718	25
P.H.O.L. - Hamilton	26899	7083	10053	34	302	92	412	40	10050	555	7547	0	0	0	0	315	7549	187	7547	260	7547	774	7547	296
P.H.O.L. - Peterborough	5520	1028	1813	1	67	11	79	19	1813	116	1478	0	0	0	0	62	1478	35	1478	50	1478	277	1478	50
St. Joseph's - Hamilton	105331	13890	54459	0	0	2765	2765	513	54459	2291	54459	0	0	1114	0	0	54459	866	54459	935	54459	3586	0	0
Sault Area Hospital	12822	2143	8738	1	262	258	521	8	8738	173	3017	36	9	74	4	0	3017	52	3017	101	3017	341	3017	84
Province of Ontario	740561	97835	290365	382	6022	6899	11662	1269	290326	11298	191223	53	16	1305	27	3612	191246	2916	191553	4188	191501	13326	136524	4051
Manitoba	76509	12140	46822	19	202	1804	2025	79	46822	1794	5799	47	45	175	8	0	5789	153	6209	226	5799	931	6209	224
Saskatchewan	173555	13807	44833	2	41	3987	4030	80	36580	2217	15059	160	116	532	84	0	15061	402	15061	682	15062	1716	15057	523
Alberta	250816	34711	142591	1070	7306	2844	11220	781	127163	7671	49436	379	157	976	146	0	49421	710	48638	1264	48621	4710	49436	1327
Prairies	500880	60658	234246	1091	7549	8635	17275	940	210565	11682	70294	586	318	1683	238	0	70271	1265	69908	2172	69482	7357	70702	2074
British Columbia	246865	26529	143688	480	4356	308	9024	322	135602	8257	31997	381	213	1159	217	6	31965	1042	31965	1192	30957	4868	31012	1162
Yukon	5373	406	985	2	136	0	139	9	983	59	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	1745	193	1583	10	147	1	158	5	1583	115	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	1583	318	N.C.
Nunavut	5362	396	3164	7	230	3	240	233	3164	155	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	12480	995	5732	19	513	4	537	247	5730	329	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	1583	318	N.C.	N.C.
CANADA	2759557	351014	1060796	2004	18962	43742	66948	5255	922003	46698	350814	1382	694	5701	741	3618	351465	8204	350871	9633	313543	28374	295177	9571

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.

