

# RESPIRATORY VIRUS DETECTION REPORT

May 8 to May 14, 2022  
(Surveillance Week 2022-19)



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

Detections of seasonal respiratory viruses have increased since February 2022, with influenza accounting for most of the increase.

- Influenza is the most common seasonal respiratory virus detected in Canada as we conclude the fourth week of the influenza season.
  - A total of 2,100 influenza detections were reported (2,092 influenza A, 8 influenza B).
  - Activity of influenza A (12.6% positive) continues to increase, and is above expected levels for this time of year.
- Activity of other respiratory viruses is variable, but is near expected levels for most viruses.
  - Activity of seasonal human coronavirus (143 detections; 4.5% positive) remains slightly above expected levels.
  - Activity of human parainfluenza virus (113 detections; 3.3% positive) and human metapneumovirus (133 detections; 3.6% positive) has increased in recent weeks, but remains relatively low.
- The number of tests performed for all viruses were above expected levels.
- 30/34 sentinel laboratories reported surveillance data.

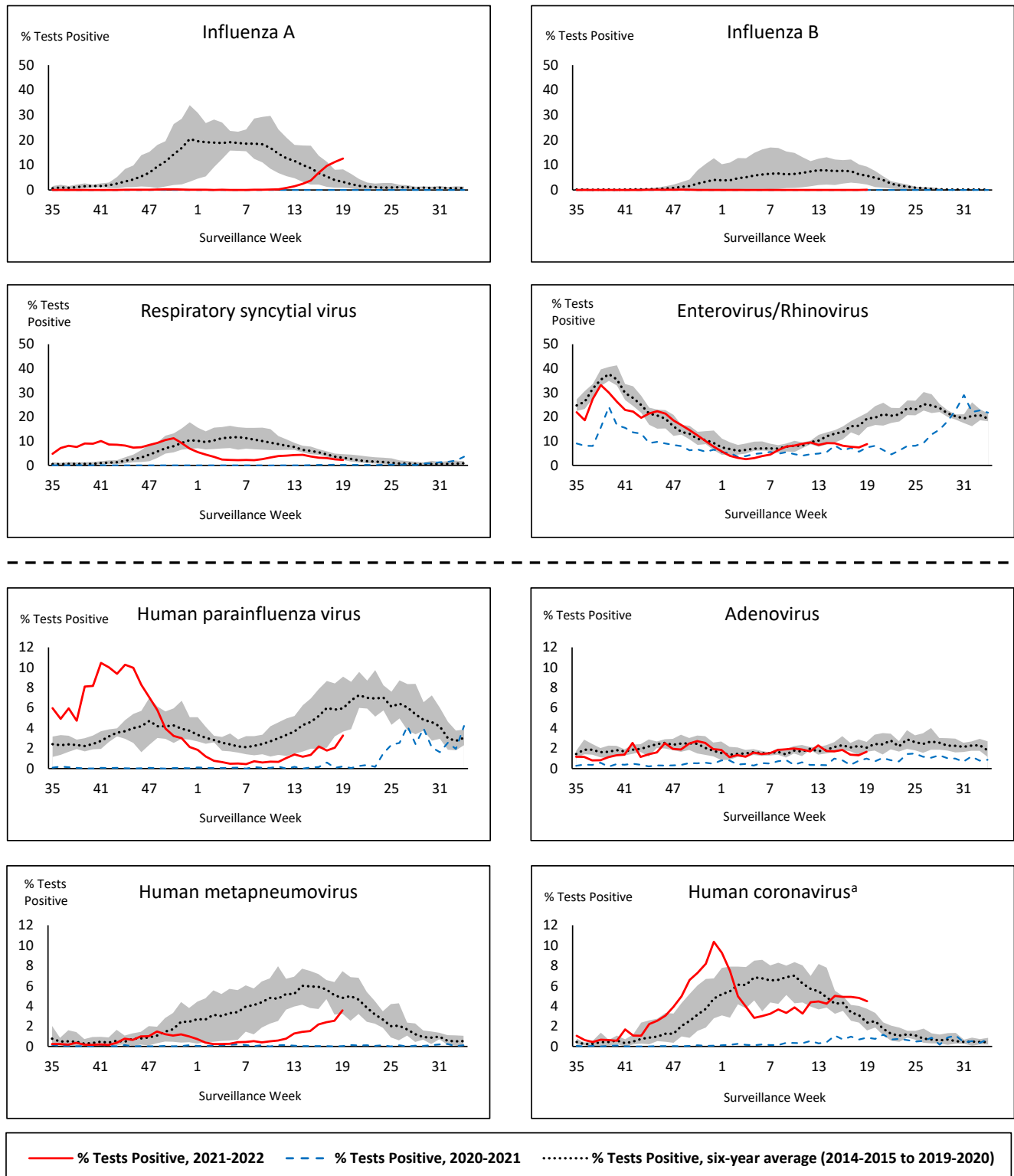
## Abbreviations

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

<sup>a</sup> 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 May 14, 2022 (surveillance week 2022-19)

