

RESPIRATORY VIRUS DETECTION REPORT

July 23 to July 29, 2023
(Surveillance Week 2023-30)



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 30 (week ending July 29, 2023) in Canada, participating RVDSS laboratories reported 1,354 detections of SARS-CoV-2 from 17,944 tests (7.6% positive). Among non-SARS-CoV-2 respiratory viruses, where test volumes are lower (range of 4,067 to 11,416 tests), activity of enterovirus/rhinovirus is highest.

- While activity of enterovirus/rhinovirus is highest, it remains below expected levels typical of this time of year (541 detections; 13.0% positive).
- Activity of all other non-SARS-CoV-2 respiratory viruses is low and near expected levels 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

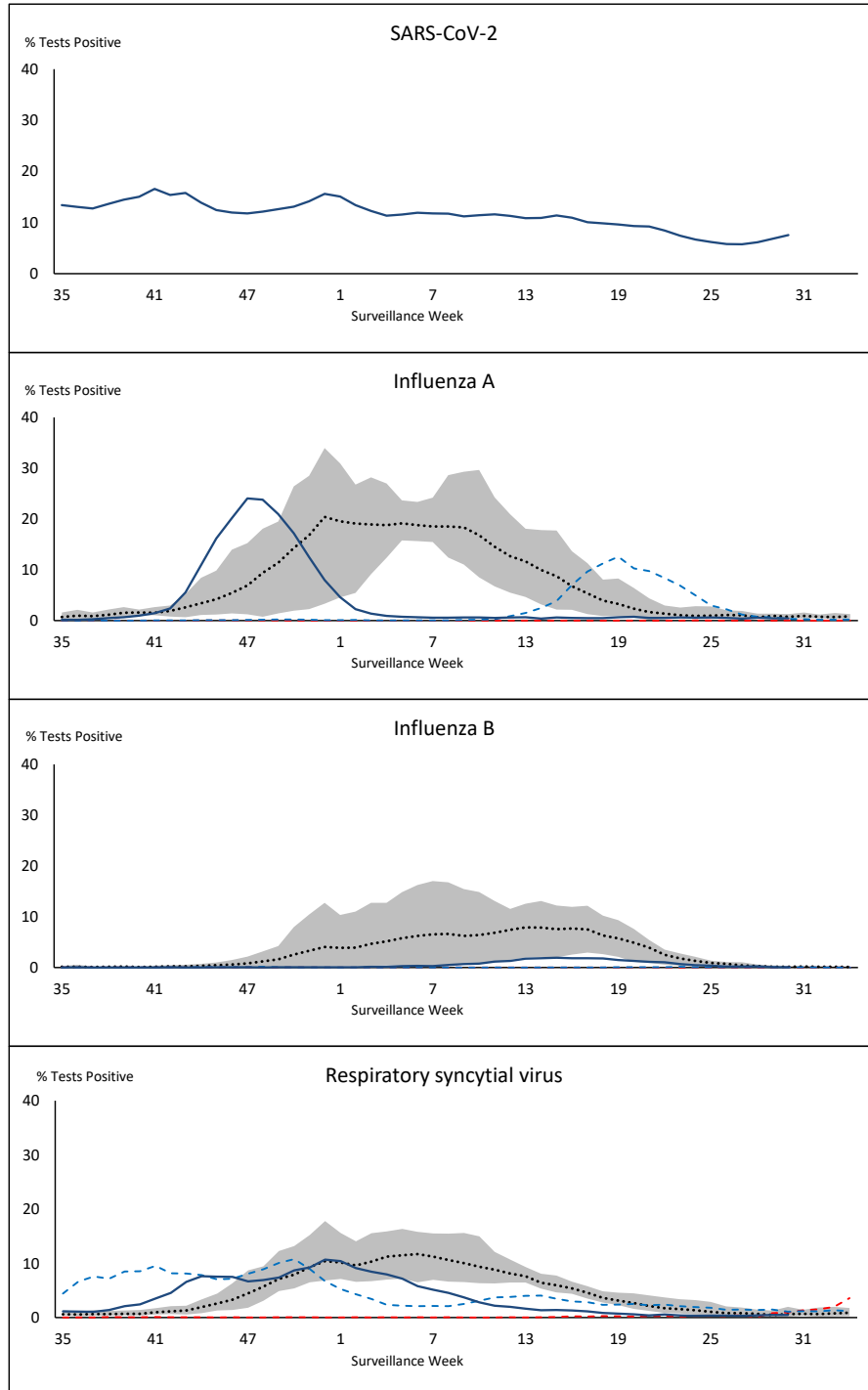
SARS-CoV-2: Severe acute respiratory syndrome coronavirus 2

Terr: Territories of Canada

UHN: University Health Network



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



— % Tests Positive, 2022-2023 - - - % Tests Positive, 2021-2022
- - - % Tests Positive, 2020-2021 ⋯ % Tests Positive, six-year average (2014-2015 to 2019-2020)

