

RESPIRATORY VIRUS DETECTION REPORT

June 26 to July 2, 2022
(Surveillance Week 2022-26)



In this Respiratory Virus Report, the number of detections of coronavirus reflects only seasonal human coronaviruses, not the novel pandemic coronavirus (SARS-CoV-2) that causes COVID-19. For information on COVID-19, see the [Coronavirus disease \(COVID-19\): Outbreak update](#).

Overall Summary

The total number of respiratory virus detections have decreased in recent weeks.

- Influenza activity has continued to decrease, and remains below the epidemic threshold and near expected levels.
 - A total of 276 influenza detections were reported (268 influenza A, 8 influenza B).
- Enterovirus/Rhinovirus is the most common seasonal respiratory virus detected in Canada (347 detections; 15.4% positive). Activity is fluctuating and below expected levels for this time of year.
- Activity of other respiratory viruses is near expected levels.
- The number of tests performed for all viruses was above expected levels.
- 30/34 sentinel laboratories reported surveillance data.

Abbreviations

Flu: Influenza

Flu A(H1N1)pdm09: Influenza A(H1N1)pdm09

Flu A(H3): Influenza A(H3N2)

Flu A (UnS): Influenza A(Unsubtyped)

RSV: Respiratory syncytial virus

HPIV: Human parainfluenza virus

HMPV: Human metapneumovirus

ADV: Adenovirus

EV/RV: Enterovirus/Rhinovirus

HCoV: Human coronavirus

Atl: Atlantic Canada

BC: British Columbia

Can: Canada

EORLA: Eastern Ontario Regional Laboratory Association

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

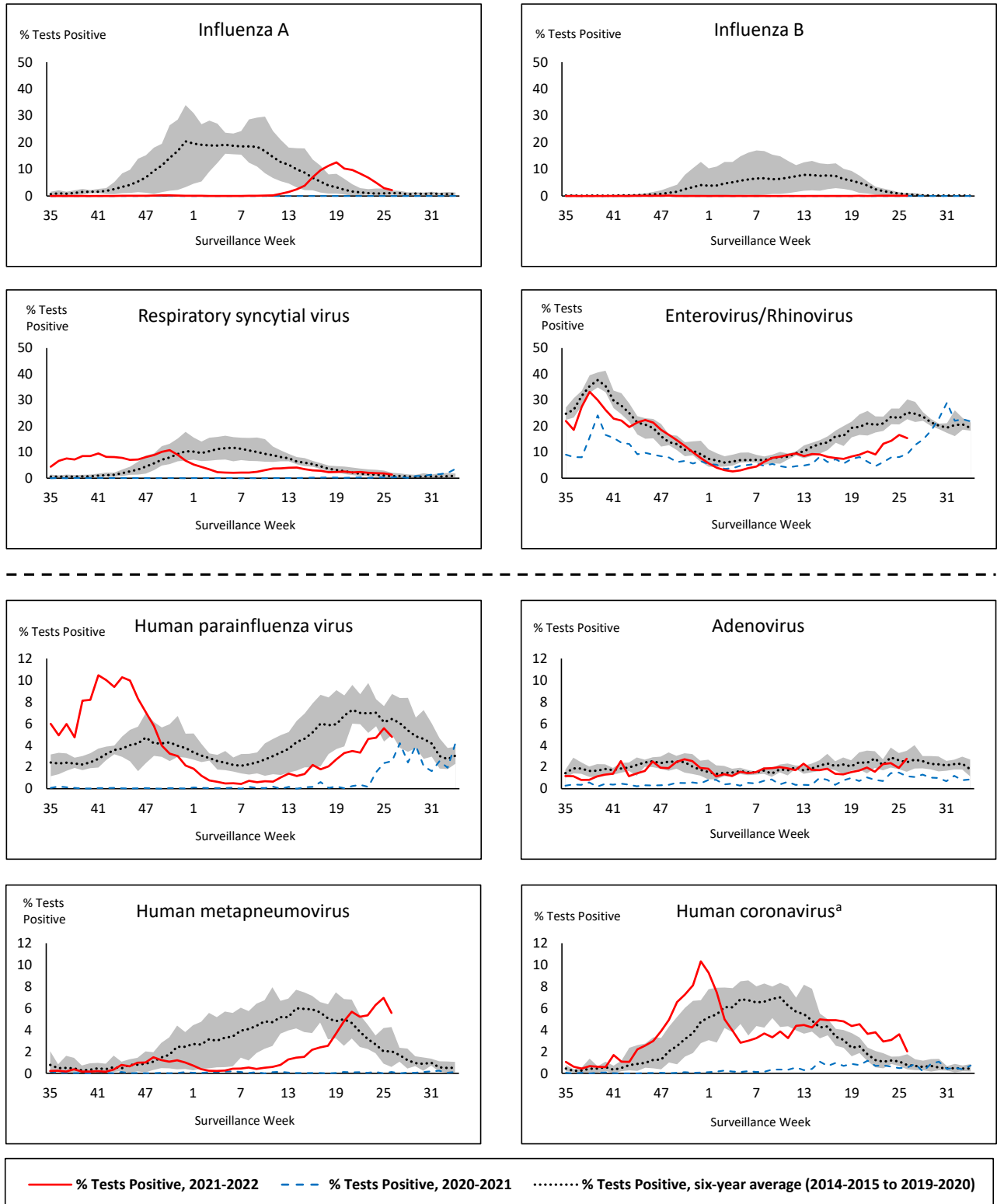
QC: Quebec

Terr: Territories of Canada

UHN: University Health Network



Figure 1: Positive respiratory 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: 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

^a Human coronavirus excludes human coronaviruses SARS-CoV, MERS-CoV and SARS-CoV-2; Includes seasonal human coronaviruses HCoV-229E, HCoV-OC43, HCoV-NL63, HCoV-HKU1.