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	348	0	0	22	22	0	348	1	348	0	3	0	0	1	348	3	348	2	348	9	N.C.	N.C.
Prince Edward Island	47	0	9	3	12	0	47	6	47	0	0	1	0	1	47	2	47	3	47	7	47	3
Nova Scotia	729	0	0	37	37	2	729	5	21	0	0	0	1	0	21	0	21	3	21	1	21	0
New Brunswick	385	0	0	36	36	0	314	7	54	0	0	3	6	0	54	3	54	7	54	7	54	3
Atlantic	1509	0	9	98	107	2	1438	19	470	0	3	4	7	2	470	8	470	15	470	24	122	6
Région Nord-Est	1703	0	0	426	426	0	1064	1	8	0	0	1	0	0	3	0	3	0	N.C.	N.C.	3	0
Québec-Chaudière-Appalaches	864	0	0	329	329	5	864	0	33	0	1	0	1	0	315	3	315	13	N.C.	N.C.	146	8
Centre-du-Québec	753	0	0	220	220	1	574	3	24	1	1	1	0	0	24	1	24	0	N.C.	N.C.	24	2
Montréal-Laval	1620	0	0	227	227	0	963	0	160	0	3	1	1	0	160	7	160	1	N.C.	N.C.	199	10
Ouest du Québec	329	0	0	86	86	0	329	1	12	0	0	0	0	0	12	1	12	2	N.C.	N.C.	12	1
Montréal	165	0	0	28	28	0	165	0	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	5434	0	0	1316	1316	6	3959	5	237	1	5	3	2	0	514	12	514	16	N.C.	N.C.	384	21
P.H.O.L. - Ottawa	71	0	31	0	31	0	71	0	71	0	0	0	0	0	71	1	71	1	71	2	71	2
EORLA	200	0	0	23	23	0	200	4	30	0	0	0	0	0	30	0	1	0	30	0	30	1
P.H.O.L. - Kingston	23	0	2	0	2	0	23	0	23	0	0	0	0	0	23	0	23	0	23	7	23	1
UHN / Mount Sinai Hospital	514	0	0	5	5	0	514	2	31	0	0	0	0	0	31	0	31	0	31	0	31	0
P.H.O.L. - Toronto	289	0	15	0	15	0	289	1	289	0	0	0	0	10	289	4	289	10	289	32	289	29
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	9	0	1	0	1	0	9	0	9	0	0	0	0	0	9	0	9	0	9	0	9	1
P.H.O.L. - Timmins	17	0	2	0	2	0	17	1	17	0	0	0	0	0	17	0	17	0	17	0	17	2
St. Joseph's - London	63	0	0	3	3	0	63	1	63	0	0	0	0	2	63	1	63	7	63	5	2	0
P.H.O.L. - London	90	0	7	2	9	0	90	1	90	0	0	0	0	0	90	4	90	7	90	4	90	1
P.H.O.L. - Orillia	24	0	0	0	0	0	24	3	24	0	0	0	0	3	24	0	24	3	24	4	24	3
P.H.O.L. - Thunder Bay	7	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	0	7	1	7	0
P.H.O.L. - Sudbury	11	0	2	0	2	0	11	0	11	0	0	0	0	0	11	0	11	2	11	0	11	1
P.H.O.L. - Hamilton	53	0	1	1	2	0	53	2	53	0	0	0	0	0	53	1	53	2	53	4	53	3
P.H.O.L. - Peterborough	10	0	0	0	0	0	10	0	10	0	0	0	0	0	10	2	10	1	10	1	10	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	1381	0	61	34	95	0	1381	15	728	0	0	0	0	15	728	13	699	33	728	60	667	44
Province of Manitoba	1056	0	7	66	73	0	1056	43	113	0	1	0	1	0	113	1	137	3	113	14	137	3
Province of Saskatchewan	633	0	0	77	77	0	633	74	223	0	3	1	5	0	223	5	223	9	223	27	216	10
Province of Alberta	2560	2	79	210	291	0	1031	78	1031	0	12	12	8	0	1031	6	1031	35	1031	70	1031	21
Prairies	4249	2	86	353	441	0	2720	195	1367	0	16	13	14	0	1367	12	1391	47	1367	111	1384	34
British Columbia	3882	0	29	0	95	0	3739	62	644	0	1	9	12	6	644	17	644	22	639	84	639	38
Yukon	22	0	0	0	2	0	22	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.
Northwest Territories	138	0	35	0	35	0	137	6	1	0	0	0	0	0	1	0	1	0	137	14	1	0
Nunavut	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	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	163	0	36	0	38	0	161	8	3	0	0	0	0	0	3	0	3	0	139	14	3	0
CANADA	16618	2	221	1801	2092	8	13398	304	3449	1	25	29	35	23	3726	62	3721	133	3343	293	3199	143

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.