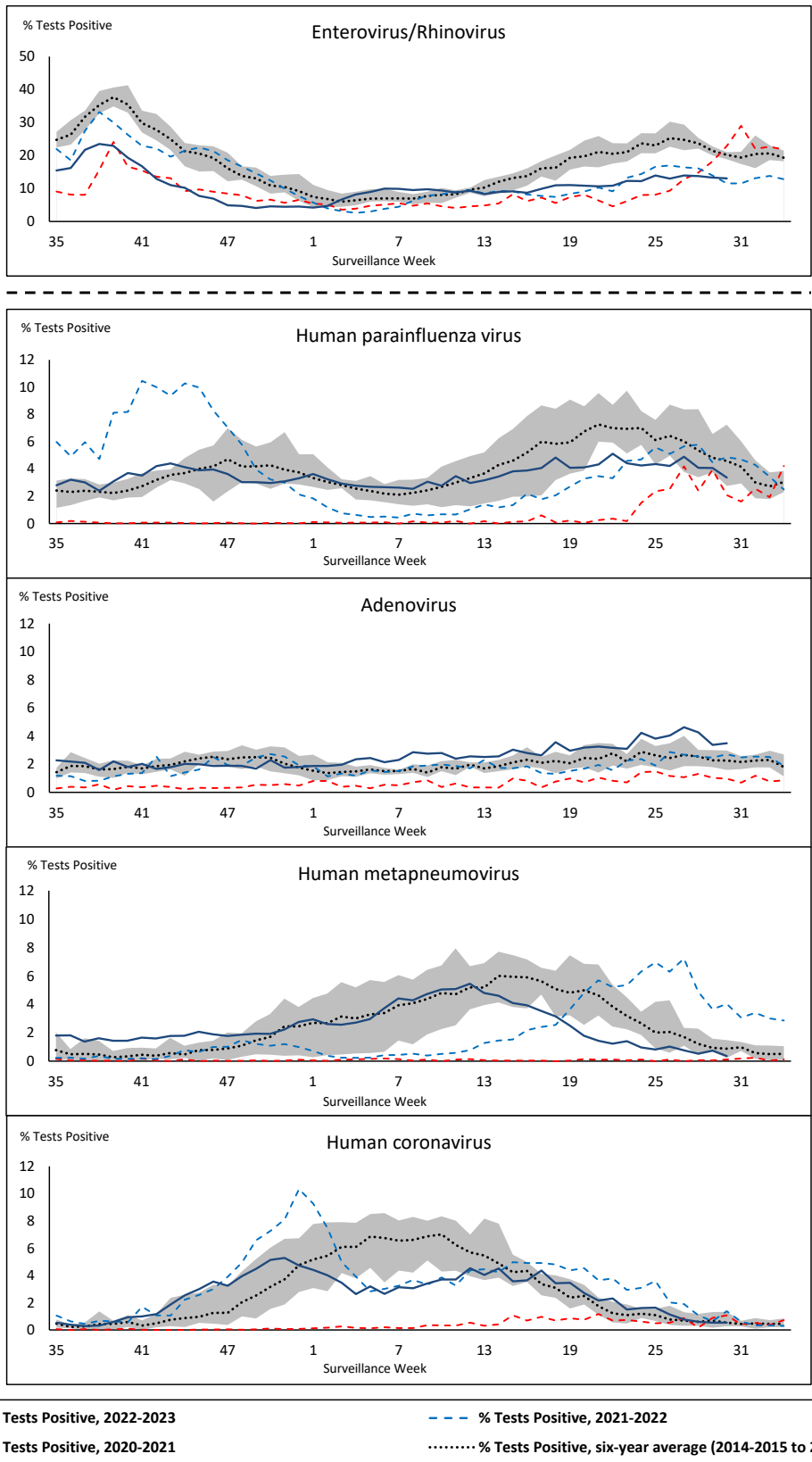
Shaded area represents the maximum and minimum % of respiratory virus tests positive reported by week from seasons 2014-2015 to 2019-2020

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 July 29, 2023 (surveillance week 2023-30)