Table 1: Respiratory virus detections for the week ending July 2, 2022 (surveillance week 2022-26)

Reporting Laboratory	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	181	0	0	1	1	0	181	4	181	0	1	0	0	0	181	2	181	2	181	11	181	6
Prince Edward Island	34	0	2	0	2	0	34	0	34	0	0	0	1	0	34	3	34	2	34	9	34	2
Nova Scotia	612	0	0	24	24	0	612	11	25	0	0	0	0	0	25	2	25	4	25	4	25	0
New Brunswick	426	0	5	16	21	0	293	8	64	0	0	3	2	0	64	1	64	1	64	14	64	0
Atlantic	1253	0	7	41	48	0	1120	23	304	0	1	3	3	0	304	8	304	9	304	38	304	8
Région Nord-Est	1350	0	0	6	6	4	291	1	3	0	0	0	0	0	3	0	3	1	N.C.	N.C.	3	0
Québec-Chaudière-Appalaches	791	0	0	9	9	3	791	2	24	0	1	1	0	0	232	4	232	0	N.C.	N.C.	135	2
Centre-du-Québec	509	0	0	20	20	0	425	5	27	1	0	2	0	0	27	0	27	2	N.C.	N.C.	27	0
Montréal-Laval	1653	0	0	37	37	0	982	10	314	2	3	10	1	0	314	18	314	8	N.C.	N.C.	356	10
Ouest du Québec	300	0	0	9	9	0	300	0	17	0	0	1	1	0	17	1	17	0	N.C.	N.C.	17	1
Montérégie	393	0	0	8	8	0	393	4	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	4996	0	0	89	89	7	3182	22	385	3	4	14	2	0	593	23	593	11	N.C.	N.C.	538	13
P.H.O.L. - Ottawa	30	0	0	0	0	0	30	0	30	0	0	0	0	1	30	0	30	1	30	1	30	1
EORLA	241	0	0	4	4	0	241	3	29	0	0	5	1	0	29	2	29	0	29	9	29	0
P.H.O.L. - Kingston	38	0	0	0	0	0	38	5	38	0	0	0	0	2	38	1	38	1	38	8	38	0
UHN / Mount Sinai Hospital	437	0	0	0	0	1	437	4	15	0	0	0	0	0	15	0	15	0	15	0	15	1
P.H.O.L. - Toronto	249	0	7	0	2	0	249	3	249	0	0	0	0	10	249	7	249	22	249	42	249	12
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.
Sunnybrook & Women's College HSC	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. - Sault Ste. Marie	4	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	0	4	0	4	0
P.H.O.L. - Timmins	13	0	0	1	1	0	13	0	13	0	0	0	0	3	13	0	13	1	13	0	13	1
St. Joseph's - London	46	0	0	1	1	0	46	1	46	0	0	0	0	1	46	3	46	9	46	2	4	0
P.H.O.L. - London	60	0	2	0	2	0	60	1	60	0	0	0	0	2	60	3	60	13	60	2	60	1
P.H.O.L. - Orillia	22	0	0	0	0	0	22	3	22	0	0	0	0	0	22	1	22	9	22	6	22	0
P.H.O.L. - Thunder Bay	4	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	0	4	1	4	0
P.H.O.L. - Sudbury	10	0	0	0	0	0	10	0	10	0	0	0	0	1	10	0	10	0	10	0	10	2
P.H.O.L. - Hamilton	41	0	0	0	0	0	41	0	41	0	0	0	0	1	41	1	41	2	41	8	41	0
P.H.O.L. - Peterborough	4	0	1	0	1	0	4	0	4	0	0	0	0	1	4	0	4	0	4	0	4	0
St. Joseph's - Hamilton	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.
Province of Ontario	1199	0	10	6	11	1	1199	20	565	0	0	5	1	22	565	18	565	58	565	79	523	18
Province of Manitoba	372	0	1	0	1	0	372	16	122	0	1	0	2	0	122	4	126	5	122	29	126	1
Province of Saskatchewan	278	0	0	6	6	0	278	5	103	0	0	0	3	0	103	5	103	14	103	19	103	1
Province of Alberta	1804	1	53	5	59	0	1534	28	632	0	13	31	2	0	631	7	632	20	621	108	632	7
Prairies	2454	1	54	11	66	0	2184	49	857	0	14	31	7	0	856	16	861	39	846	156	861	9
British Columbia	2392	0	9	0	51	0	2269	13	547	0	2	6	4	5	547	14	547	43	540	74	540	8
Yukon	2	0	0	0	0	0	2	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	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.
Nunavut	51	0	3	0	3	0	51	11	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	53	0	3	0	3	0	53	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CANADA	12347	1	83	147	268	8	10007	138	2658	3	21	59	17	27	2865	79	2870	160	2255	347	2766	56

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.

The reporting laboratory previously listed as CHEO - Ottawa is now listed as EORLA to better reflect data submitted by this provider.

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: BC Children's and Women's Hospital, Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Powell River Hospital , St. Paul's Hospital , Vancouver General Hospital, Victoria General Hospital, BCCDC Public Health Laboratory, Interior Health Authority sites and Northern Health Authority sites.

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

For British Columbia, only data from subtyped influenza A specimens are included in the weekly number of influenza detections. The sum of A(H1N1)pdm09, A(H3), and A(UnS) positive results may not equal the sum of total Flu A positive results.

Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts, as some subtype detections are not available through routine testing but are subsequently reported if further subtype testing is conducted. In these instances, subtype counts do not reflect influenza A detections intended to be captured by routine surveillance, and are excluded from total detections and percent positivity.

