

RESPIRATORY VIRUS DETECTION REPORT

September 19 to September 25, 2021
(Surveillance Week 2021-38)



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

Respiratory virus detections continue to increase in Canada

- Enterovirus/rhinovirus (1,080 detections; 33.8% positive), respiratory syncytial virus (641 detections; 8.6% positive), and human parainfluenza virus (163 detections; 4.8% positive) are the most common seasonal respiratory viruses detected in Canada.
 - Activity of enterovirus/rhinovirus is near average levels for this time of year. Activity is increasing across Canada.
 - Activity of respiratory syncytial virus is above expected levels. The majority of detections are found in Quebec.
 - Activity of human parainfluenza virus is above expected levels.
- Detections of other respiratory viruses are low.
- The number of tests performed for all viruses are above expected levels.
- 32/34 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

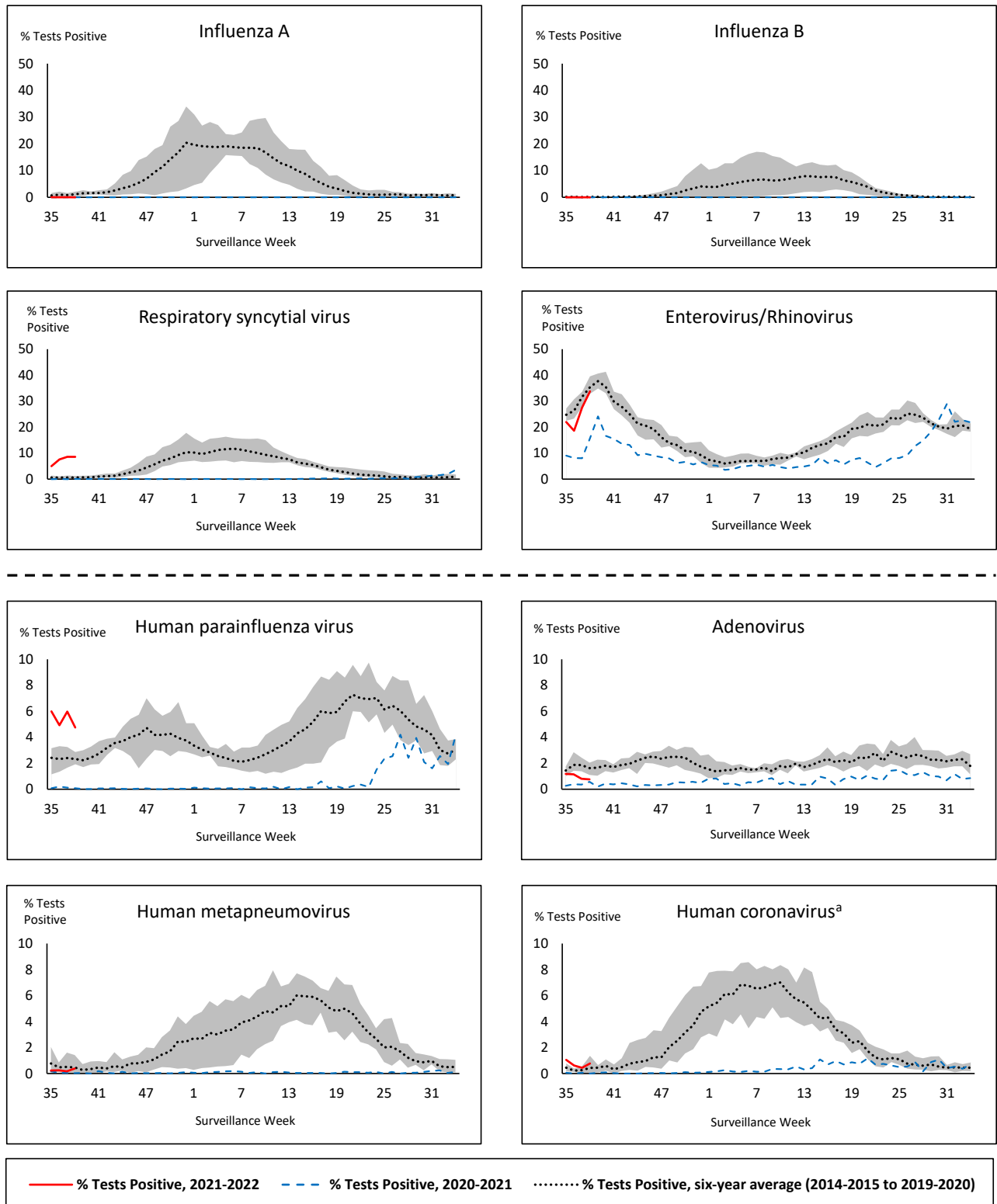
QC: Quebec

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 September 25, 2021 (surveillance week 2021-38)