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	299	25	203	0	0	0	0	0	203	5	203	1	0	0	7	0	203	5	203	0	203	27	203	1	
Prince Edward Island	57	6	11	0	0	0	0	0	11	0	0	0	0	0	0	0	5	0	5	0	5	0	5	0	
Nova Scotia	773	45	454	0	0	0	0	0	454	1	48	2	0	0	0	0	48	2	48	0	48	10	48	2	
New Brunswick	546	55	296	0	0	1	1	0	288	0	52	0	1	0	0	0	52	10	52	1	52	3	52	0	
Atlantic	1675	131	964	0	0	1	1	0	956	6	303	3	1	0	7	0	308	17	308	1	308	40	308	3	
Région Nord-Est	797	45	677	0	0	0	0	0	132	1	46	1	0	0	2	0	46	2	44	1	N.C.	N.C.	46	0	
Québec-Chaudière-Appalaches	1257	144	351	0	0	0	0	0	351	2	147	0	1	0	2	0	174	11	147	0	N.C.	N.C.	147	0	
Centre-du-Québec	784	50	125	0	0	0	0	0	120	2	21	0	0	2	1	0	21	2	21	1	N.C.	N.C.	21	0	
Montréal-Laval	1883	111	823	0	0	1	1	1	824	11	501	2	2	6	4	0	501	7	502	5	N.C.	N.C.	501	4	
Ouest du Québec	797	72	217	0	0	1	1	0	217	3	16	0	0	0	0	0	16	1	16	2	N.C.	N.C.	16	0	
Montérégie	665	46	440	0	0	2	2	0	428	10	10	0	0	0	0	0	10	0	10	0	N.C.	N.C.	10	0	
Province of Québec	6183	468	2633	0	0	4	4	1	2072	29	741	3	3	8	9	0	768	23	740	9	N.C.	N.C.	741	4	
P.H.O.L. - Ottawa	103	27	51	0	0	0	0	0	51	0	51	0	0	0	0	1	51	0	51	0	51	10	51	0	
EORLA	596	25	241	0	0	1	1	0	241	3	17	0	1	0	0	0	17	0	17	0	17	4	17	0	
P.H.O.L. - Kingston	132	22	54	0	0	0	0	0	54	0	38	0	0	0	0	2	38	0	38	0	38	14	38	2	
UHN / Mount Sinai Hospital	784	34	430	0	0	0	0	0	430	1	24	0	0	4	0	0	24	0	24	0	24	3	24	1	
P.H.O.L. - Toronto	193	39	566	4	0	0	2	0	565	2	513	0	0	0	0	42	513	17	513	4	513	122	513	4	
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	736	30	736	0	1	0	1	1	736	0	739	0	0	0	0	14	739	14	742	1	742	27	742	1	
P.H.O.L. - Sault Ste. Marie	12	0	12	0	0	0	0	0	12	0	12	0	0	0	0	0	12	0	12	0	12	4	12	0	
P.H.O.L. - Timmins	23	6	17	0	0	0	0	0	17	0	17	0	0	0	0	0	17	0	17	0	17	2	17	0	
St. Joseph's - London	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.	
P.H.O.L. - London	201	37	108	0	0	0	0	0	108	0	101	0	0	0	0	9	101	0	101	1	101	23	101	0	
P.H.O.L. - Orillia	5	0	19	0	0	0	0	0	19	1	19	0	0	0	0	4	19	2	19	0	19	4	19	0	
P.H.O.L. - Thunder Bay	35	9	13	0	0	0	0	0	13	0	12	0	0	0	0	0	12	0	12	0	12	1	12	0	
P.H.O.L. - Sudbury	6	0	8	0	0	0	0	0	8	0	8	0	0	0	0	0	8	0	8	0	8	3	8	0	
P.H.O.L. - Hamilton	148	9	116	0	1	0	1	0	116	0	105	0	0	0	0	4	105	4	105	0	105	11	105	1	
P.H.O.L. - Peterborough	21	1	29	0	1	0	1	0	29	0	29	0	0	0	0	2	29	1	29	0	29	5	29	0	
St. Joseph's - Hamilton	1003	60	854	0	0	3	3	1	854	2	854	0	0	11	0	0	854	21	854	2	854	53	0	0	
Sault Area Hospital	66	13	66	0	0	0	0	0	66	0	49	0	1	0	0	0	49	1	49	0	49	3	49	1	
Province of Ontario	4064	312	3320	4	3	4	9	2	3319	9	2588	0	1	15	0	78	2588	60	2591	8	2591	289	1737	10	
Manitoba	846	51	735	0	2	3	5	0	735	3	61	0	1	0	2	0	61	8	92	0	61	26	92	0	
Saskatchewan	1039	75	459	0	0	2	2	0	455	0	234	1	3	2	1	0	234	14	234	0	234	39	234	0	
Alberta	2218	165	1790	3	0	0	3	1	1705	0	553	3	6	0	0	0	553	22	548	0	543	85	553	2	
Prairies	4103	291	2984	3	2	5	10	1	2895	3	848	4	10	2	3	0	848	44	874	0	838	150	879	2	
British Columbia	1823	150	1446	11	2	0	26	1	1446	3	419	3	3	3	9	0	419	28	419	0	402	56	402	3	
Yukon	41	2	22	0	0	0	0	0	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	10	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	6	N.C.	N.C.
Nunavut	45	0	37	0	0	0	0	0	37	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.	
Territories	96	2	69	0	0	0	0	0	69	1	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	10	6	N.C.	N.C.
CANADA	17944	1354	11416	18	7	14	50	5	10757	51	4899	13	18	28	28	78	4931	172	4932	18	4149	541	4067	22	

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.