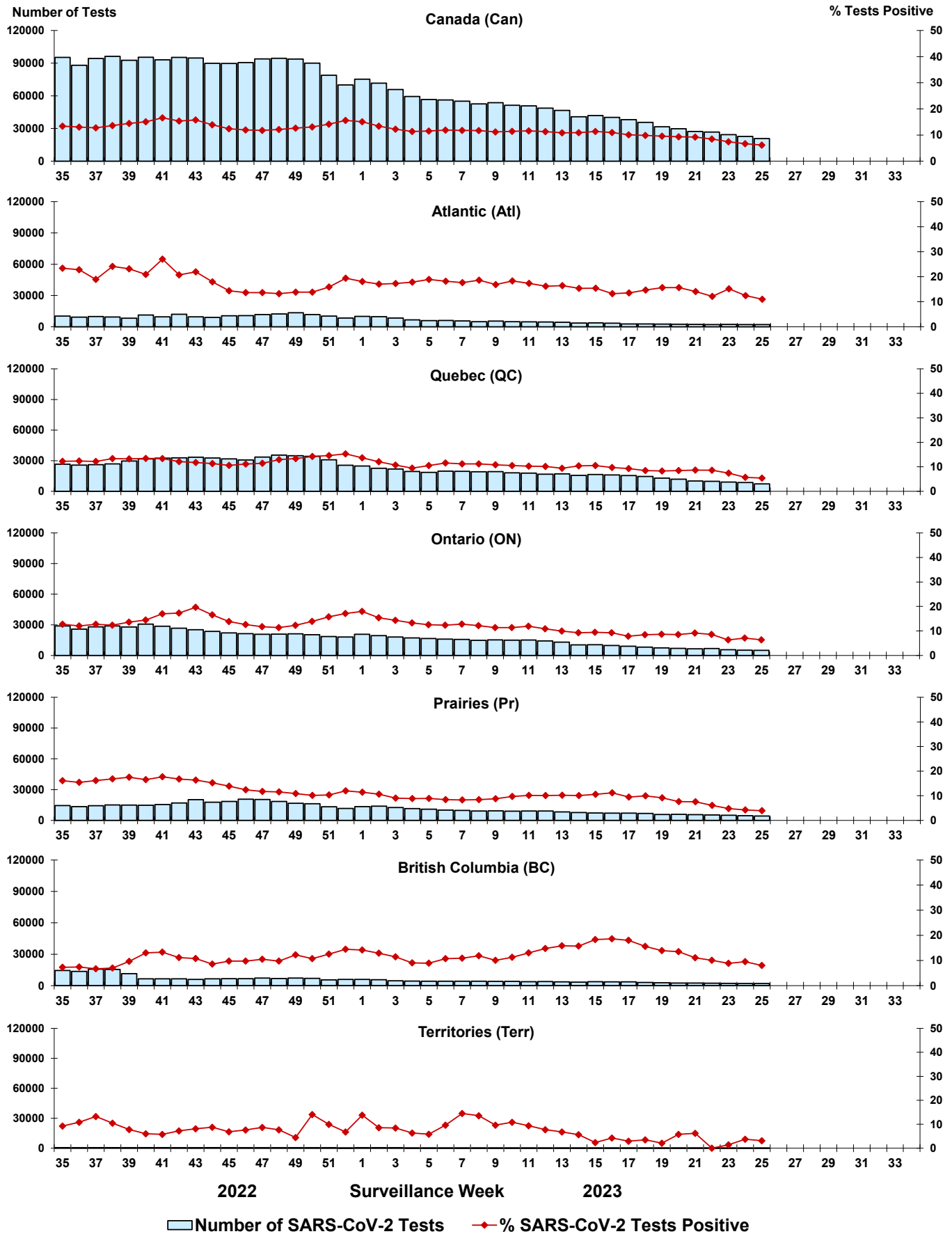
Some specimens from Yukon (YT) are sent to reference laboratories in British Columbia and reported results reflect specimens identified as originating from YT.

