

RESPIRATORY VIRUS DETECTION REPORT

June 11 to June 17, 2023
(Surveillance Week 2023-24)



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 24 (week ending June 17, 2023) in Canada, participating RVDSS laboratories reported 1,515 detections of SARS-CoV-2 from 22,696 tests (6.7% positive). Among non-SARS-CoV-2 respiratory viruses, where test volumes are lower (range of 4,154 to 13,416 tests), activity of nearly all viruses is within or below expected levels.

- Activity of influenza remains low at inter-seasonal levels. Both influenza A (70 detections; 0.5% positive) and influenza B (65 detections; 0.5% 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

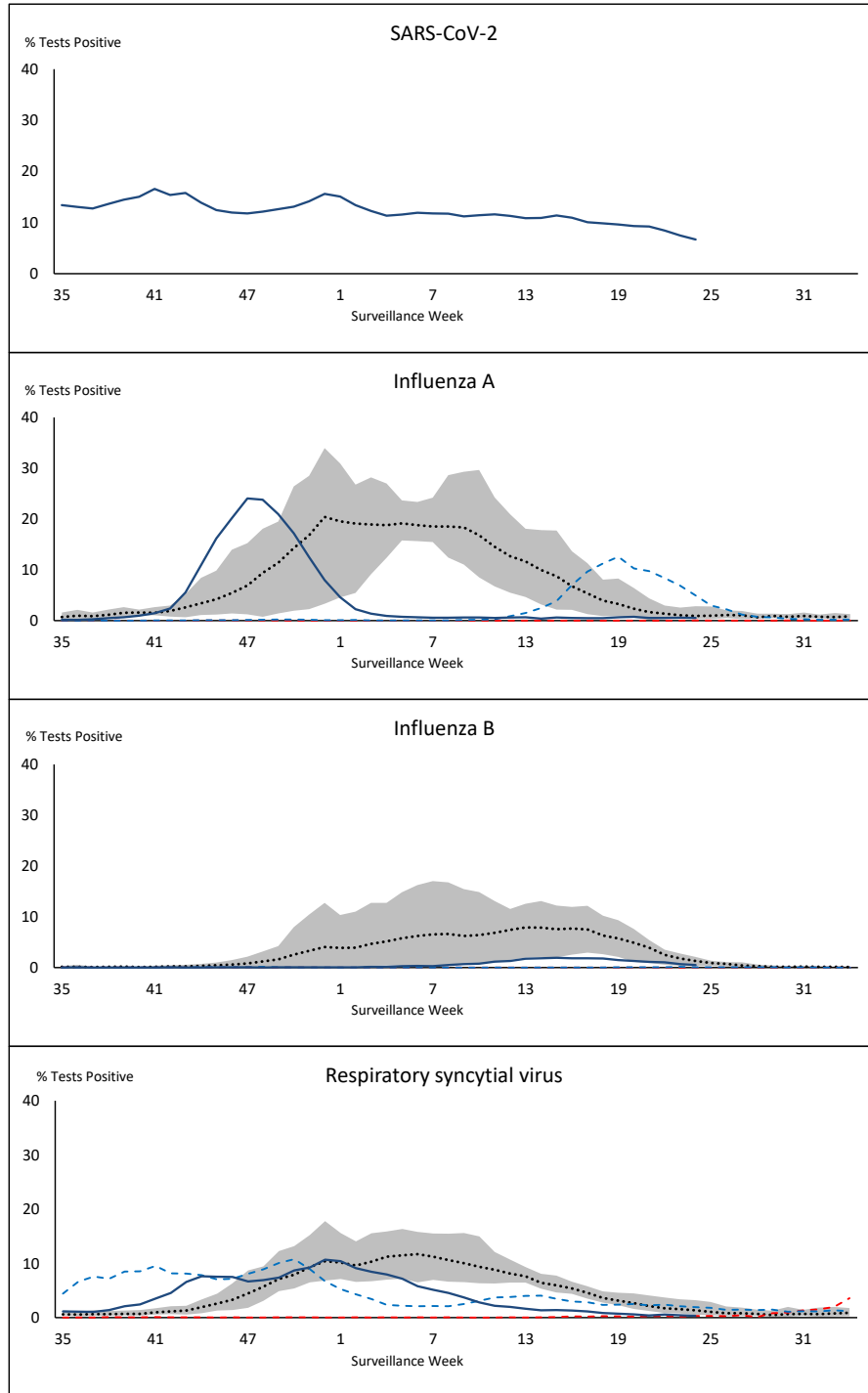
SARS-CoV-2: Severe acute respiratory syndrome coronavirus 2