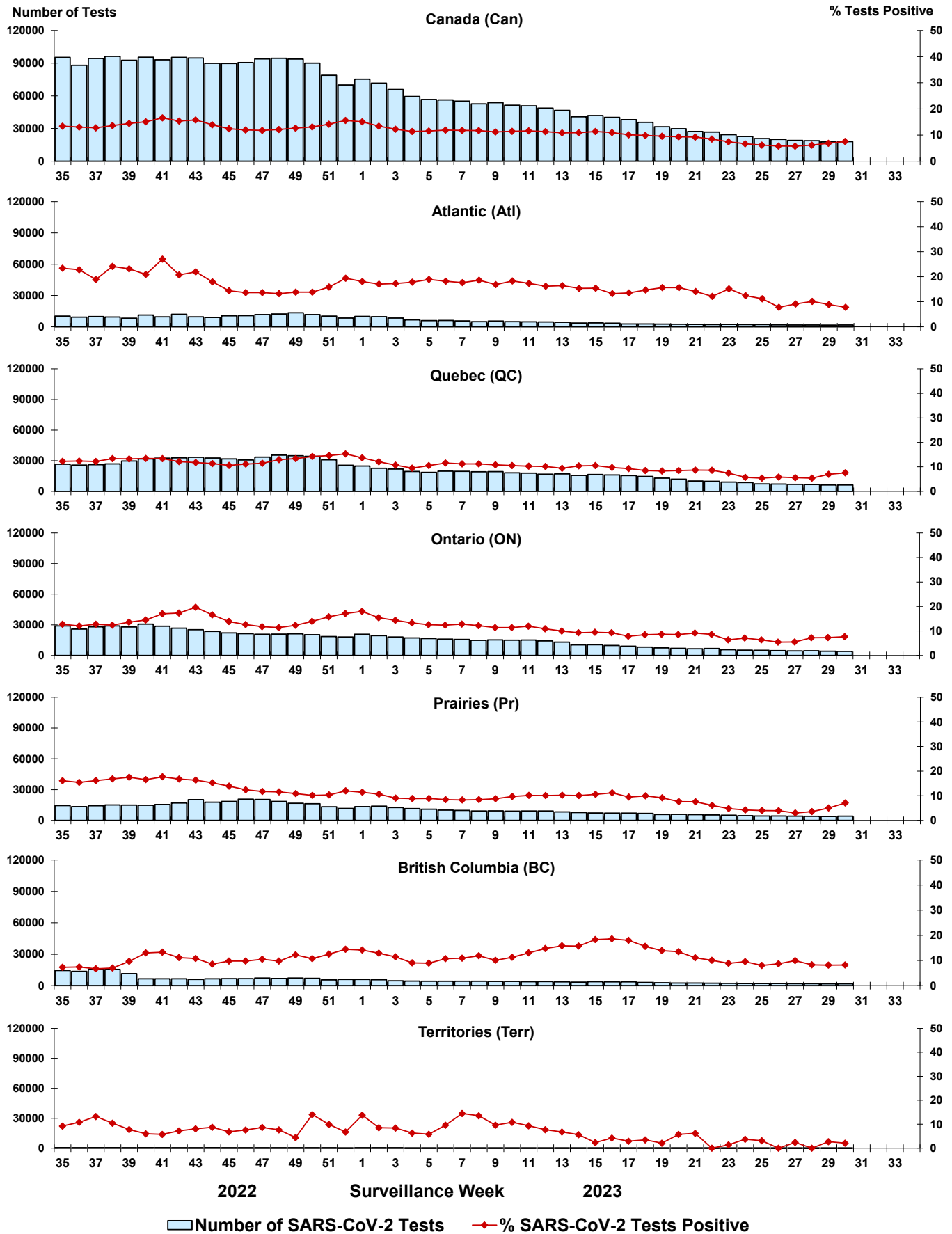
Some specimens from Yukon (YT) are sent to reference laboratories in British Columbia and reported results reflect specimens identified as originating from YT.