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

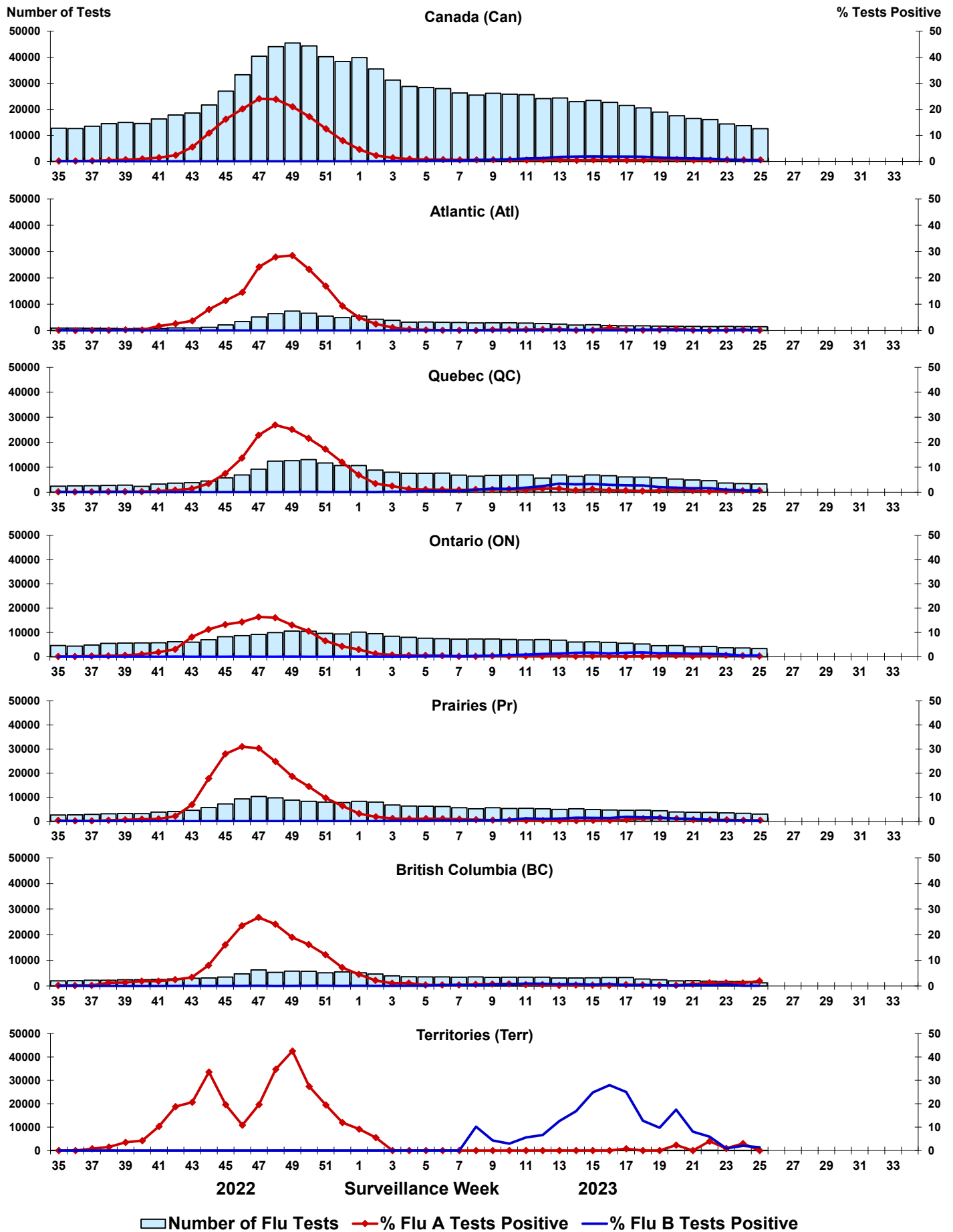
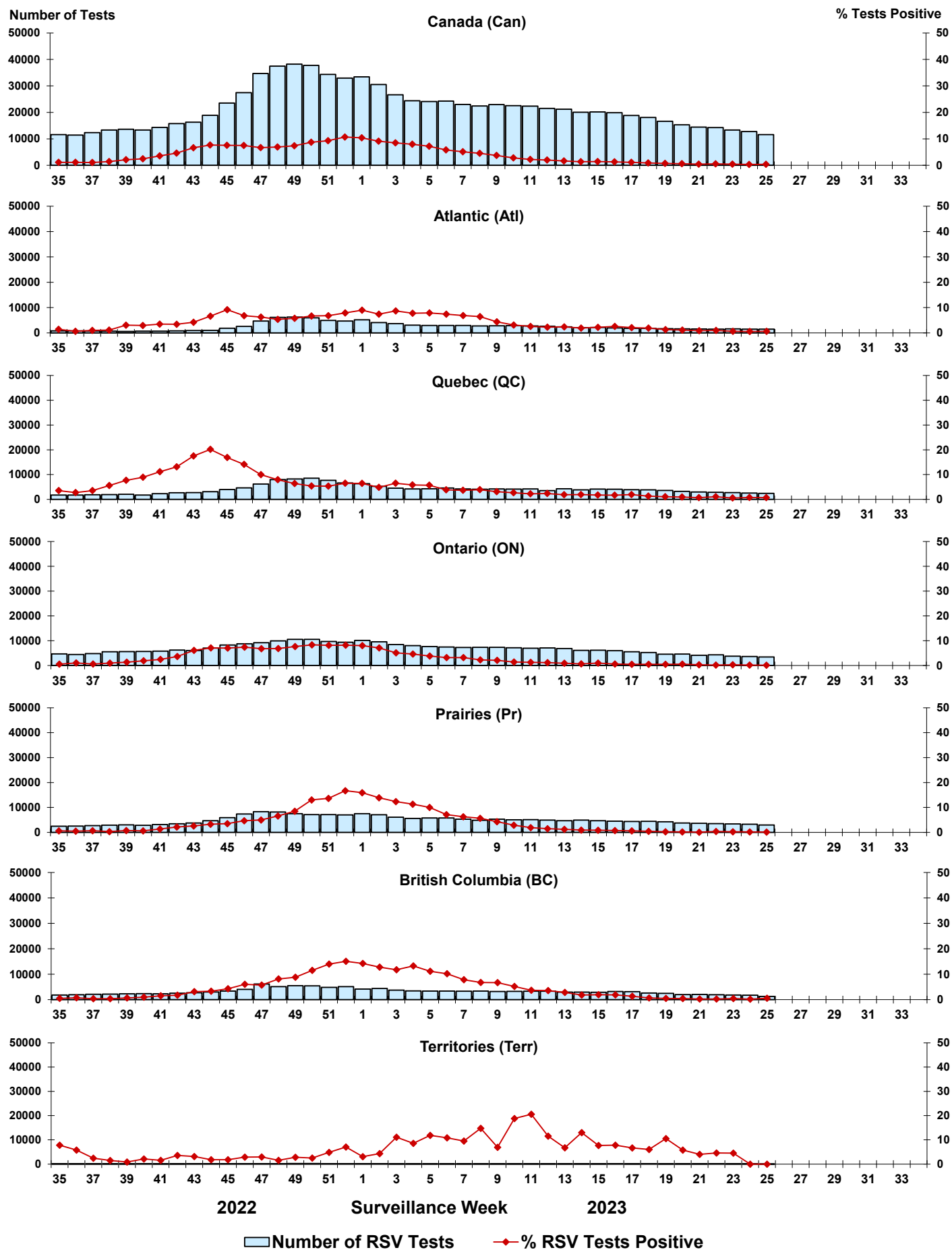