Terr: Territories of Canada

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



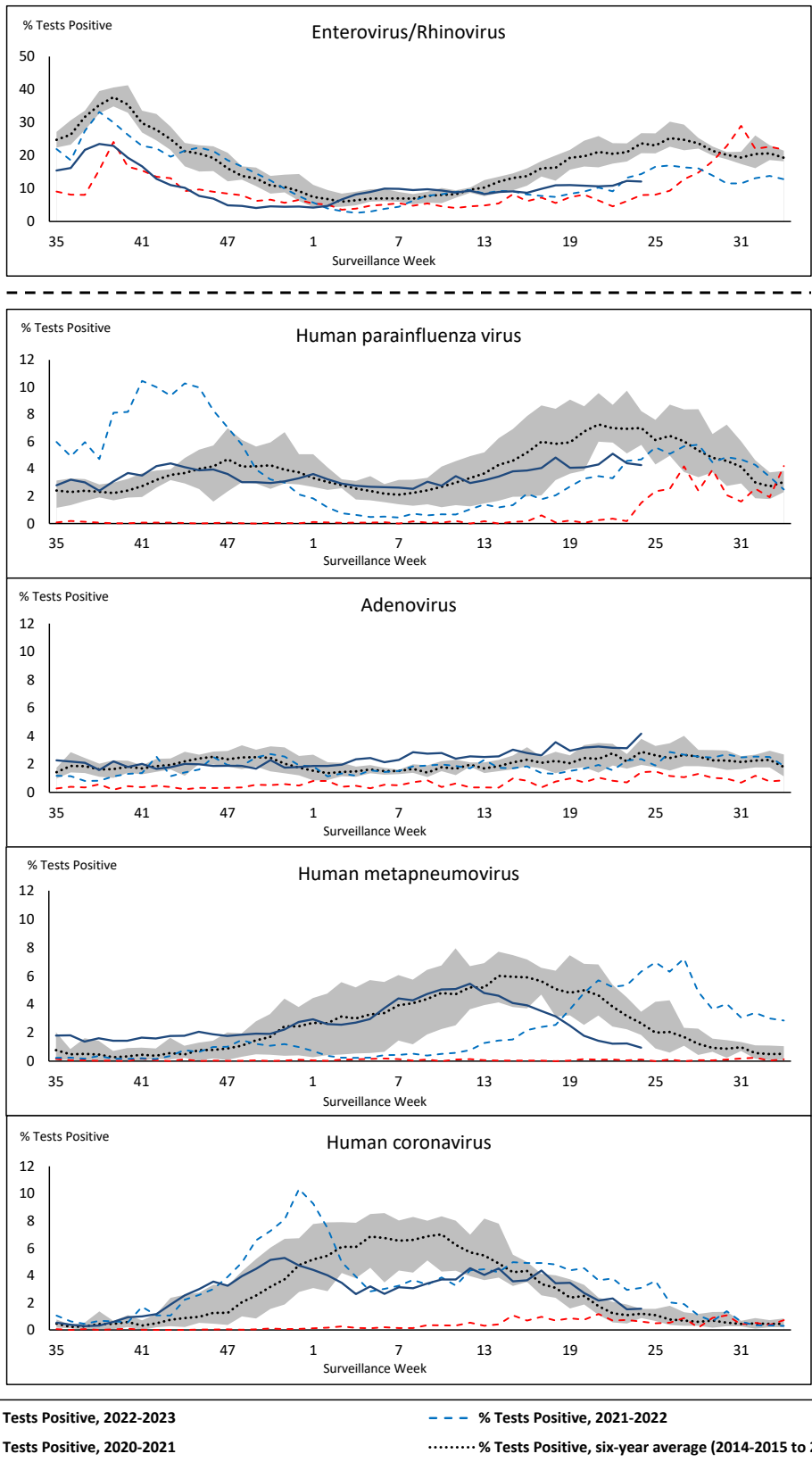
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

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 17, 2023 (surveillance week 2023-24)