Table 2: Cumulative respiratory virus detections from August 29, 2021 to May 14, 2022 (surveillance week 2021-35 to 2022-19)

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	11136	0	0	178	178	0	11134	128	11137	1	10	116	0	214	11144	37	11131	39	11138	1892	N.C.	N.C.
Prince Edward Island	2286	0	21	8	29	0	2286	242	2241	0	0	157	4	1	2286	61	2286	58	2286	541	2286	124
Nova Scotia	19264	0	2	151	153	8	19269	325	1537	0	2	41	18	0	1551	14	1551	12	1551	120	1551	39
New Brunswick	15962	0	1	52	53	0	10112	284	2976	0	0	26	12	0	2969	23	2976	17	2976	66	2885	10
Atlantic	48648	0	24	389	413	8	42801	979	17891	1	12	340	34	215	17950	135	17944	126	17951	2619	6722	173
Région Nord-Est	23794	15	1	1508	1524	3	11093	1444	808	2	0	10	1	0	899	17	408	11	N.C.	N.C.	1243	23
Québec-Chaudière-Appalaches	8030	0	0	968	968	10	8628	1001	1563	0	11	7	11	0	2604	93	2513	96	N.C.	N.C.	1867	80
Centre-du-Québec	8688	0	2	715	717	7	8291	1085	1243	1	6	24	2	0	1243	35	1251	21	N.C.	N.C.	1236	18
Montréal-Laval	23617	0	5	906	911	6	22870	2454	7633	8	43	29	6	0	7632	443	7630	348	N.C.	N.C.	7668	169
Ouest du Québec	6131	0	5	364	369	0	6073	931	152	0	5	3	4	0	145	9	141	5	N.C.	N.C.	141	4
Montréal	3651	0	0	106	106	0	3353	387	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	73911	15	13	4567	4595	26	60308	7302	11399	11	65	73	24	0	12523	597	11943	481	N.C.	N.C.	12155	294
P.H.O.L. - Ottawa	6835	2	57	1	60	0	6835	1441	6835	0	0	0	0	733	6835	312	6833	43	6835	2241	6833	284
EORLA	6596	0	0	81	81	0	6571	620	950	0	2	19	2	0	950	16	602	6	950	151	608	22
P.H.O.L. - Kingston	1399	0	6	0	6	0	1409	128	1408	0	0	0	0	130	1408	19	1390	3	1408	315	1390	94
UHN / Mount Sinai Hospital	17444	0	0	37	37	3	17444	105	565	0	0	0	0	0	565	0	565	1	565	14	565	6
P.H.O.L. - Toronto	9224	2	38	1	41	0	9211	277	9211	0	0	0	0	304	9214	127	9207	44	9211	1060	9208	338
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	318	0	3	1	4	0	317	8	317	0	0	0	0	7	317	3	317	1	317	50	317	20
P.H.O.L. - Timmins	441	0	4	0	4	0	441	26	441	0	0	0	0	18	441	1	441	0	441	31	441	28
St. Joseph's - London	12641	0	0	51	51	0	12644	771	11087	0	0	7	0	89	11087	141	11087	46	11041	581	528	2
P.H.O.L. - London	3485	0	24	7	31	0	3484	454	3484	0	0	0	0	164	3484	84	3483	35	3484	463	3483	267
P.H.O.L. - Orillia	855	0	1	1	2	0	855	119	855	0	0	0	0	48	855	26	852	12	855	213	852	63
P.H.O.L. - Thunder Bay	312	0	1	0	1	0	312	22	312	0	0	0	0	24	312	1	312	0	312	59	312	37
P.H.O.L. - Sudbury	331	0	4	0	4	0	331	12	331	0	0	0	0	9	331	1	331	4	331	31	331	10
P.H.O.L. - Hamilton	1745	0	11	2	13	0	1740	70	1740	0	0	0	0	46	1741	14	1740	22	1740	231	1740	106
P.H.O.L. - Peterborough	612	0	0	0	0	0	612	45	605	0	0	0	0	12	605	3	603	2	605	95	603	45
St. Joseph's - Hamilton	21583	0	4	94	98	1	21577	1637	21577	2	0	653	0	0	21577	209	21577	81	21577	1921	0	0
Province of Ontario	84660	4	153	276	433	4	83783	5735	60557	2	4	747	3	1584	60561	969	60179	301	60511	7689	28050	1332
Manitoba	53136	1	55	279	335	0	53136	1248	2705	2	10	74	9	0	2705	44	4060	13	2705	317	3866	85
Province of Saskatchewan	26546	2	221	293	516	0	26515	1558	4894	1	8	198	59	0	4894	86	4894	35	4894	665	4883	271
Province of Alberta	77253	3	378	958	1339	2	31019	3265	31019	2	73	689	205	0	31019	316	31019	293	31019	3501	31019	1462
Prairies	156935	6	654	1530	2190	2	110670	6071	38618	5	91	961	273	0	38618	446	39973	341	38618	4483	39768	1818
British Columbia	182958	7	372	6	682	87	178754	9079	22862	6	14	1074	237	167	22862	444	22858	171	22401	3480	22449	821
Yukon	5421	1	2	2	10	7	5431	306	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	1461	0	129	1	130	0	1394	136	97	0	1	1	0	0	97	2	97	0	1393	151	97	1
Nunavut	15340	0	73	0	73	0	15323	48	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	22222	1	204	3	213	7	22148	490	126	0	1	2	0	0	126	4	126	0	1422	161	123	1
CANADA	569334	33	1420	6771	8526	134	498464	29656	151453	25	187	3197	571	1966	152640	2595	153023	1420	140903	18432	109267	4439

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.