Table 2: Cumulative respiratory virus detections from August 29, 2021 to July 2, 2022 (surveillance week 2021-35 to 2022-26)

Reporting Laboratory	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	14569	0	0	316	316	0	14567	202	14570	1	25	116	0	314	14577	48	14564	78	14631	2128	351	15
Prince Edward Island	2579	0	47	17	64	0	2579	259	2534	0	0	158	23	1	2579	69	2579	96	2579	599	2579	140
Nova Scotia	23585	0	2	391	393	8	23590	369	1781	0	3	41	29	0	1801	22	1801	46	1801	159	1801	48
New Brunswick	18850	0	106	359	465	0	12044	337	3369	0	4	31	28	0	3362	34	3369	38	3369	119	3278	18
Atlantic	59583	0	155	1083	1238	8	52780	1167	22254	1	32	346	80	315	22319	173	22313	258	22380	3005	8009	221
Région Nord-Est	33289	45	1	2184	2230	24	15120	1462	817	2	0	10	1	0	908	18	421	15	N.C.	N.C.	1252	24
Québec-Chaudière-Appalaches	12455	0	0	1423	1423	51	13525	1010	1764	1	16	11	17	0	4459	133	4360	129	N.C.	N.C.	2729	110
Centre-du-Québec	13106	0	3	1273	1276	11	11808	1096	1408	4	8	29	3	0	1408	41	1416	27	N.C.	N.C.	1401	30
Montréal-Laval	33965	0	5	1543	1548	8	29344	2479	9377	23	83	72	9	0	9376	541	9374	389	N.C.	N.C.	9601	243
Ouest du Québec	8273	0	6	646	652	0	8215	940	272	1	8	7	7	0	265	22	261	13	N.C.	N.C.	261	6
Montréal	5620	0	0	308	308	0	4829	393	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	106708	45	15	7377	7437	94	82841	7380	13638	31	115	129	37	0	16416	755	15832	573	N.C.	N.C.	15244	413
P.H.O.L. - Ottawa	7070	2	81	1	84	0	7070	1442	7070	0	0	0	0	741	7070	313	7068	47	7070	2253	7068	292
EORLA	8215	0	0	172	172	0	8190	652	1215	0	2	26	10	0	1215	23	896	24	1215	194	873	30
P.H.O.L. - Kingston	1567	0	219	0	8	0	1574	140	1573	0	0	0	0	137	1574	27	1555	21	1573	358	1555	99
UHN / Mount Sinai Hospital	20595	0	0	55	55	5	20596	118	683	0	0	0	0	0	683	1	683	2	683	17	683	13
P.H.O.L. - Toronto	11073	2	374	2	123	0	11060	294	11060	0	0	0	0	402	11066	162	11050	172	11060	1249	11051	477
Sick Kids Hospital - Toronto	839	0	0	0	0	0	0	0	839	0	2	68	1	0	839	12	839	1	839	233	839	10
Sunnybrook & Women's College HSC	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. - Sault Ste. Marie	355	0	4	1	4	0	354	9	354	0	0	0	0	9	354	3	354	2	354	54	354	23
P.H.O.L. - Timmins	513	0	16	1	10	0	513	28	513	0	0	0	0	22	513	1	512	3	513	40	512	33
St. Joseph's - London	13050	0	0	71	71	0	13053	783	11496	0	0	7	0	96	11496	155	11496	99	11450	636	548	4
P.H.O.L. - London	3996	0	56	10	58	0	3995	467	3995	0	0	0	0	186	3995	95	3992	96	3995	513	3992	297
P.H.O.L. - Orillia	1045	0	8	1	9	0	1045	144	1045	0	0	0	0	67	1045	36	1042	60	1045	261	1042	77
P.H.O.L. - Thunder Bay	359	0	5	0	4	0	359	27	359	0	0	0	0	25	359	1	359	12	359	63	359	37
P.H.O.L. - Sudbury	380	0	6	0	6	0	380	12	380	0	0	0	0	12	380	2	380	7	380	34	380	14
P.H.O.L. - Hamilton	2065	0	24	2	22	0	2060	78	2060	0	0	0	0	69	2061	21	2060	50	2060	275	2060	113
P.H.O.L. - Peterborough	678	0	2	0	2	0	678	49	671	0	0	0	0	15	671	6	668	3	671	111	668	45
St. Joseph's - Hamilton	24329	0	4	237	241	1	24323	1651	24323	5	0	663	0	0	24323	234	24323	263	24323	2098	0	0
Province of Ontario	96129	4	799	553	869	6	95250	5894	67636	5	4	764	11	1781	67644	1092	67277	862	67590	8389	31984	1564
Manitoba	57329	1	85	487	573	0	57329	1408	3525	2	14	77	23	0	3525	59	4937	44	3525	448	4743	95
Province of Saskatchewan	29890	2	476	292	770	0	29855	1747	6014	1	18	210	94	0	6014	119	6014	113	6014	896	6003	313
Province of Alberta	89325	8	1771	837	2616	3	69007	3643	36662	6	155	830	252	0	36654	393	36641	590	36309	4156	36662	1545
Prairies	176544	11	2332	1616	3959	3	156191	6798	46201	9	187	1117	369	0	46193	571	47592	747	45848	5500	47408	1953
British Columbia	204384	7	874	6	1326	88	199566	9373	27743	12	25	1107	316	189	27743	550	27739	535	27208	4168	27226	981
Yukon	5464	1	5	2	14	7	5473	308	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	1903	0	204	1	205	0	1863	189	126	0	1	2	0	0	126	3	126	0	1823	198	126	1
Nunavut	16411	0	401	7	408	0	16409	414	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	23778	1	610	10	627	7	23745	911	177	0	1	6	0	0	177	6	177	0	1874	211	160	1
CANADA	667126	68	4785	10645	15456	206	610373	31523	177649	58	364	3469	813	2285	180492	3147	180930	2975	164900	21273	130031	5133

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.