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	351	45	227	0	0	0	0	1	227	3	227	2	2	1	10	0	227	5	227	1	227	18	227	7	
Prince Edward Island	49	5	12	0	0	0	0	0	12	0	6	0	0	0	0	0	6	2	6	0	6	1	6	0	
Nova Scotia	1123	151	698	0	0	3	3	2	698	4	17	0	0	0	0	0	17	0	17	0	17	6	17	1	
New Brunswick	573	60	559	0	0	1	1	1	553	1	73	0	0	1	0	0	73	4	73	1	73	19	73	0	
Atlantic	2096	261	1496	0	0	4	4	4	1490	8	323	2	2	2	10	0	323	11	323	2	323	44	323	8	
Région Nord-Est	1231	81	949	0	0	2	2	4	181	3	51	0	0	1	1	0	51	3	51	0	N.C.	N.C.	51	0	
Québec-Chaudière-Appalaches	1499	79	329	0	0	1	1	4	329	5	165	0	0	1	1	0	182	13	165	3	N.C.	N.C.	165	2	
Centre-du-Québec	1339	64	134	0	0	0	0	4	132	0	24	1	0	1	1	0	24	2	24	0	N.C.	N.C.	24	0	
Montréal-Laval	2628	159	1116	0	0	12	12	9	953	8	448	2	1	16	9	0	448	13	450	4	N.C.	N.C.	448	6	
Ouest du Québec	938	50	280	0	0	0	0	1	279	0	16	1	0	0	1	0	16	0	16	0	N.C.	N.C.	16	0	
Montérégie	931	54	667	0	0	4	4	5	666	3	4	0	0	0	0	0	4	0	4	0	N.C.	N.C.	4	0	
Province of Québec	8566	487	3475	0	0	19	19	27	2540	19	708	4	1	19	13	0	725	31	710	7	N.C.	N.C.	708	8	
P.H.O.L. - Ottawa	133	24	61	0	0	1	1	0	61	0	37	0	0	0	0	2	37	0	37	0	37	3	37	0	
EORLA	774	49	251	0	0	0	0	1	251	0	30	0	0	0	0	0	30	0	30	0	30	3	30	1	
P.H.O.L. - Kingston	204	21	45	0	0	0	0	0	45	0	36	0	0	0	0	2	36	1	36	0	36	5	36	0	
UHN / Mount Sinai Hospital	862	28	502	0	0	0	0	0	502	0	23	0	0	1	1	0	23	0	23	0	23	2	23	0	
P.H.O.L. - Toronto	296	93	550	11	0	5	8	1	549	1	474	0	0	0	0	44	474	15	474	7	474	63	474	11	
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	757	29	757	1	0	0	1	4	757	1	757	0	0	0	0	11	757	14	759	4	759	35	759	8	
P.H.O.L. - Sault Ste. Marie	11	0	11	0	0	0	0	0	11	0	11	0	0	0	0	0	11	0	11	0	11	1	11	0	
P.H.O.L. - Timmins	22	2	12	0	0	0	0	0	12	0	10	0	0	0	0	0	10	0	10	0	10	1	10	1	
St. Joseph's - London	557	36	46	0	0	0	0	0	46	0	45	0	0	0	0	1	45	3	45	0	45	3	46	0	
P.H.O.L. - London	240	29	126	1	0	0	1	0	126	0	119	0	0	0	0	7	119	4	119	5	119	5	119	5	
P.H.O.L. - Orillia	8	1	22	0	0	0	0	1	22	0	22	0	0	0	0	0	22	4	22	0	22	4	22	0	
P.H.O.L. - Thunder Bay	21	3	9	0	0	0	0	0	9	0	7	0	0	0	0	0	7	1	7	0	7	1	7	0	
P.H.O.L. - Sudbury	9	0	11	0	0	0	0	0	11	0	11	0	0	0	0	0	11	1	11	0	11	2	11	0	
P.H.O.L. - Hamilton	127	15	85	13	0	0	0	1	85	0	85	0	0	0	0	6	85	8	85	1	85	21	85	0	
P.H.O.L. - Peterborough	37	1	66	0	0	0	0	1	66	0	61	0	0	0	0	5	61	3	61	2	61	20	61	2	
St. Joseph's - Hamilton	1103	37	991	0	0	6	6	8	991	2	991	0	0	11	0	0	991	52	991	2	991	50	0	0	
Sault Area Hospital	69	3	69	0	0	0	0	1	69	1	43	0	2	0	0	0	43	1	43	0	43	10	43	1	
Province of Ontario	5230	371	3614	26	0	12	17	18	3613	5	2762	0	2	12	1	78	2762	107	2764	21	2764	229	1774	29	
Manitoba	900	64	752	0	0	0	0	3	752	5	73	1	4	1	0	0	73	4	96	3	73	26	96	0	
Saskatchewan	1233	36	542	0	0	7	7	0	520	0	234	7	3	1	9	0	234	9	234	10	234	46	235	3	
Alberta	2445	94	1824	3	1	0	4	9	1775	1	536	4	7	3	0	0	536	13	536	1	517	79	536	5	
Prairies	4578	194	3118	3	1	7	11	12	3047	6	843	12	14	5	9	0	843	26	866	14	824	151	867	8	
British Columbia	2102	200	1614	10	0	0	16	2	1613	3	504	13	5	10	6	0	504	40	504	5	482	105	482	12	
Yukon	28	1	13	0	0	0	1	0	13	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	11	0	10	0	0	0	0	0	10	0	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	10	4	N.C.	N.C.
Nunavut	85	1	76	2	0	0	2	2	76	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	124	2	99	2	0	0	3	2	99	0	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	10	4	N.C.	N.C.
CANADA	22696	1515	13416	41	1	42	70	65	12402	41	5140	31	24	48	39	78	5157	215	5167	49	4403	533	4154	65	

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.