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

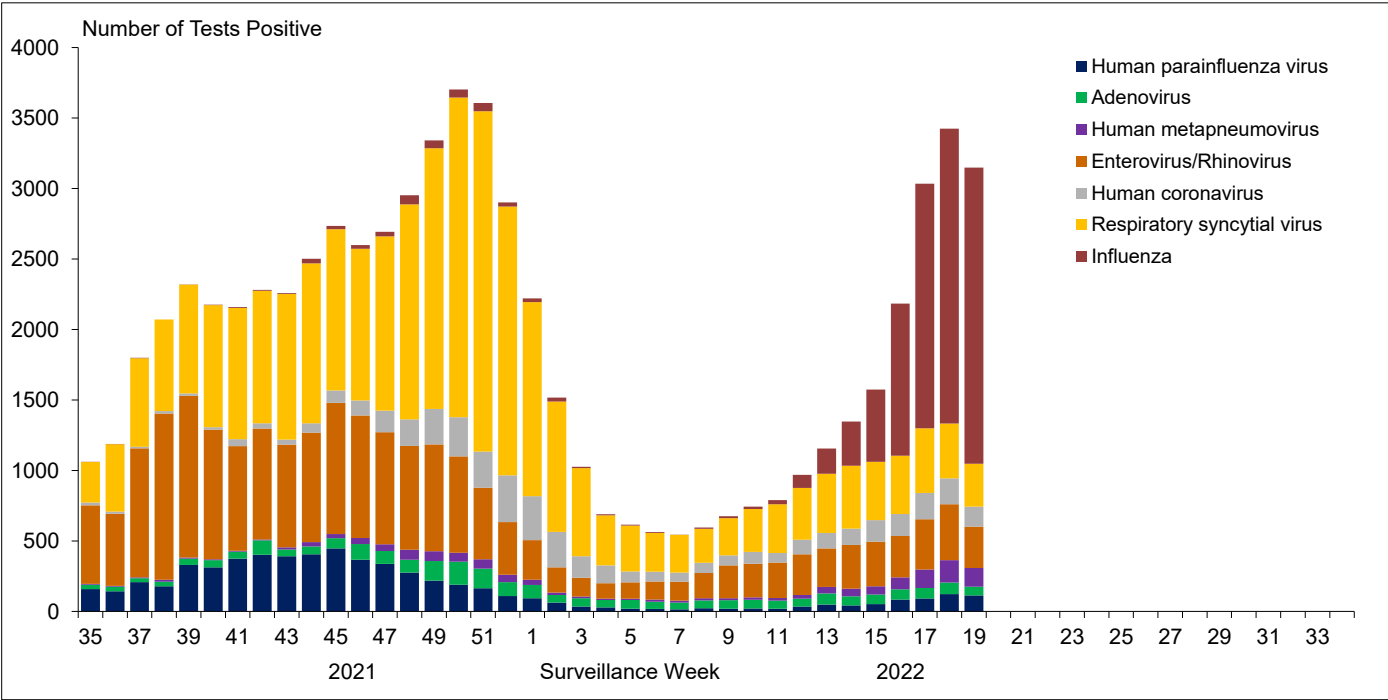


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