Note: Included in the cumulative detections this season are 11 co-infections of influenza A and B (total of 22 detections) that are suspected to be associated with recent live attenuated influenza vaccine (LAIV) receipt. Co-infections known or reported to be associated with recent LAIV are removed by the submitting laboratory or by PHAC beginning in week 44 as they do not represent community transmission of seasonal influenza viruses.

The reporting laboratory previously listed as CHEO - Ottawa is now listed as EORLA to better reflect data submitted by this provider.

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: BC Children's and Women's Hospital, Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Powell River Hospital, St. Paul's Hospital, Vancouver General Hospital, Victoria General Hospital, BCCDC Public Health Laboratory, Interior Health Authority sites and Northern Health Authority sites.

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.

For British Columbia, only data from subtyped influenza A specimens are included in the weekly number of influenza detections. The sum of A(H1N1)pdm09, A(H3), and A(UnS) positive results may not equal the sum of total Flu A positive results.

Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts, as some subtype detections are not available through routine testing but are subsequently reported if further subtype testing is conducted. In these instances, subtype counts do not reflect influenza A detections intended to be captured by routine surveillance, and are excluded from total detections and percent positivity.

Figure 2: Number of positive respiratory virus tests reported by participating laboratories in Canada by surveillance week

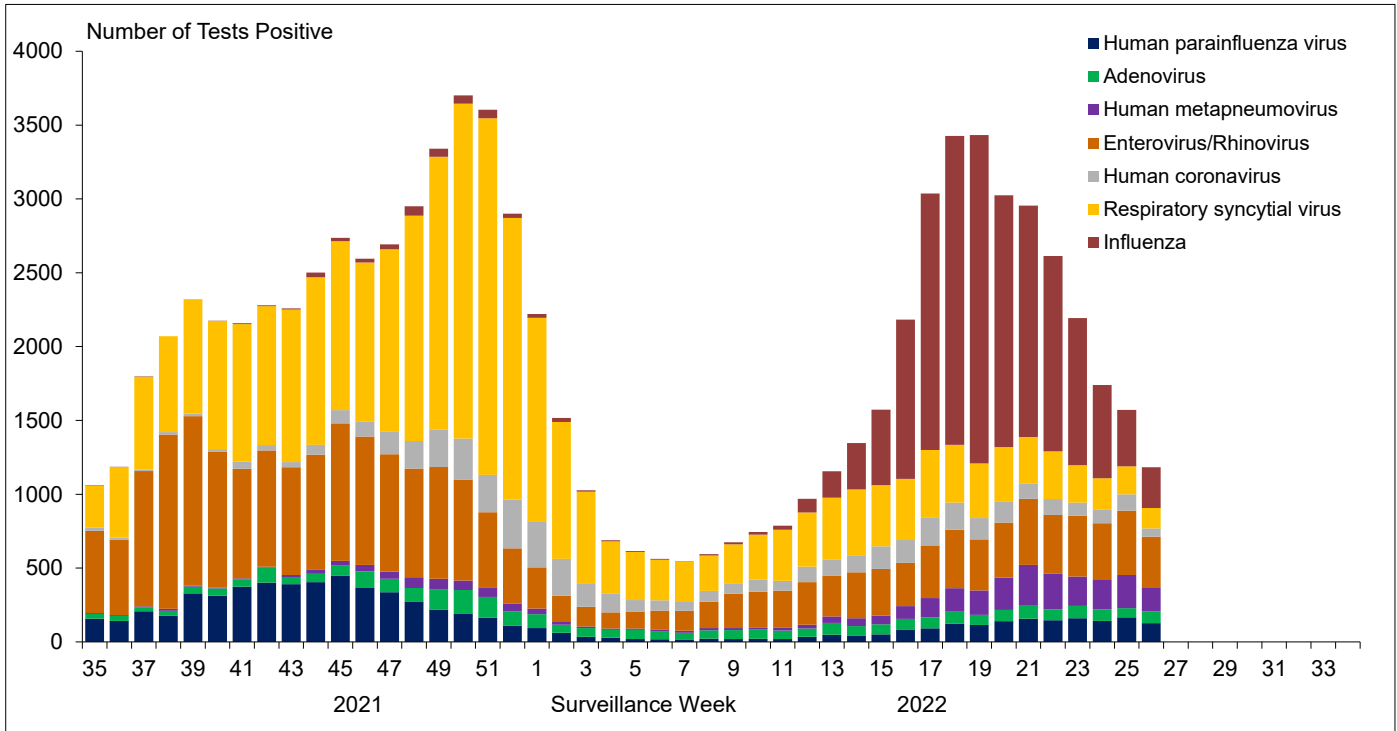


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

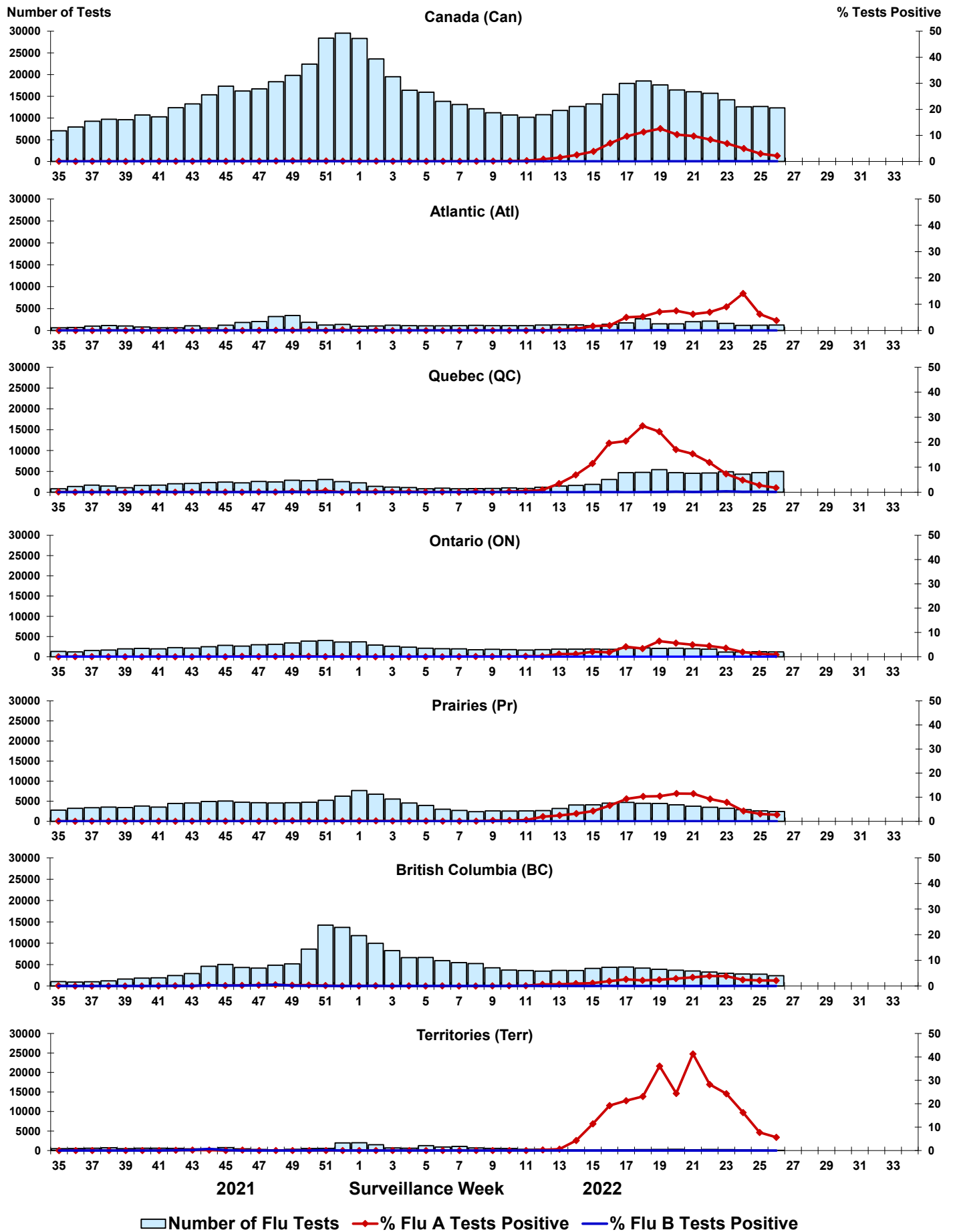


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