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	953	0	0	0	0	0	953	0	953	0	0	5	0	14	953	2	953	0	953	431	N.C.	N.C.
Prince Edward Island	63	0	0	0	0	0	63	0	63	0	0	17	0	0	63	2	63	0	63	26	63	0
Nova Scotia	65	0	0	0	0	0	65	0	49	0	0	1	0	0	49	1	49	0	49	11	49	0
New Brunswick	60	0	0	0	0	0	54	0	18	0	0	3	0	0	18	0	18	0	18	2	18	0
Atlantic	1141	0	0	0	0	0	1135	0	1083	0	0	26	0	14	1083	5	1083	0	1083	470	130	0
Région Nord-Est	521	0	0	0	0	0	284	115	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Québec-Chaudière-Appalaches	12	0	0	0	0	0	61	3	3	0	0	0	0	0	0	0	0	0	N.C.	N.C.	2	0
Centre-du-Québec	103	0	0	0	0	0	144	74	18	0	0	0	0	0	18	0	18	0	N.C.	N.C.	18	0
Montréal-Laval	733	0	0	0	0	0	733	299	201	0	0	1	0	0	201	5	201	4	N.C.	N.C.	201	0
Ouest du Québec	72	0	0	0	0	0	73	35	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Montérégie	61	0	0	0	0	0	61	39	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	1502	0	0	0	0	0	1356	565	222	0	0	1	0	0	219	5	219	4	N.C.	N.C.	221	0
P.H.O.L. - Ottawa	260	0	0	0	0	0	260	41	260	0	0	0	0	18	260	4	260	3	260	125	260	8
EORLA	127	0	0	0	0	0	127	8	25	0	0	1	0	0	25	0	0	0	7	0	0	0
P.H.O.L. - Kingston	68	0	0	0	0	0	68	4	68	0	0	0	0	20	68	1	68	1	68	29	68	1
UHN / Mount Sinai Hospital	446	0	0	0	0	0	446	1	14	0	0	0	0	0	14	0	14	0	14	1	14	0
P.H.O.L. - Toronto	237	0	0	0	0	0	237	0	237	0	0	0	0	15	237	0	237	2	237	51	237	0
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	5	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	0	5	3	5	0
P.H.O.L. - Timmins	12	0	0	0	0	0	12	0	12	0	0	0	0	1	12	0	12	0	12	2	12	0
St. Joseph's - London	41	0	0	0	0	0	41	1	41	0	0	0	0	3	41	0	41	1	41	12	41	0
P.H.O.L. - London	43	0	0	0	0	0	43	1	43	0	0	0	0	2	43	0	43	0	43	11	43	0
P.H.O.L. - Orillia	12	0	0	0	0	0	12	0	12	0	0	0	0	3	12	1	11	0	12	5	11	0
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	2	7	0
P.H.O.L. - Sudbury	16	0	0	0	0	0	16	0	16	0	0	0	0	0	16	0	16	0	16	3	16	0
P.H.O.L. - Hamilton	31	0	0	0	0	0	31	0	31	0	0	0	0	2	31	0	31	0	31	14	31	0
P.H.O.L. - Peterborough	9	0	0	0	0	0	9	1	9	0	0	0	0	1	9	0	8	0	9	2	8	0
St. Joseph's - Hamilton	298	0	0	0	0	0	298	7	298	0	0	24	0	0	298	0	298	0	298	78	0	0
Province of Ontario	1612	0	0	0	0	0	1612	64	1078	0	0	25	0	65	1078	6	1051	7	1060	338	753	9
Province of Manitoba	1672	0	0	0	0	0	1672	3	36	0	0	2	0	0	36	0	93	0	36	24	93	0
Province of Saskatchewan	110	0	0	0	0	0	94	0	100	0	0	0	0	0	100	1	100	0	100	29	100	0
Province of Alberta	1692	0	0	0	0	0	633	4	633	0	0	13	1	0	633	3	633	0	633	142	633	8
Prairies	3474	0	0	0	0	0	2399	7	769	0	0	15	1	0	769	4	826	0	769	195	826	8
British Columbia	775	0	0	0	0	0	775	5	279	0	0	15	1	0	279	6	279	2	279	74	279	0
Yukon	199	0	0	0	0	0	199	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	6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6	3	0	0
Nunavut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Territories	205	0	0	0	0	0	205	0	0	0	0	0	0	0	0	0	0	0	6	3	0	0
CANADA	8709	0	0	0	0	0	7482	641	3431	0	0	82	2	79	3428	26	3458	13	3197	1080	2209	17

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), Northwest Territories (NT) and Nunavut (NU) are sent to reference laboratories in other provinces and reported results reflect specimens identified as originating from YT, NT or NU.