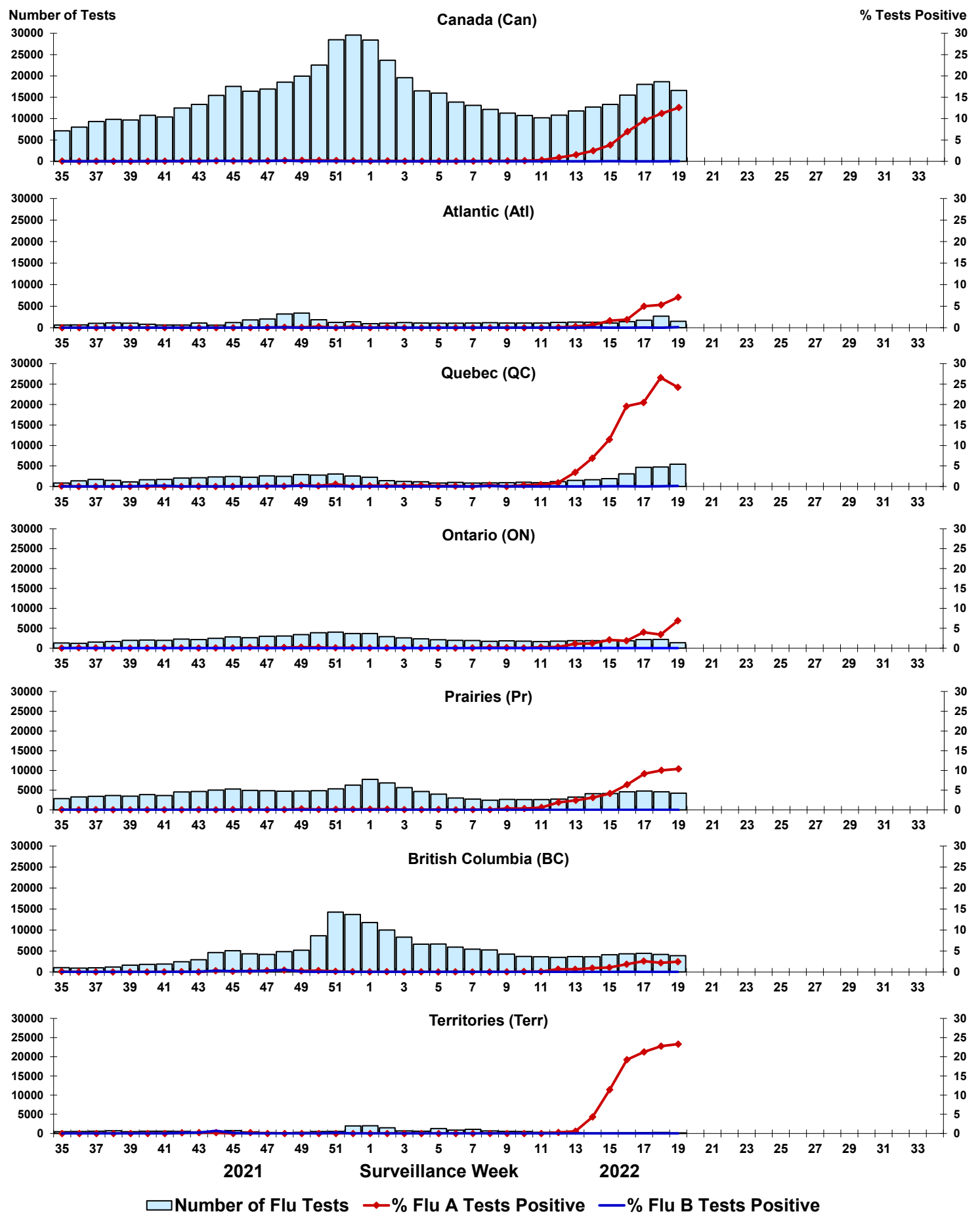


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

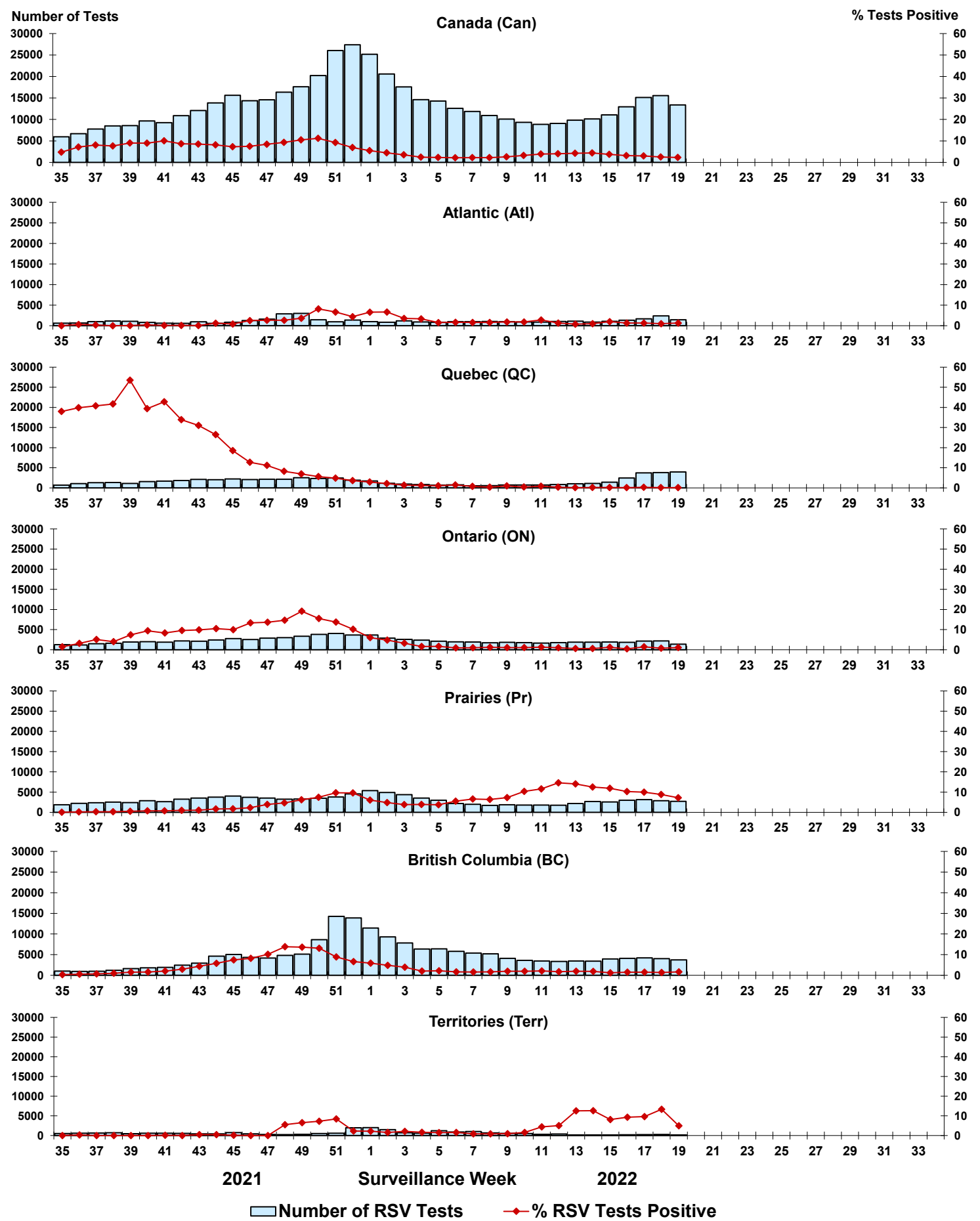