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

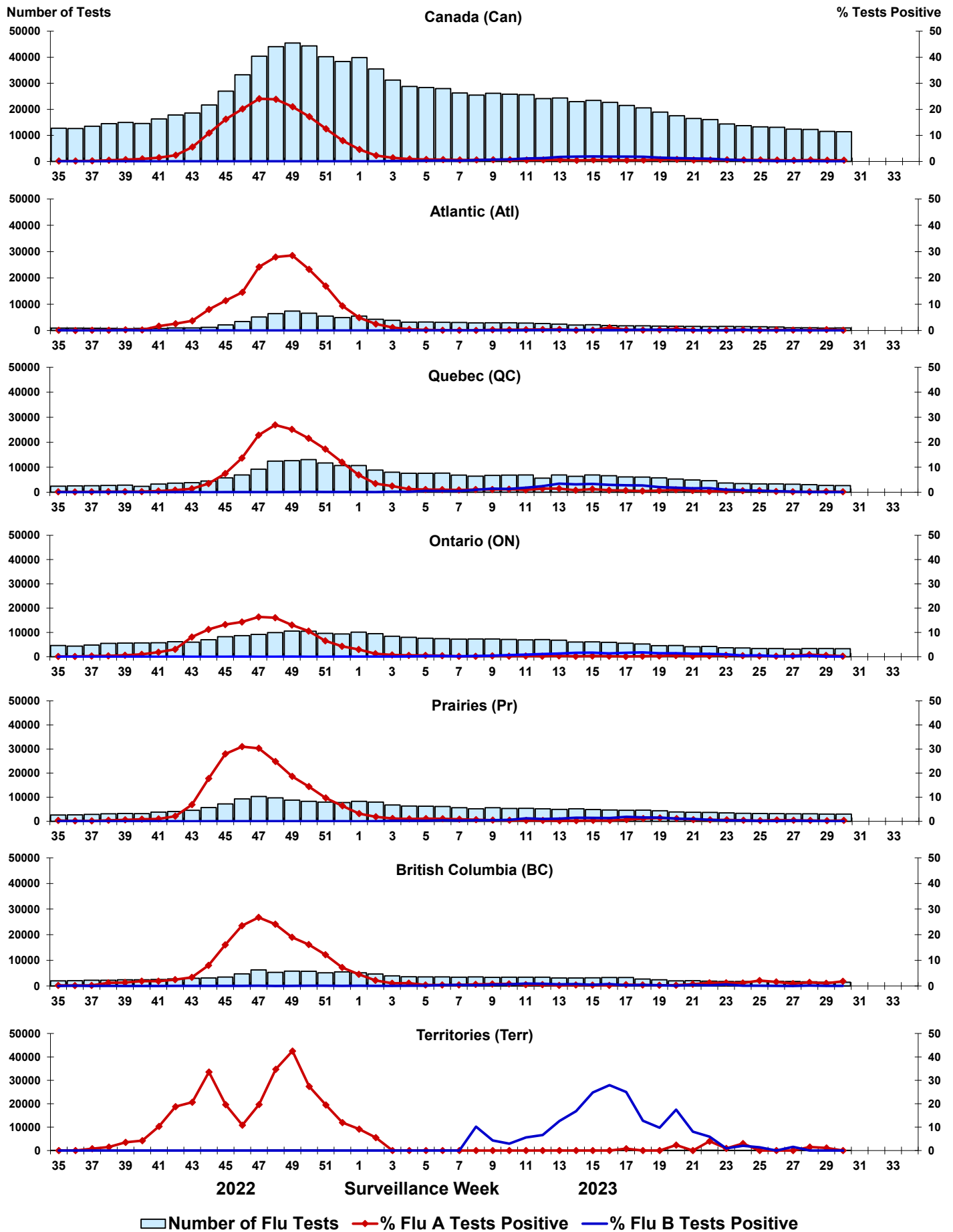


Figure 5: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