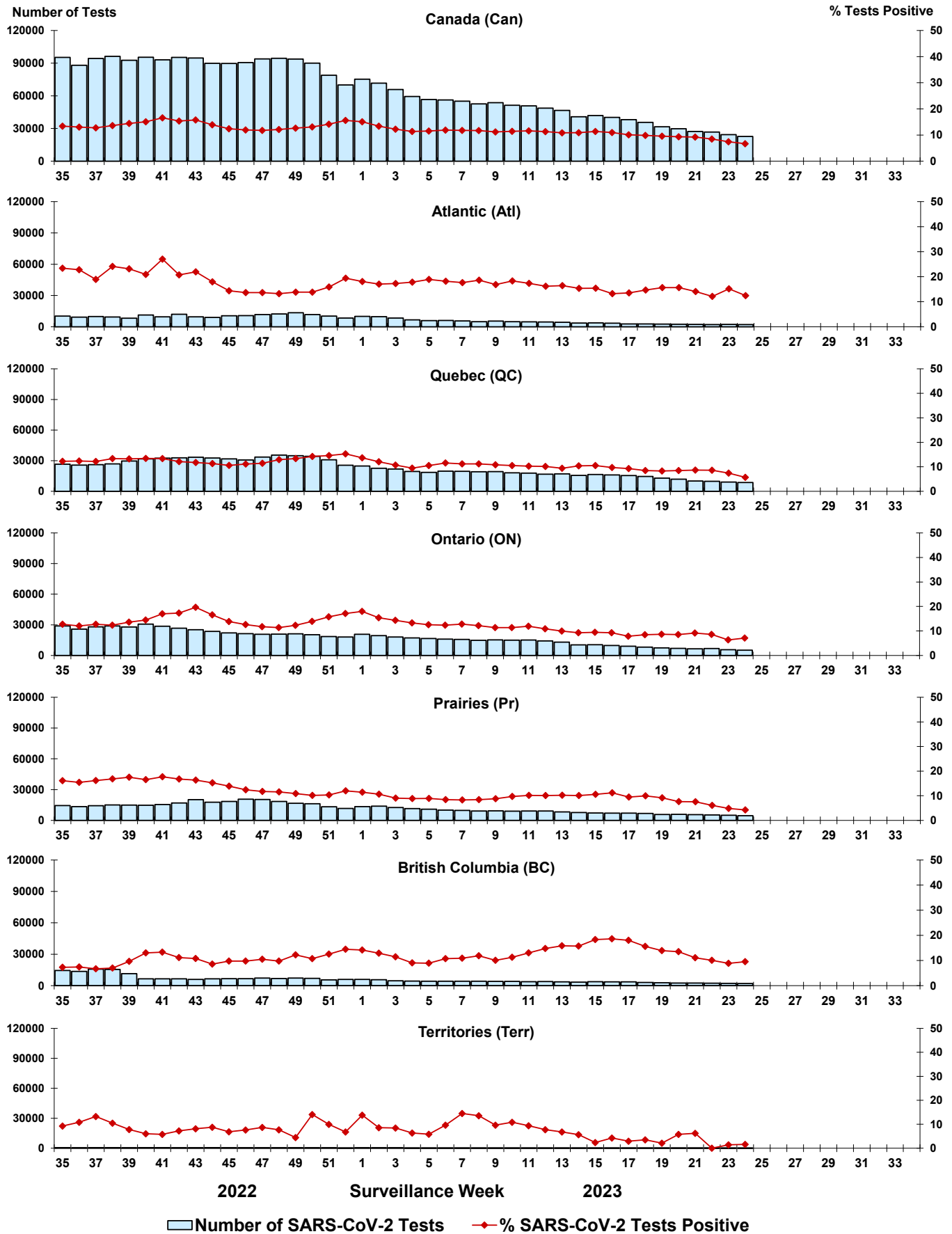
Some specimens from Yukon (YT) are sent to reference laboratories in British Columbia and reported results reflect specimens identified as originating from YT.

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.