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

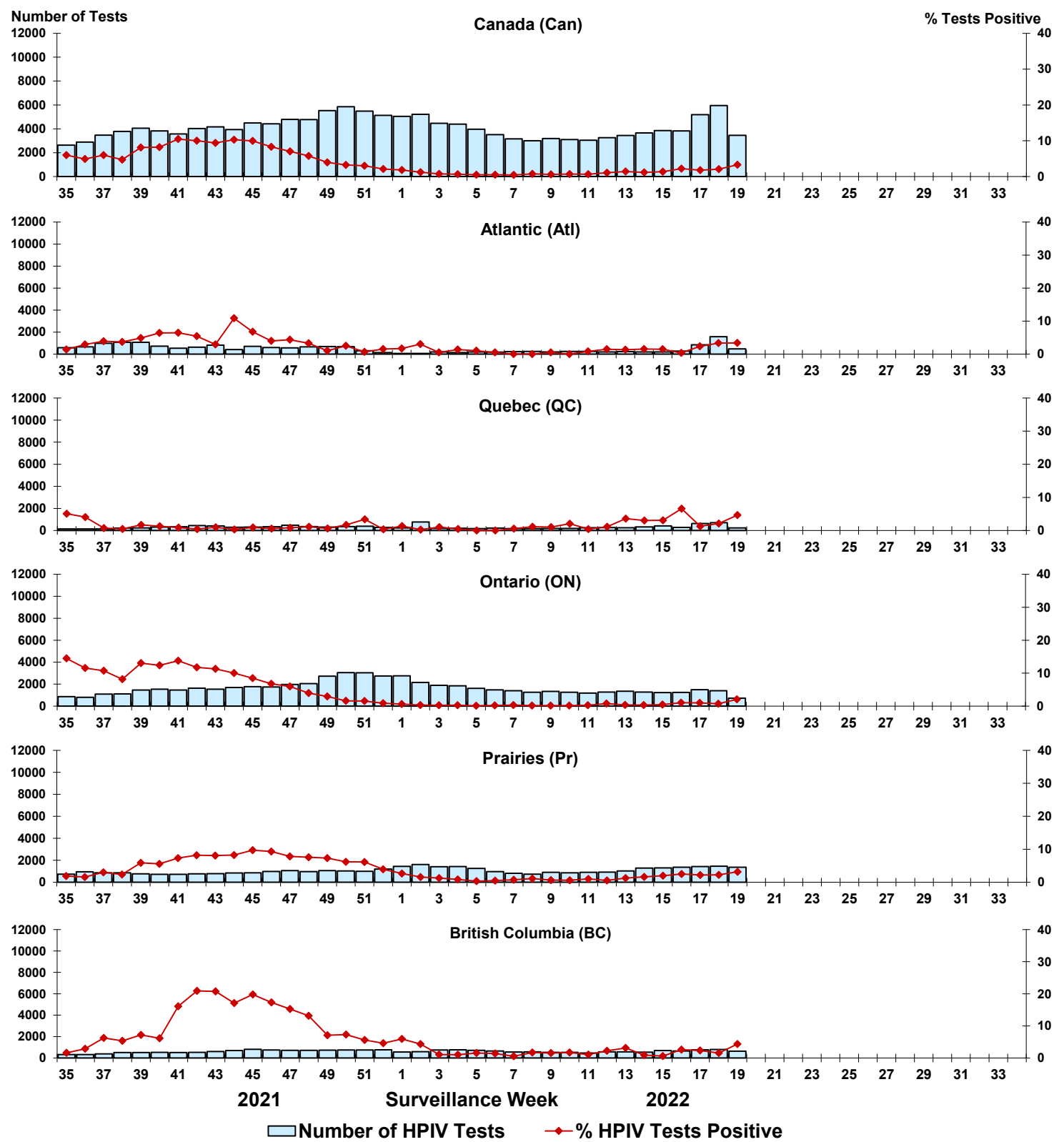




Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