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.

Influenza co-detections may cause the sum of A(H1)pdm09, A(H3), and A(UnS) positive results to exceed the sum of Total Flu A Positive results.

Table 2: Cumulative respiratory virus detections from August 29, 2021 to September 25, 2021 (surveillance week 2021-35 to 2021-38)

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	2617	0	0	0	0	0	2617	6	2617	0	0	15	0	21	2619	11	2617	0	2617	903	N.C.	N.C.
Prince Edward Island	249	0	0	0	0	0	249	0	249	0	0	48	0	0	249	8	249	0	249	90	249	1
Nova Scotia	213	0	0	0	0	0	213	1	178	0	2	8	0	0	178	1	178	0	178	21	178	0
New Brunswick	371	0	0	0	0	0	337	1	250	0	0	11	0	0	243	0	250	0	250	8	250	0
Atlantic	3450	0	0	0	0	0	3416	8	3294	0	2	82	0	21	3289	20	3294	0	3294	1022	677	1
Région Nord-Est	1875	0	0	0	0	0	647	222	3	0	0	0	0	0	3	0	3	0	N.C.	N.C.	3	0
Québec-Chaudière-Appalaches	87	0	0	0	0	0	241	41	57	0	0	3	0	0	53	1	53	0	N.C.	N.C.	55	0
Centre-du-Québec	218	0	0	0	0	0	278	131	62	0	0	6	0	0	62	0	62	0	N.C.	N.C.	55	0
Montréal-Laval	2888	0	0	1	1	0	2892	1242	523	1	0	5	0	0	523	17	523	10	N.C.	N.C.	523	0
Ouest du Québec	213	0	0	0	0	0	214	75	3	0	0	0	0	0	0	0	3	0	N.C.	N.C.	3	0
Montérégie	156	0	0	0	0	0	156	77	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	5437	0	0	1	1	0	4428	1788	648	1	0	14	0	0	641	18	644	10	N.C.	N.C.	639	0
P.H.O.L. - Ottawa	1190	0	1	0	1	0	1190	144	1190	0	0	0	0	198	1190	35	1190	7	1190	501	1190	28
EORLA	386	0	0	0	0	0	386	20	86	0	0	3	0	0	86	0	0	0	46	6	25	1
P.H.O.L. - Kingston	182	0	0	0	0	0	182	6	182	0	0	0	0	47	182	4	182	1	182	71	182	1
UHN / Mount Sinai Hospital	1603	0	0	1	1	0	1603	3	64	0	0	0	0	0	64	0	64	0	64	2	64	0
P.H.O.L. - Toronto	712	0	1	0	1	0	711	4	711	0	0	0	0	44	713	2	711	2	711	116	713	0
Sick Kids Hospital - Toronto	103	0	0	0	0	0	0	0	103	0	0	8	0	0	103	1	103	0	103	21	103	0
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	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. - Timmins	27	0	0	0	0	0	27	0	27	0	0	0	0	3	27	0	27	0	27	2	27	0
St. Joseph's - London	114	0	0	0	0	0	114	2	115	0	0	7	0	3	115	0	115	1	119	22	119	0
P.H.O.L. - London	129	0	0	0	0	0	129	2	129	0	0	0	0	4	129	0	129	0	129	26	129	0
P.H.O.L. - Orillia	44	0	0	0	0	0	44	1	44	0	0	0	0	4	44	1	43	0	44	19	43	0
P.H.O.L. - Thunder Bay	28	0	0	0	0	0	28	0	28	0	0	0	0	0	28	0	28	0	28	11	28	0
P.H.O.L. - Sudbury	47	0	0	0	0	0	47	0	47	0	0	0	0	0	47	0	47	0	47	10	47	0
P.H.O.L. - Hamilton	76	0	0	0	0	0	76	0	76	0	0	0	0	5	76	1	76	4	76	23	76	0
P.H.O.L. - Peterborough	38	0	0	0	0	0	38	1	38	0	0	0	0	3	38	0	37	0	38	7	37	0
St. Joseph's - Hamilton	997	0	0	0	0	0	991	13	991	0	0	96	0	0	991	4	991	1	991	197	0	0
Province of Ontario	5684	0	2	1	3	0	5574	196	3839	0	0	114	0	311	3841	48	3751	16	3803	1037	2791	30
Manitoba	5660	0	0	0	0	0	5660	7	107	0	0	3	0	0	107	2	326	2	107	48	326	0
Province of Saskatchewan	334	0	0	0	0	0	306	1	311	0	0	1	2	0	311	3	311	0	311	78	310	0
Province of Alberta	7083	0	1	2	3	0	2902	12	2902	0	2	55	8	0	2902	11	2902	1	2902	598	2902	28
Prairies	13077	0	1	2	3	0	8868	20	3320	0	2	59	10	0	3320	16	3539	3	3320	724	3538	28
British Columbia	3715	0	0	1	1	0	3715	20	1299	0	0	43	8	3	1299	14	1299	3	1281	261	1277	4
Yukon	730	0	0	0	0	0	802	2	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	95	0	0	0	0	0	89	0	15	0	0	0	0	0	15	2	15	0	89	15	15	0
Nunavut	2	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	0	2	0	2	0
Territories	827	0	0	0	0	0	893	2	17	0	0	0	0	0	17	2	17	0	91	15	17	0
CANADA	32190	0	3	5	8	0	26894	2034	12417	1	4	312	18	335	12407	118	12544	32	11789	3059	8939	63