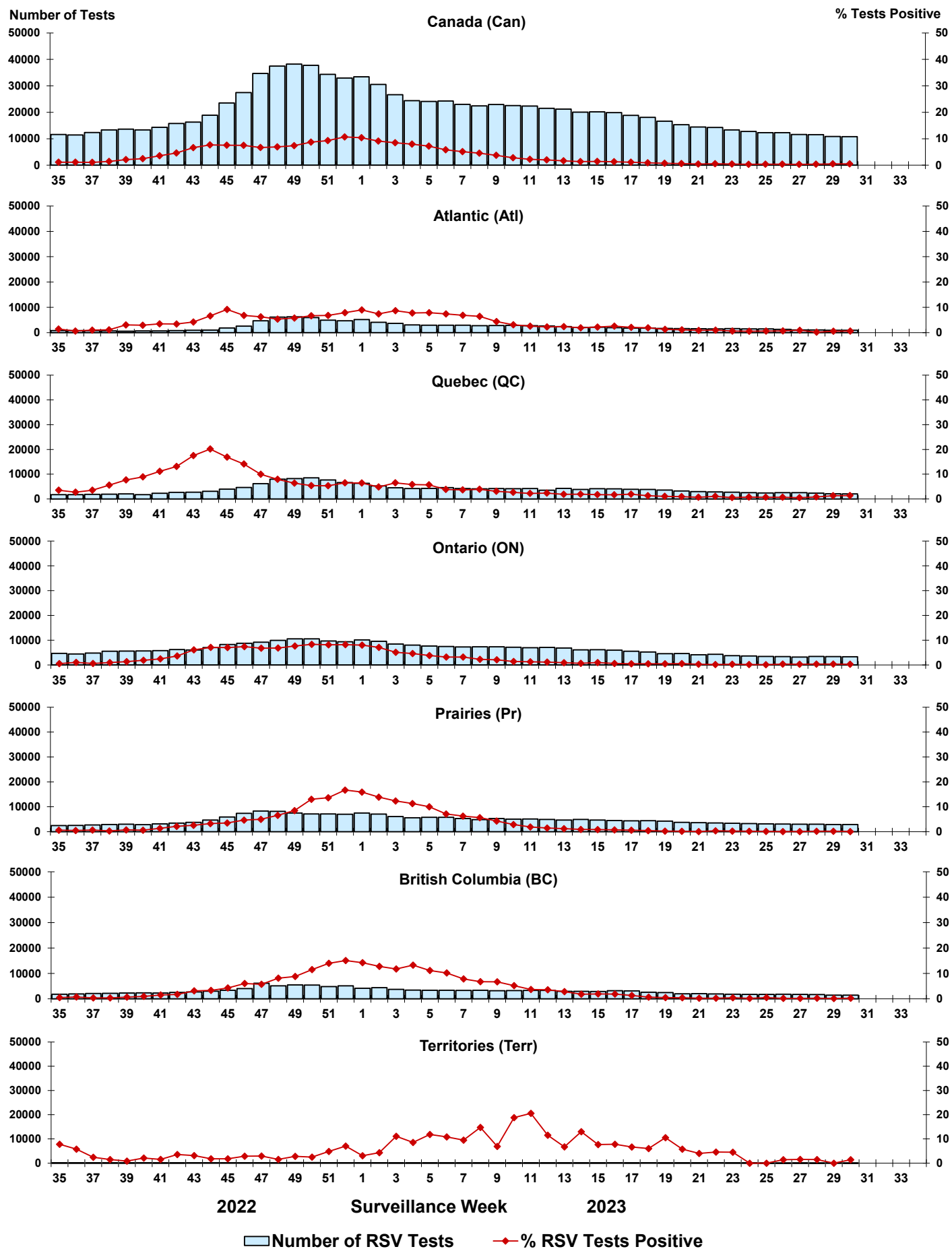


Figure 6: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

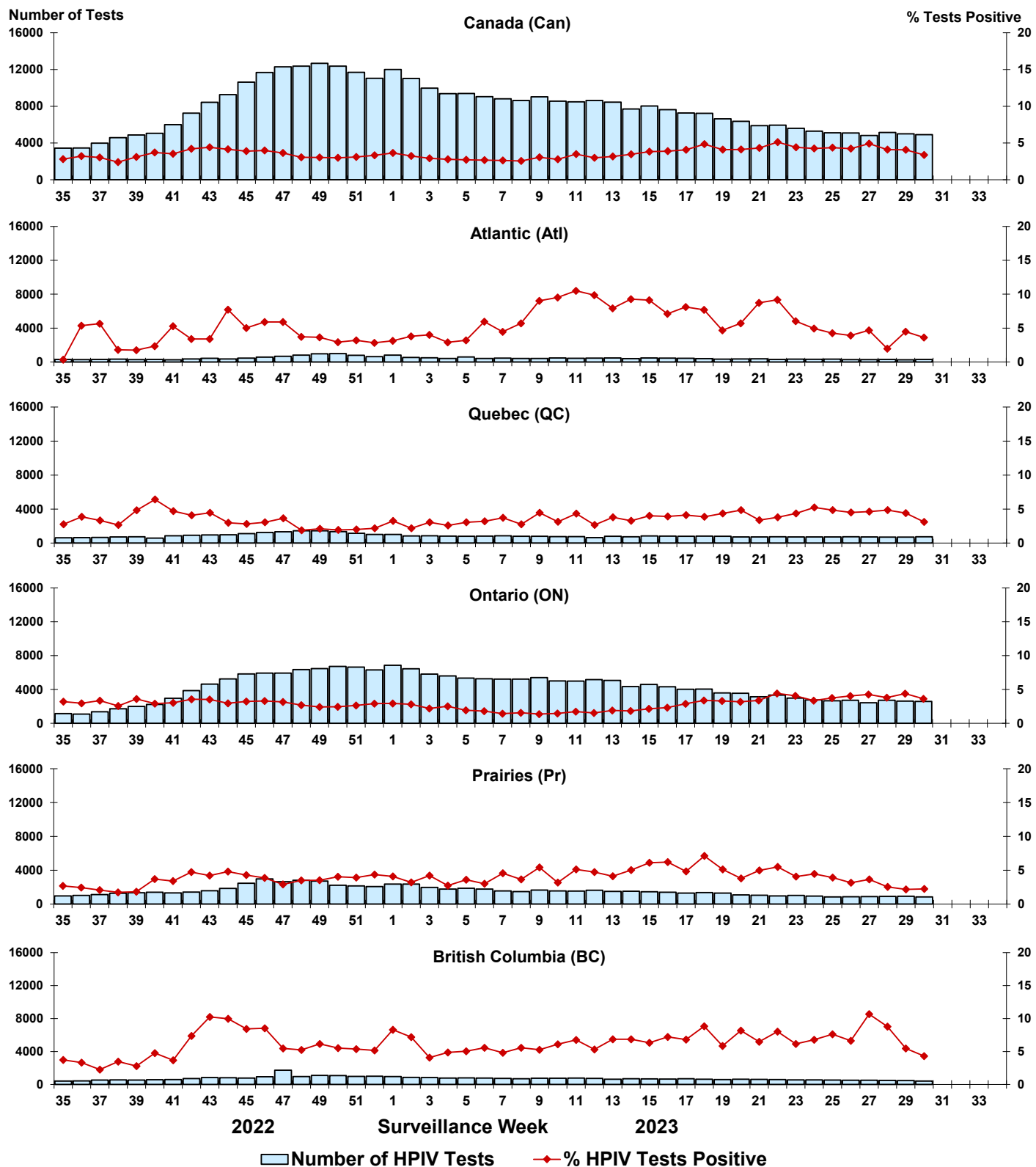


Figure 7: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