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

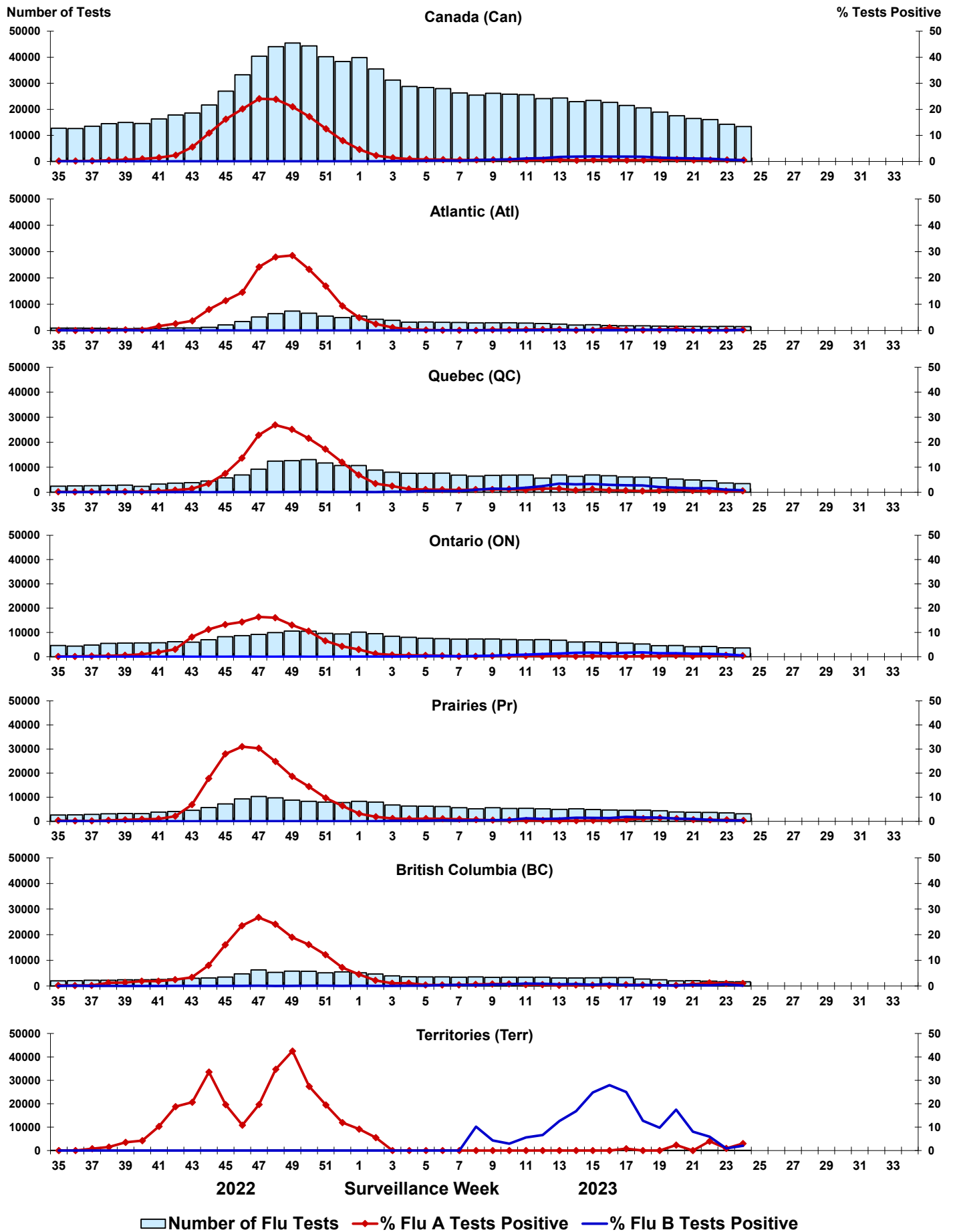
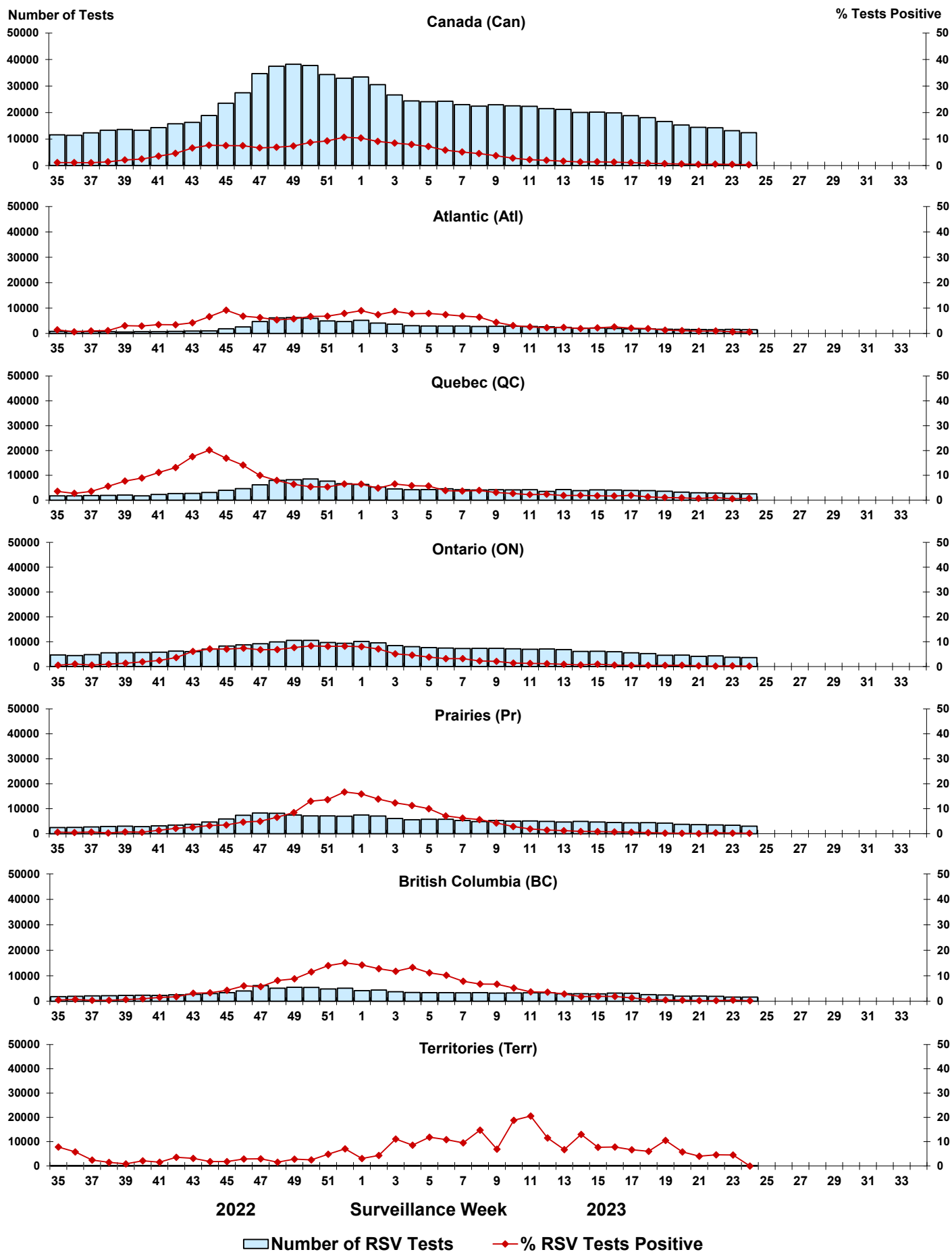