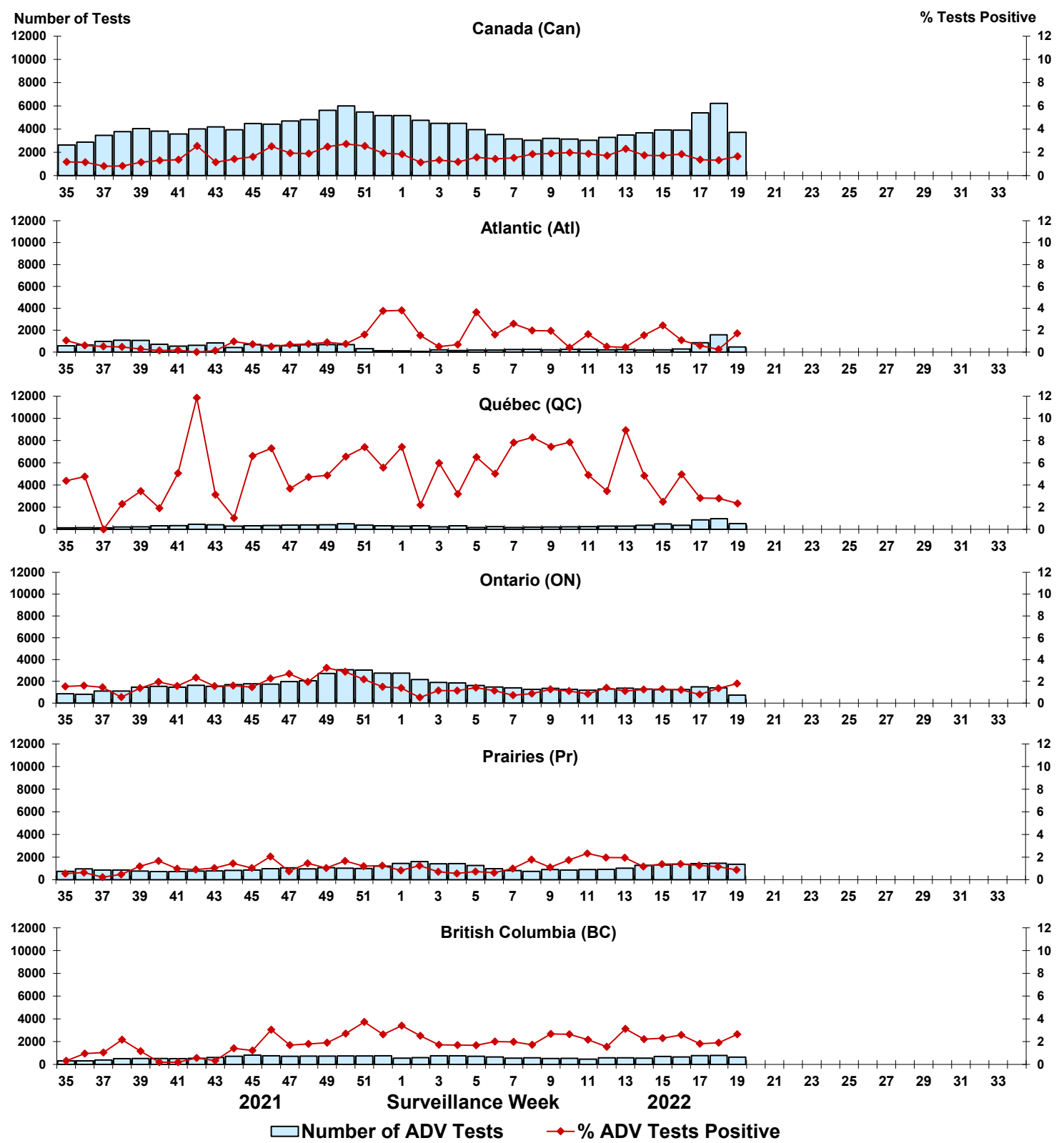


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

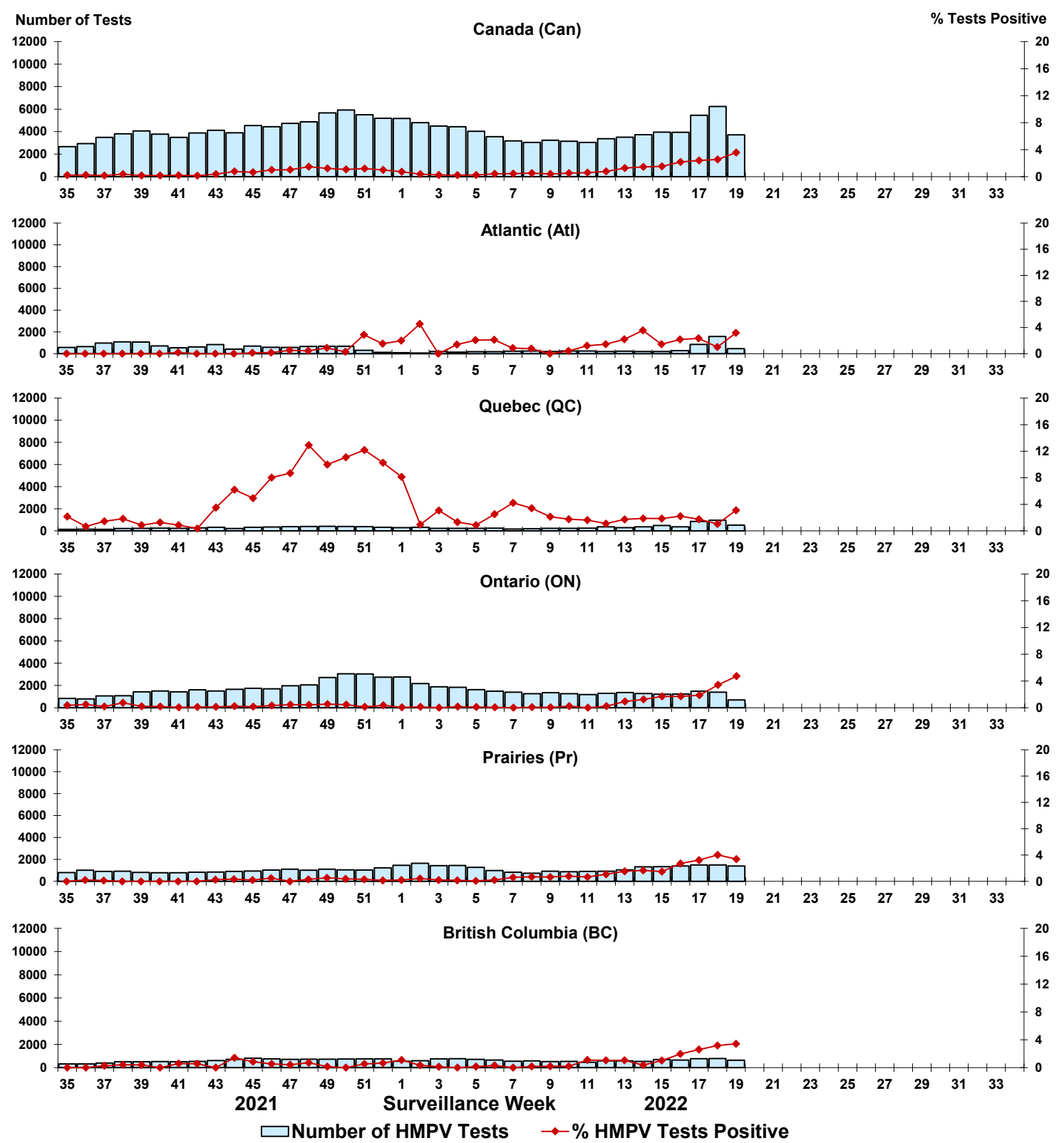