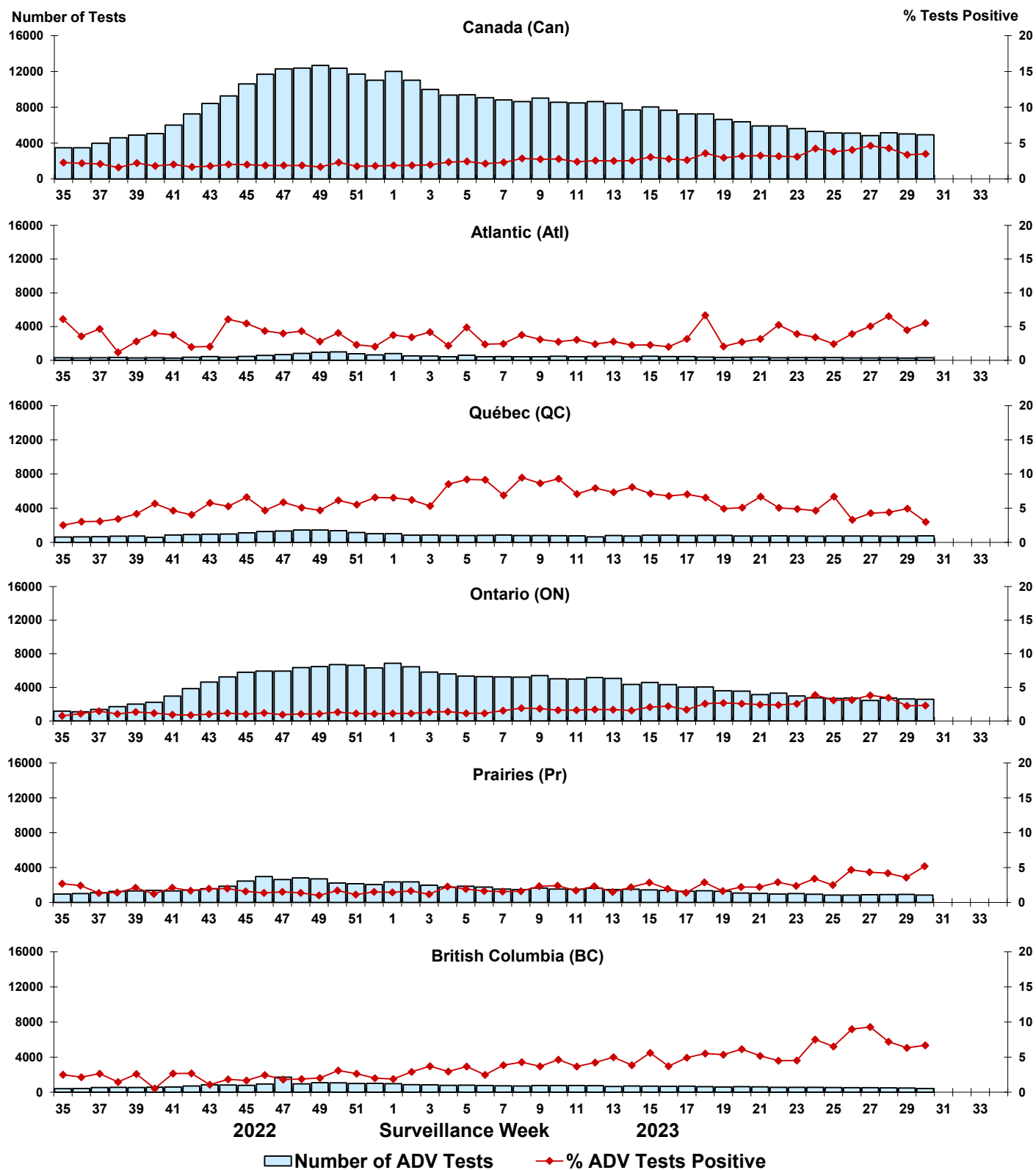


Figure 8: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

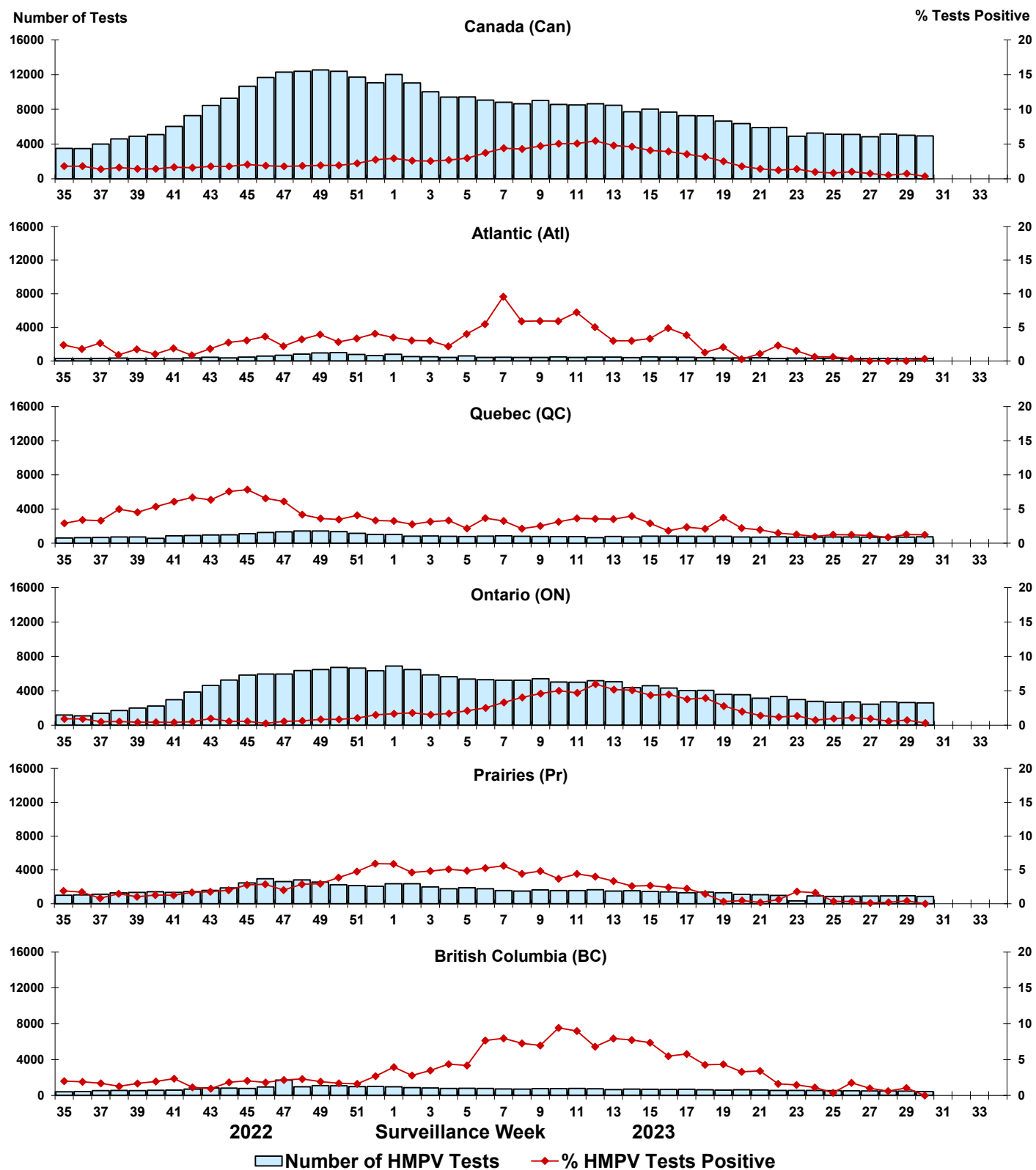