Figure 5: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



Number of RSV Tests % RSV Tests Positive

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

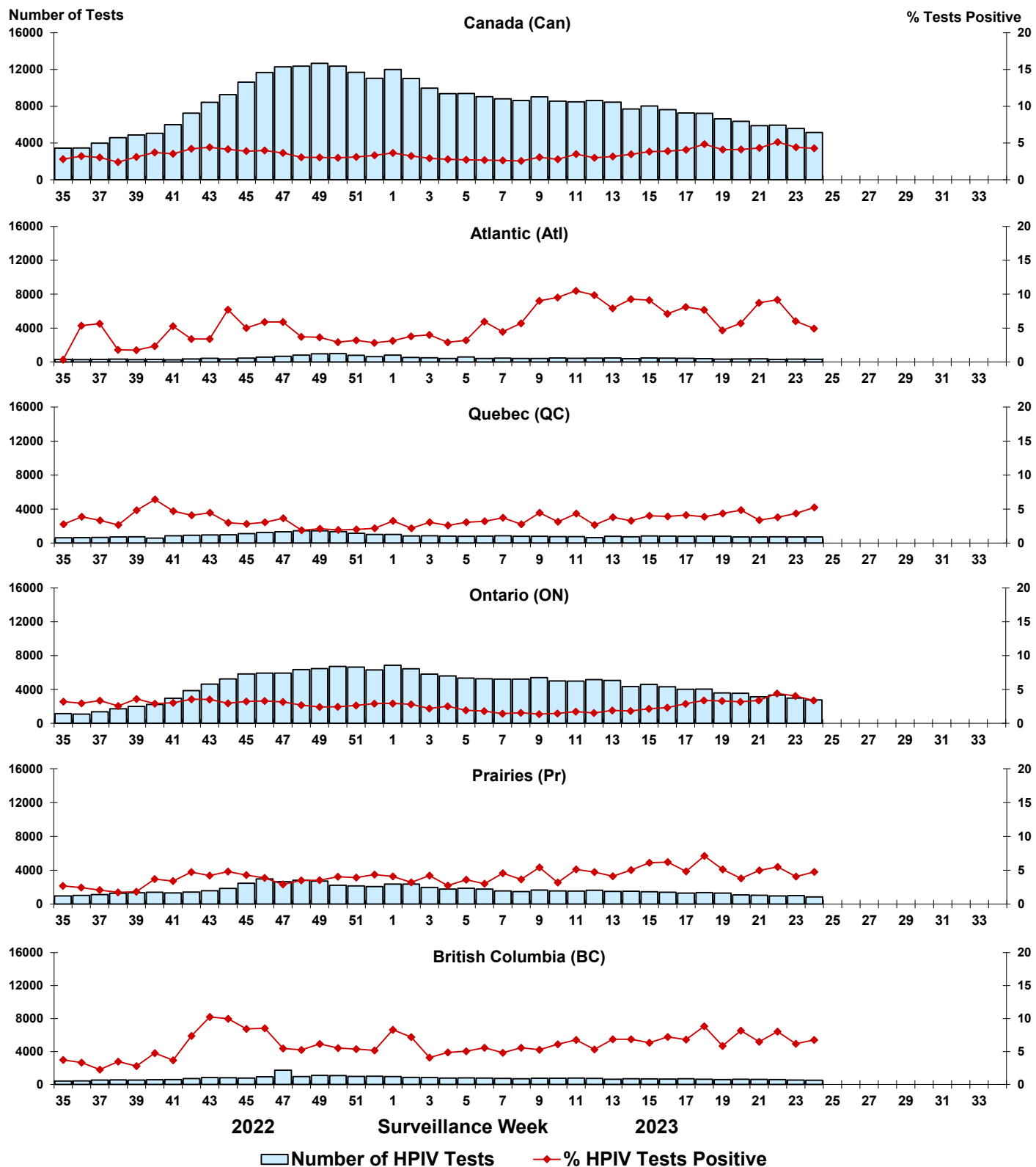