Figure 5: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



Number of RSV Tests % RSV Tests Positive

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

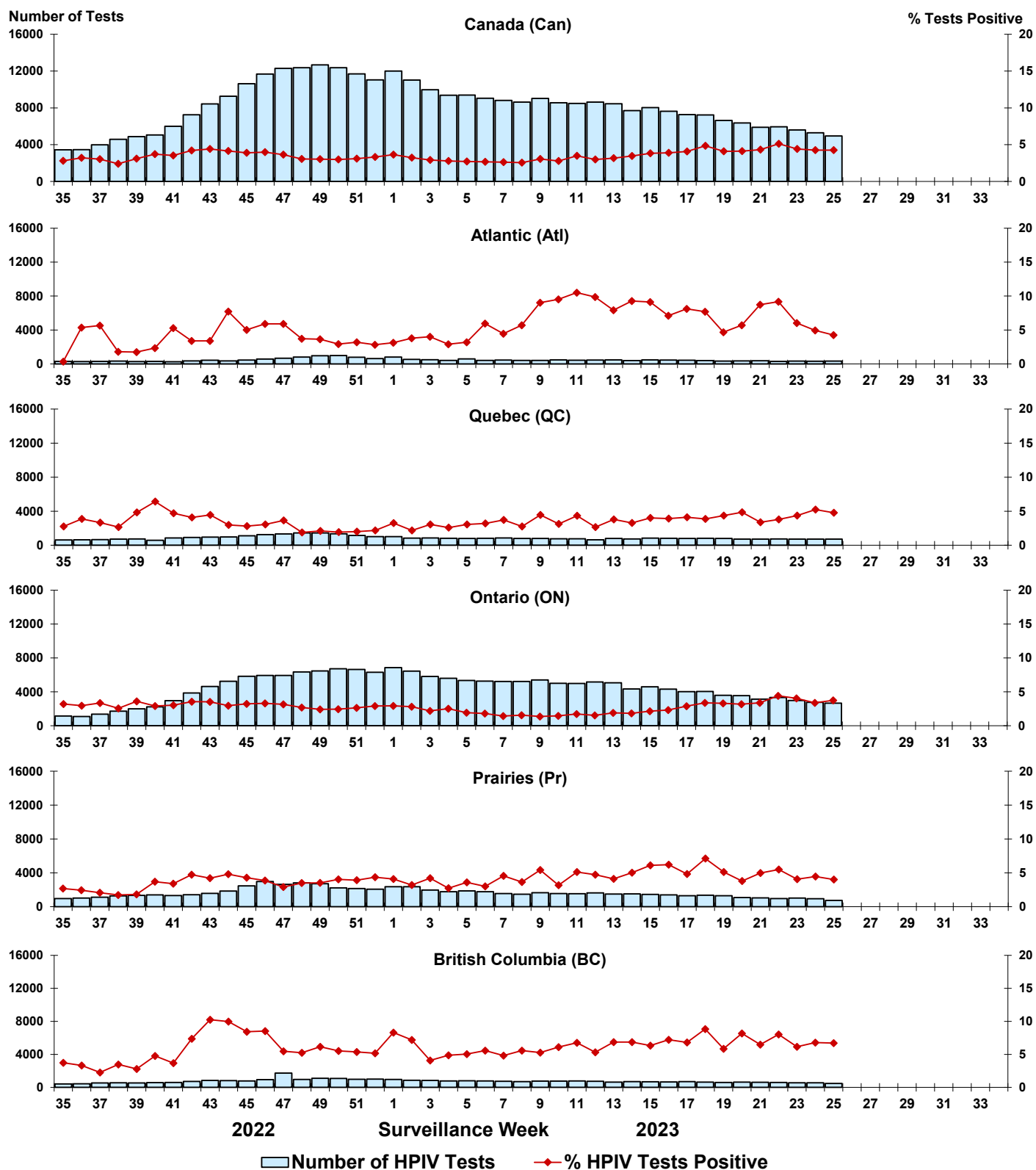