Figure 9: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

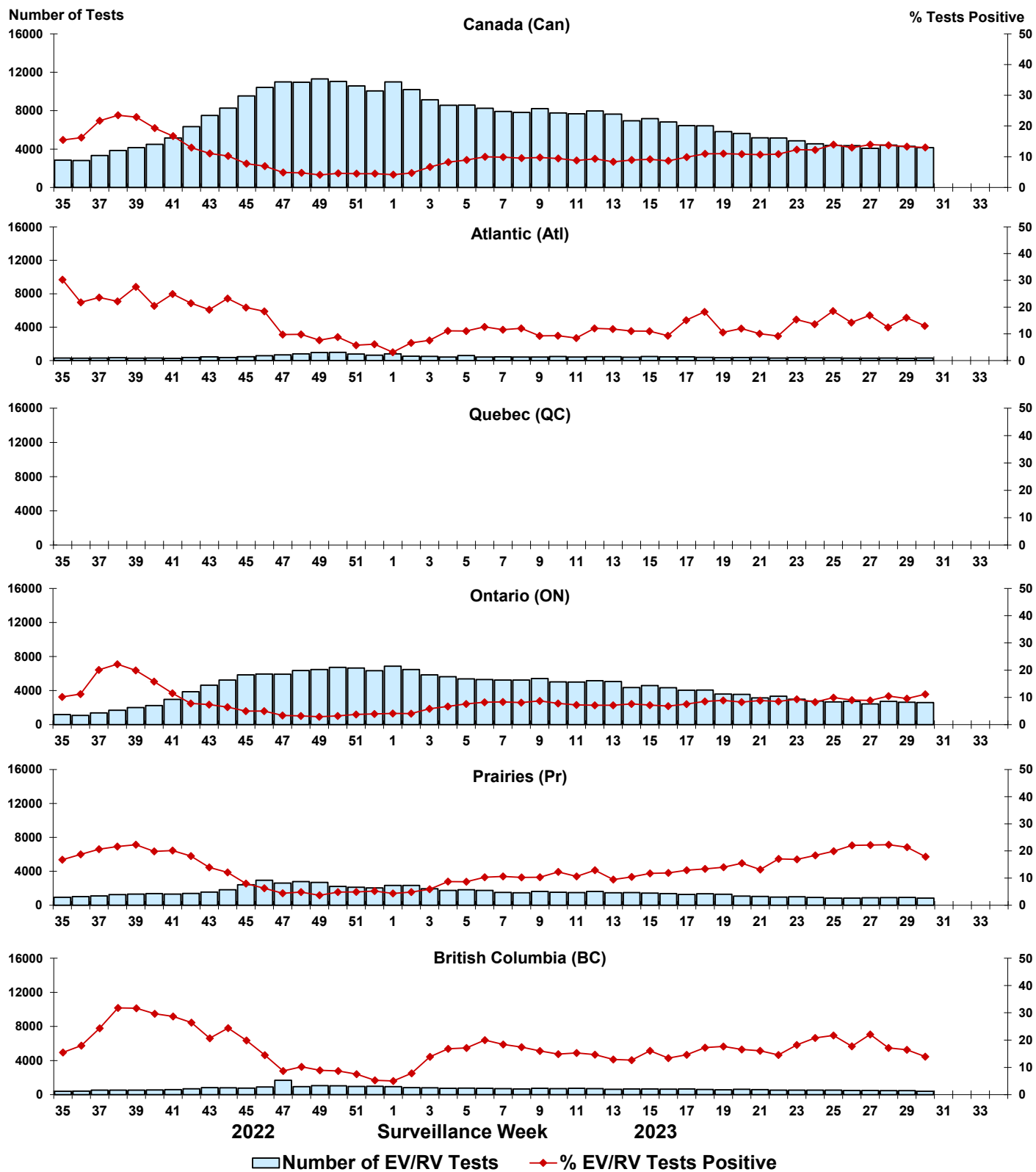


Figure 10: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