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

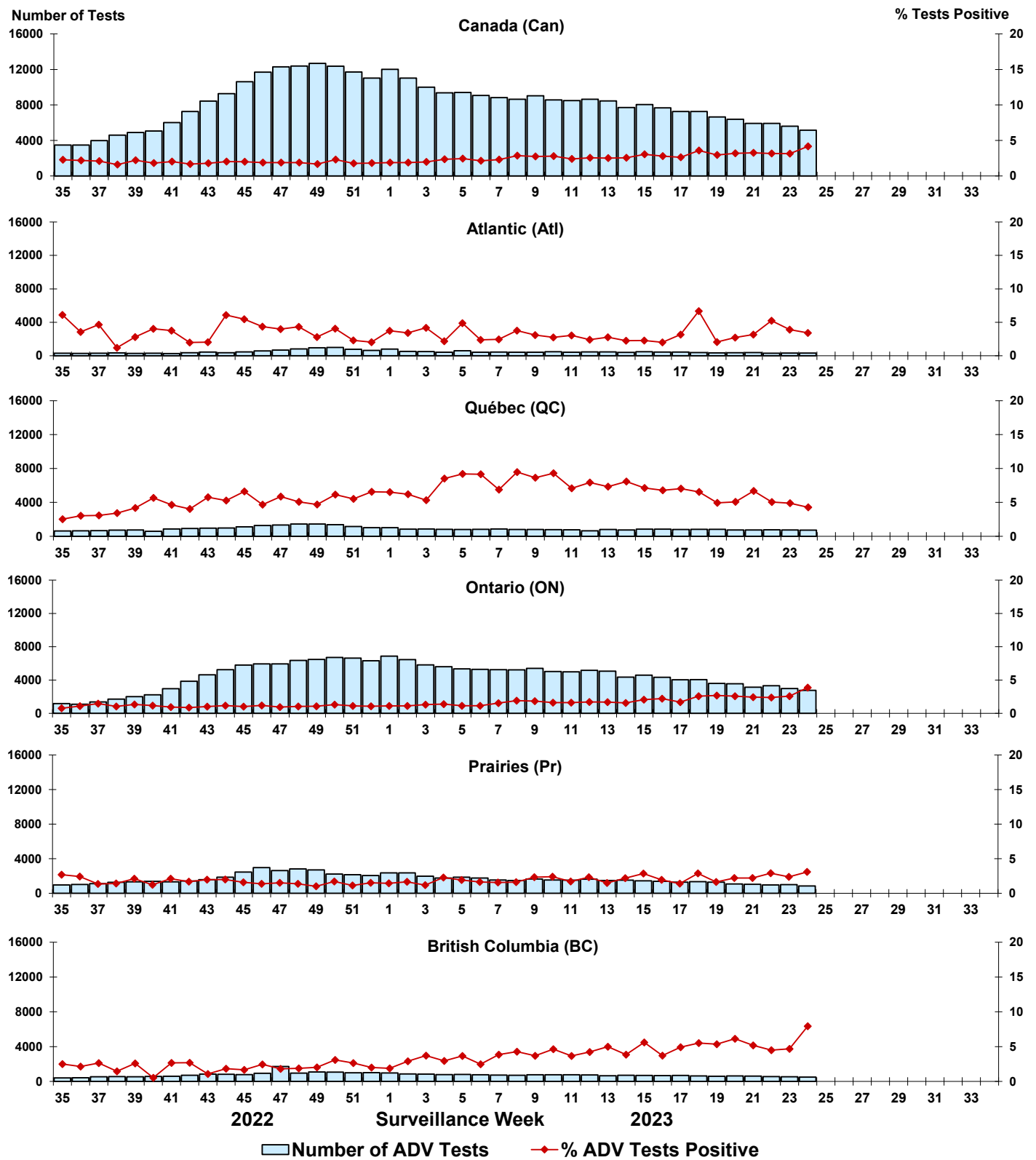


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