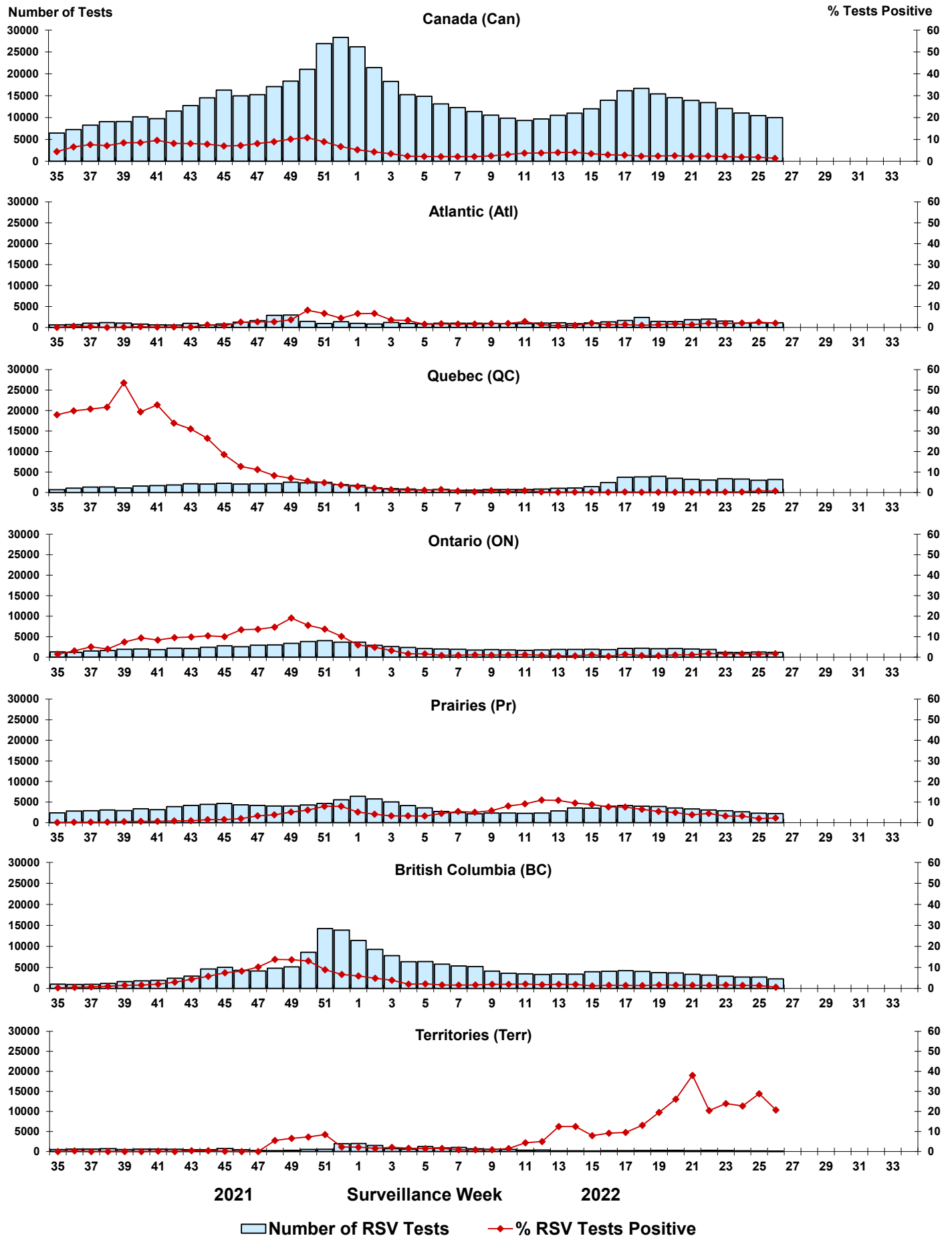


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

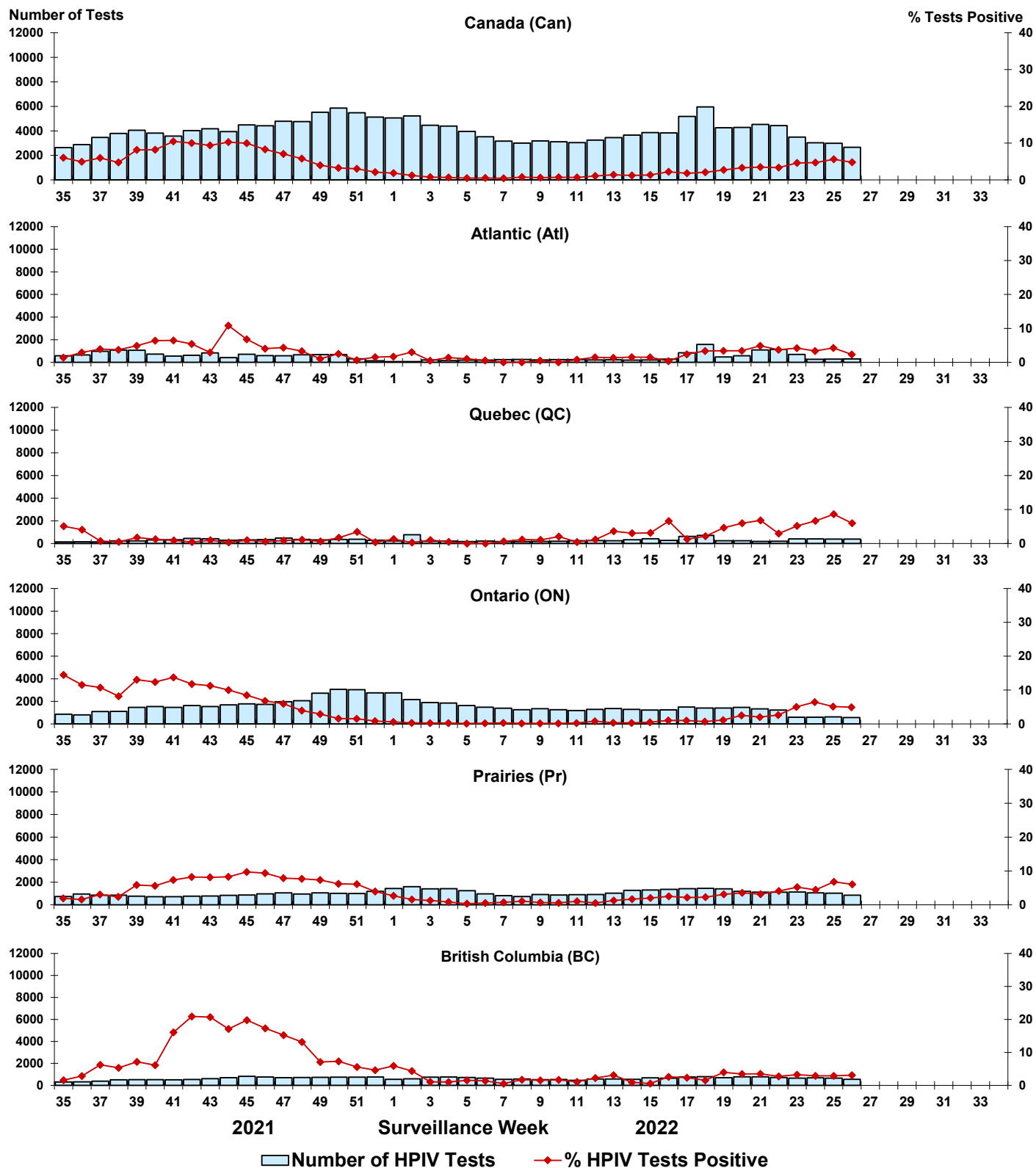


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

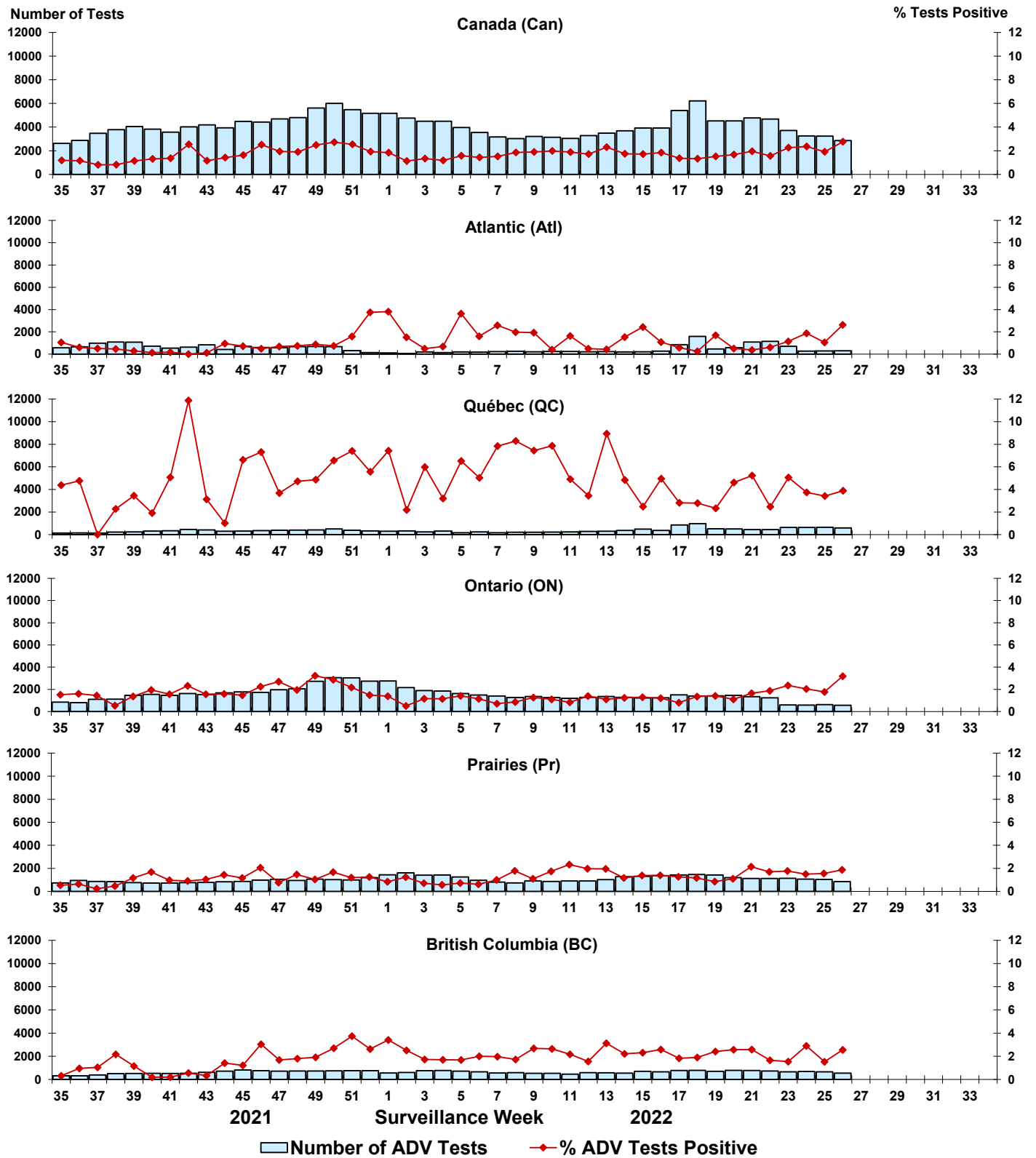


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

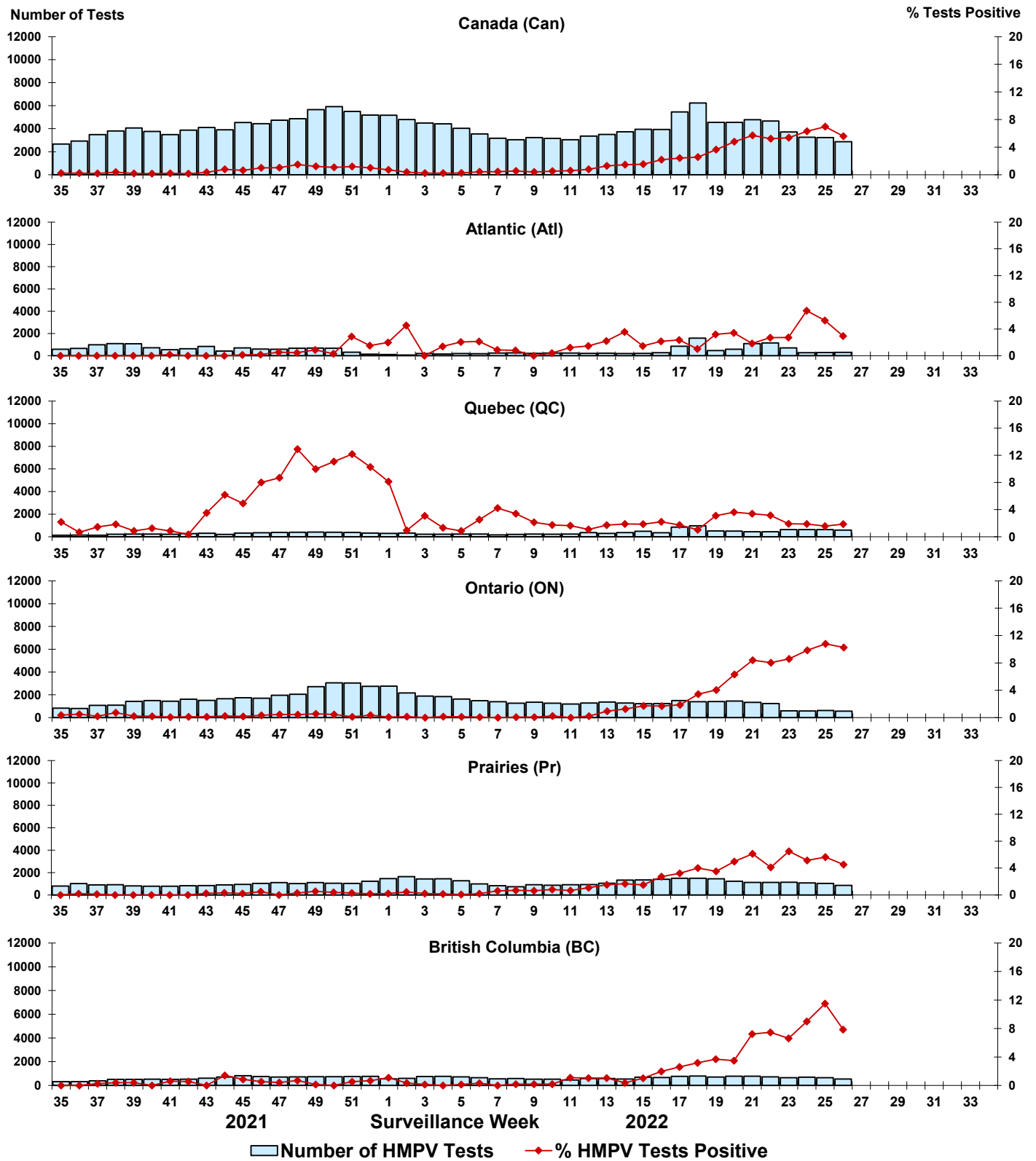


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

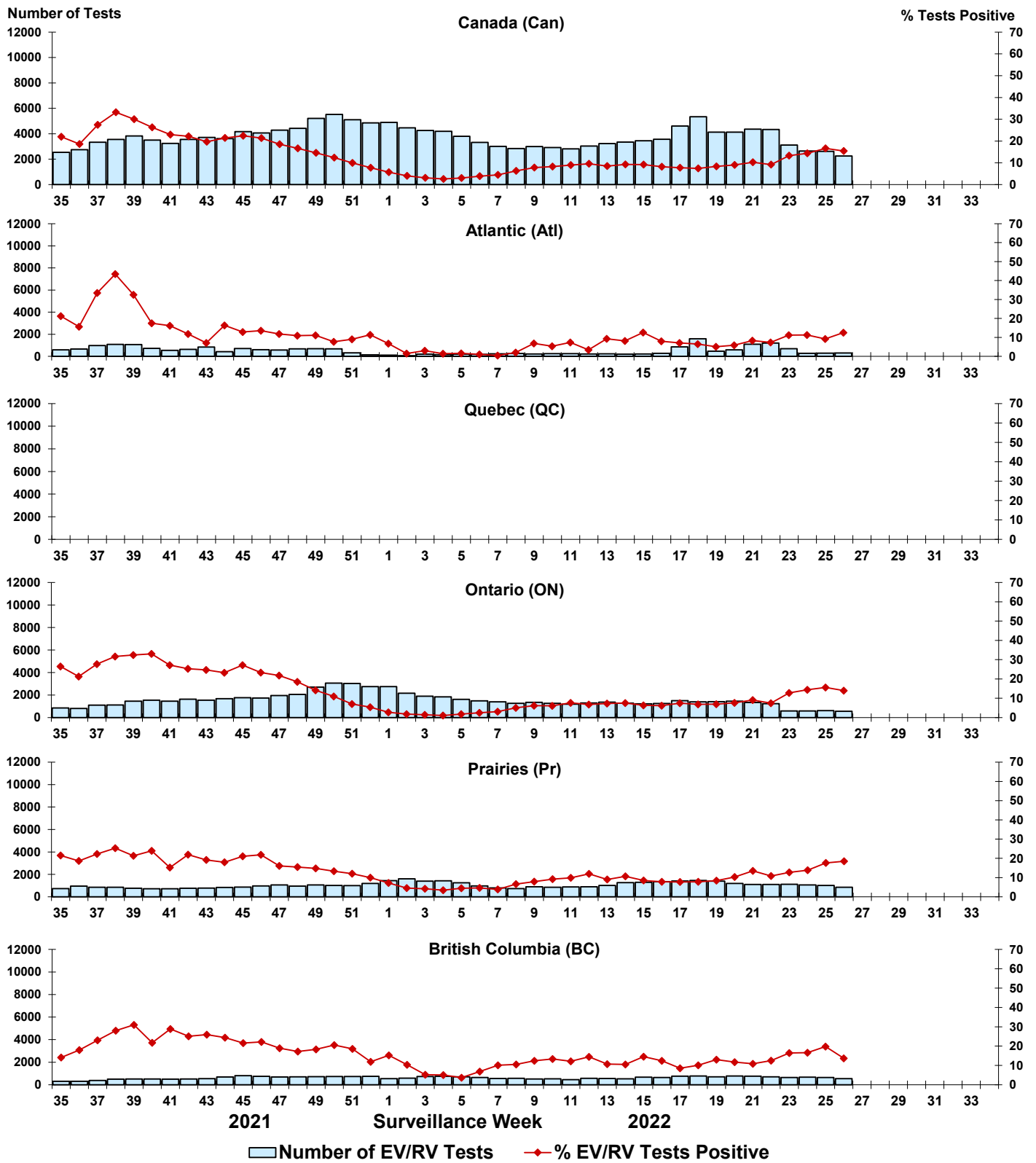


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