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

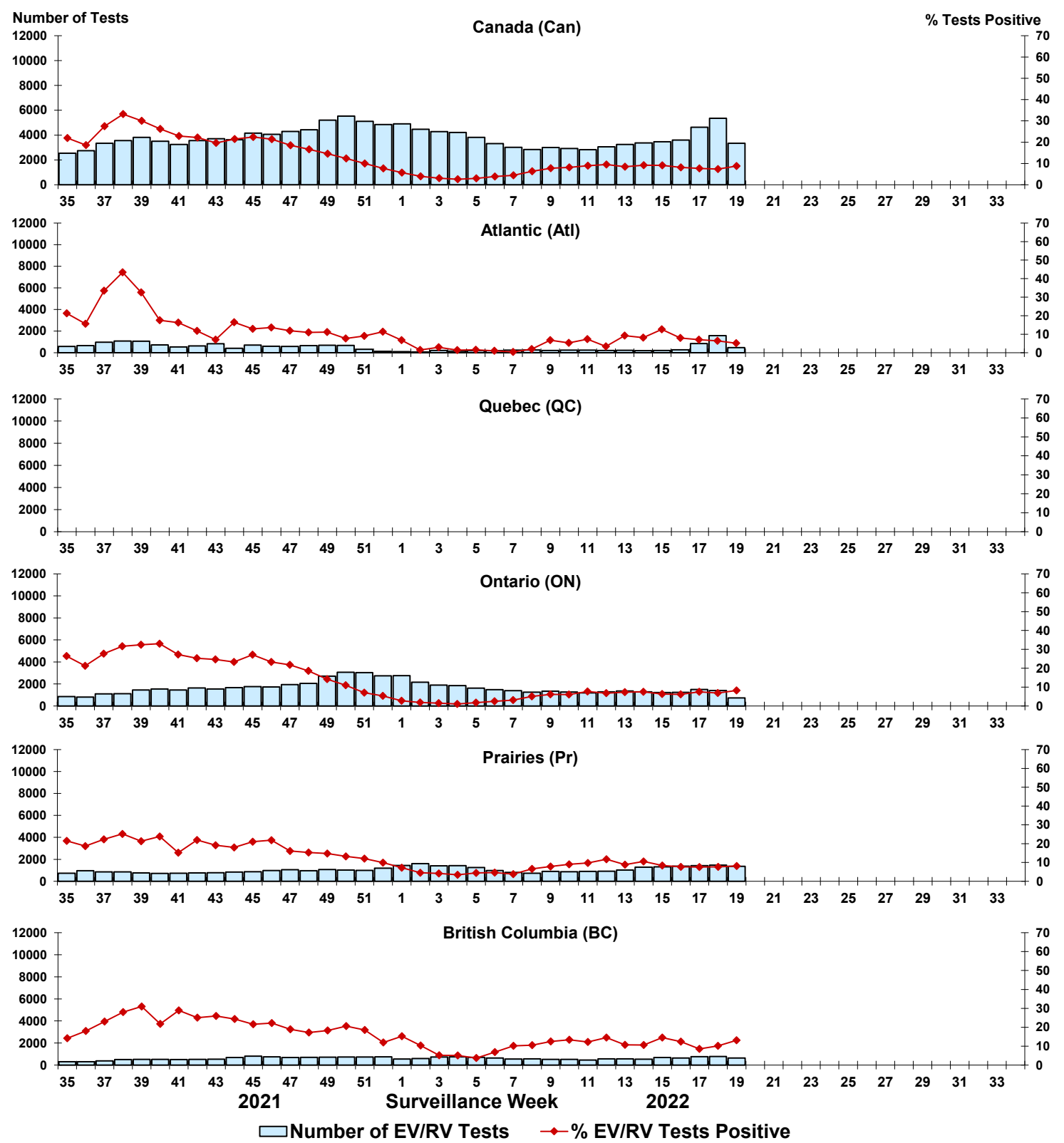


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