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

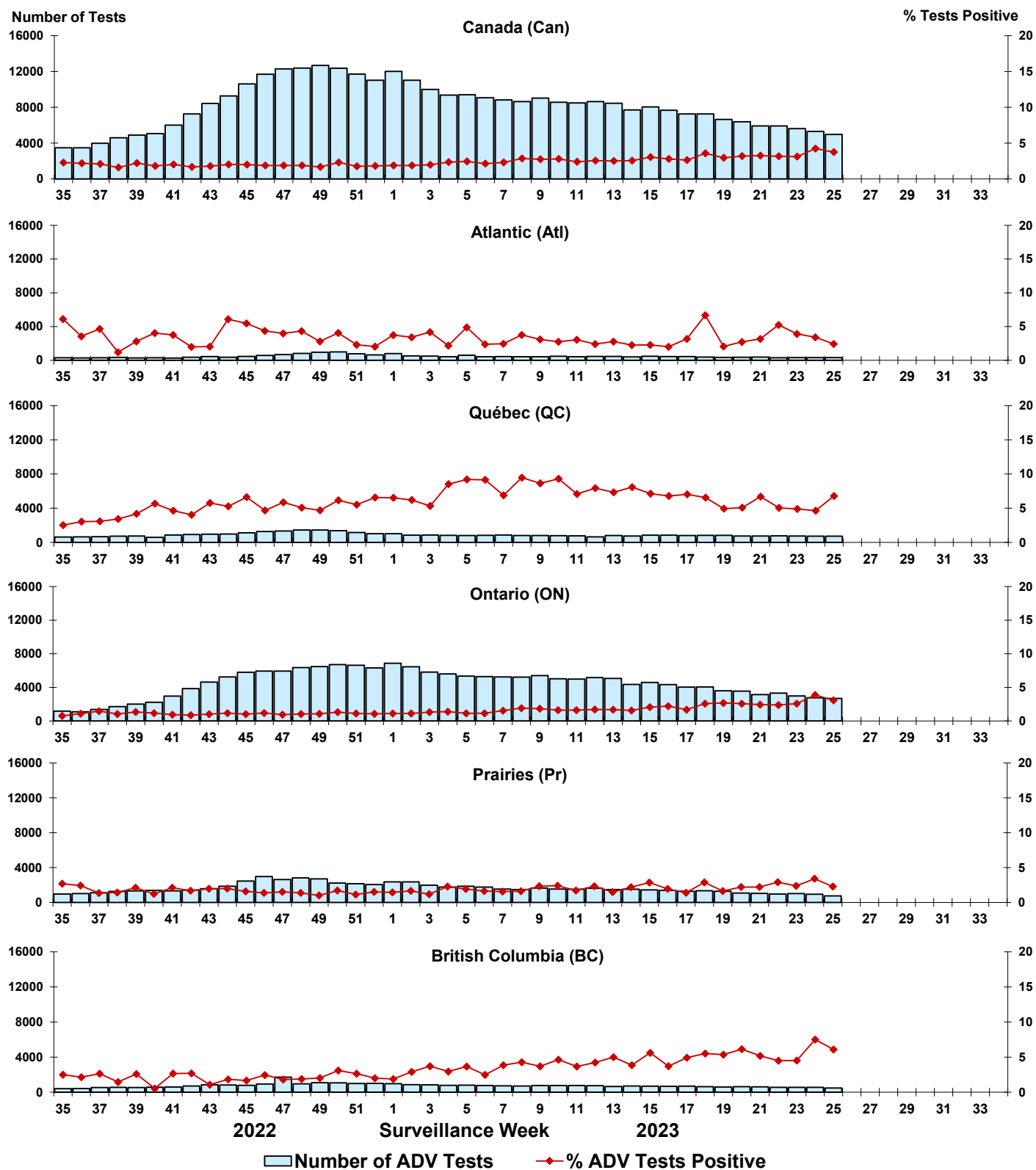


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