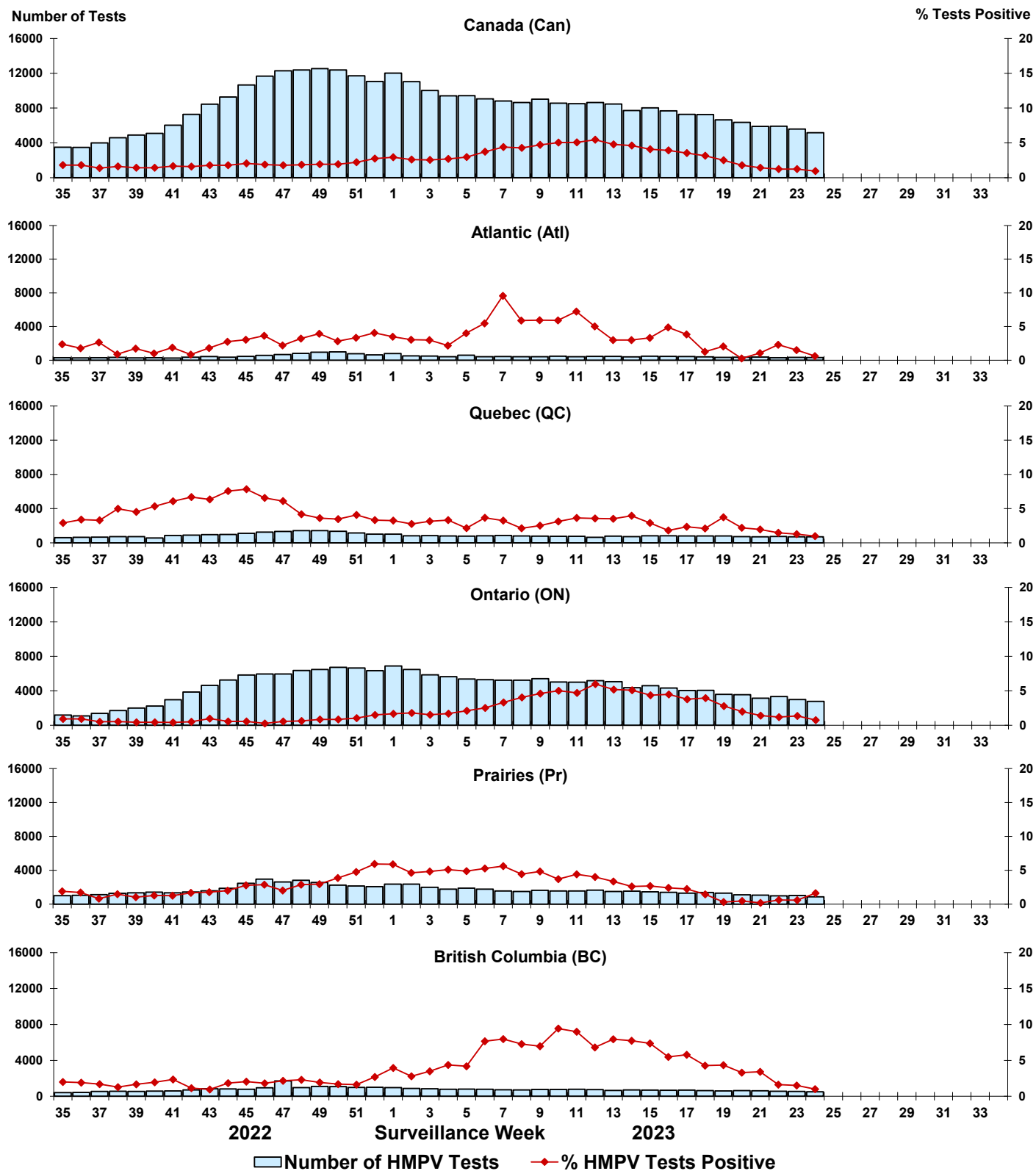


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

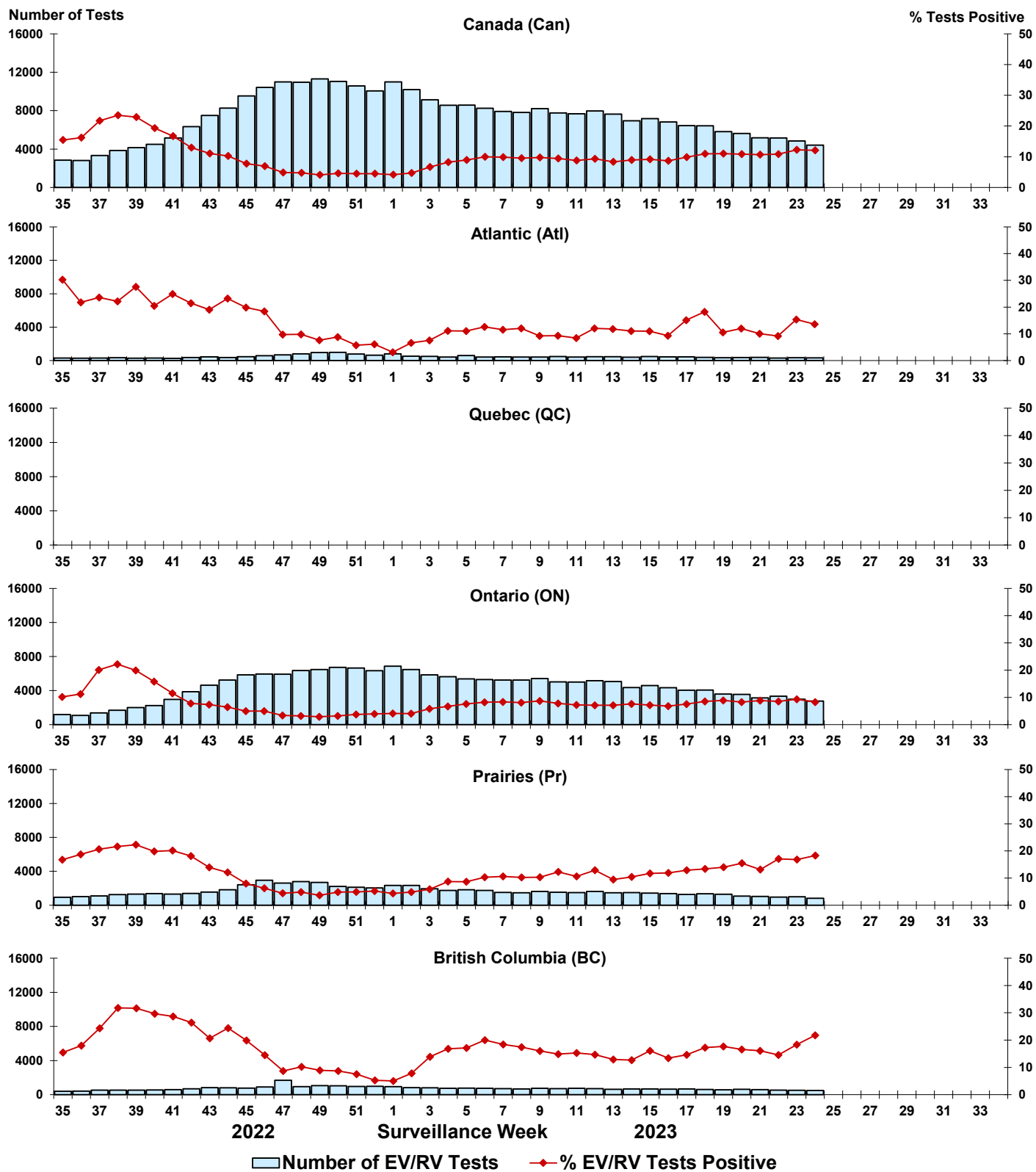


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