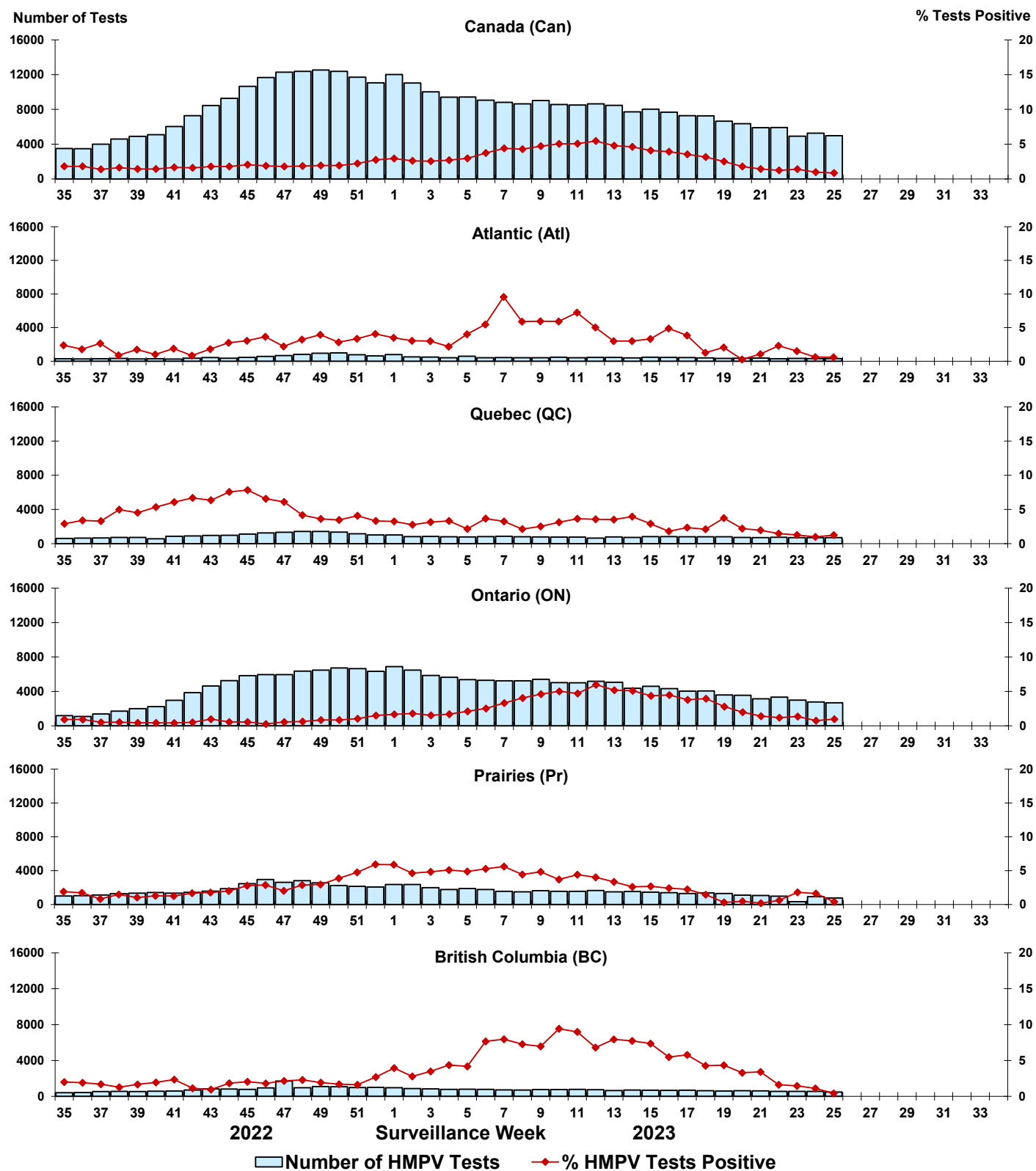


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

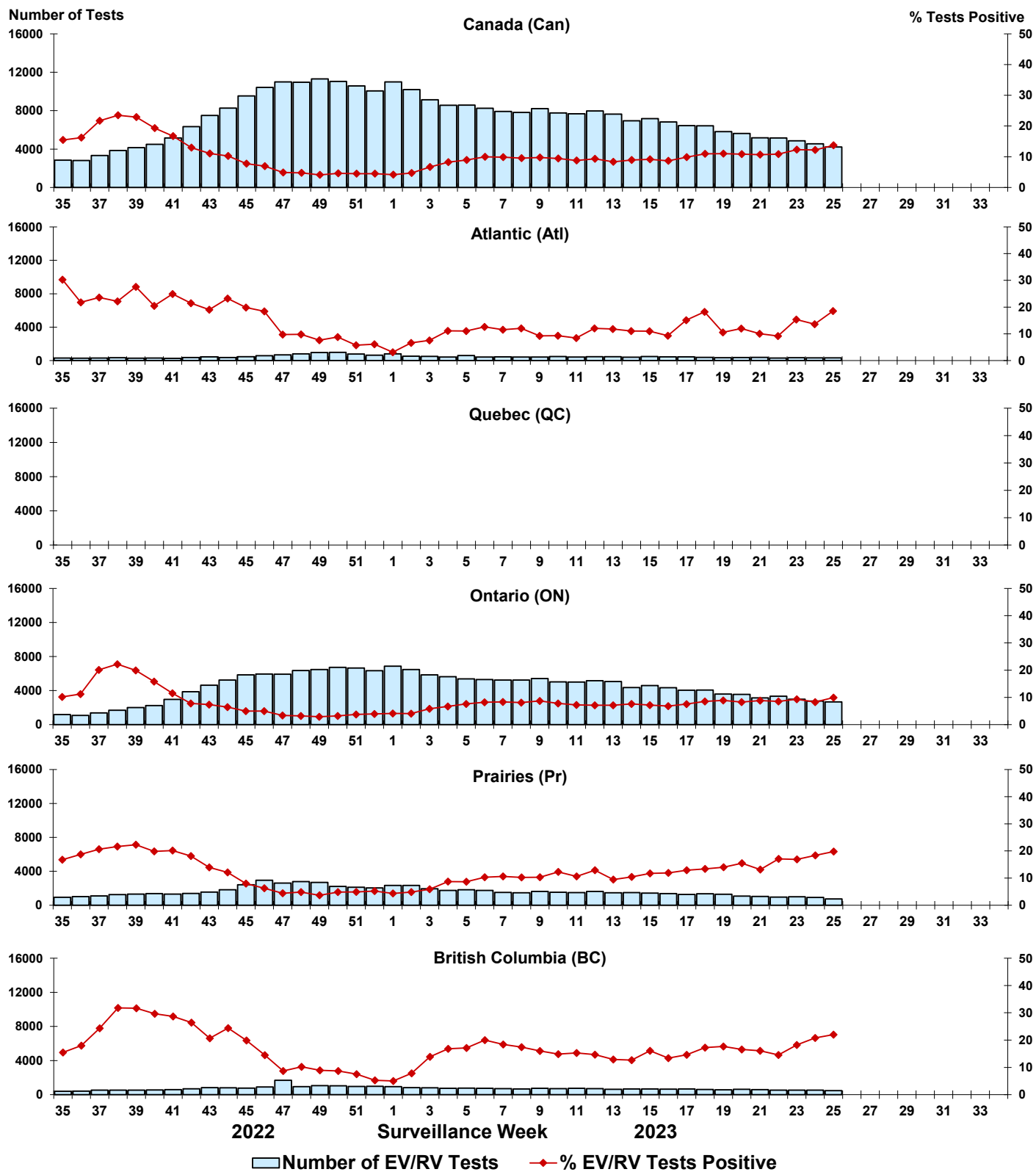


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