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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.

Influenza co-detections may cause the sum of A(H1N1)pdm09, A(H3), and A(UnS) positive results to exceed 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

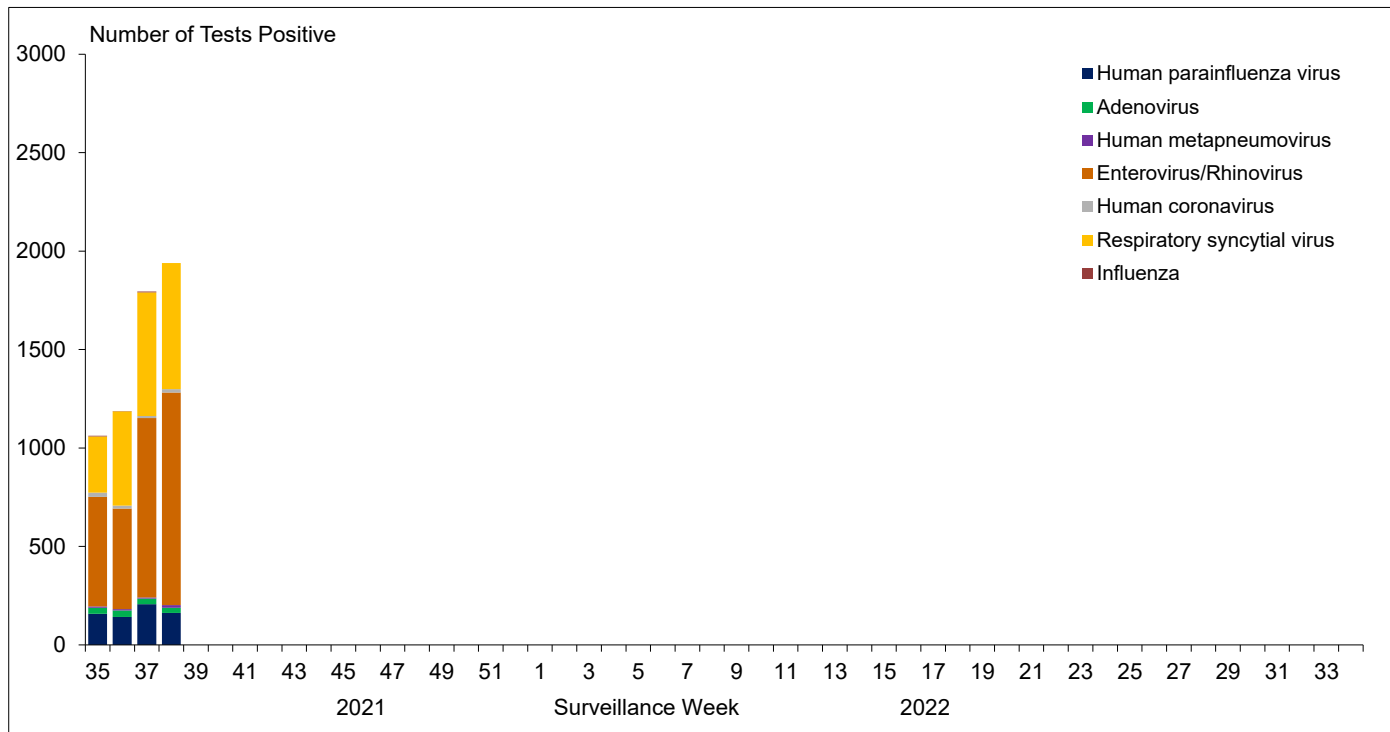


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

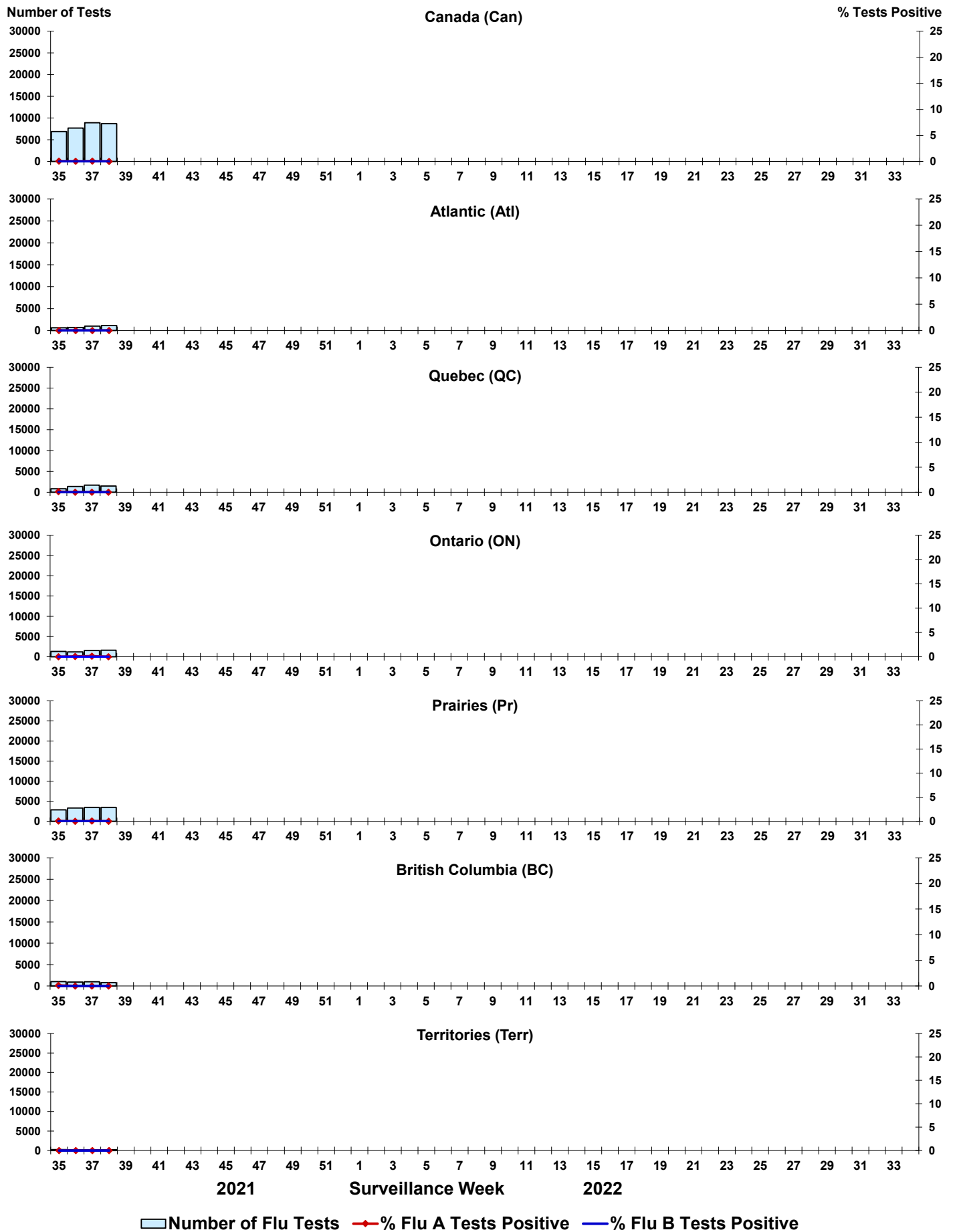
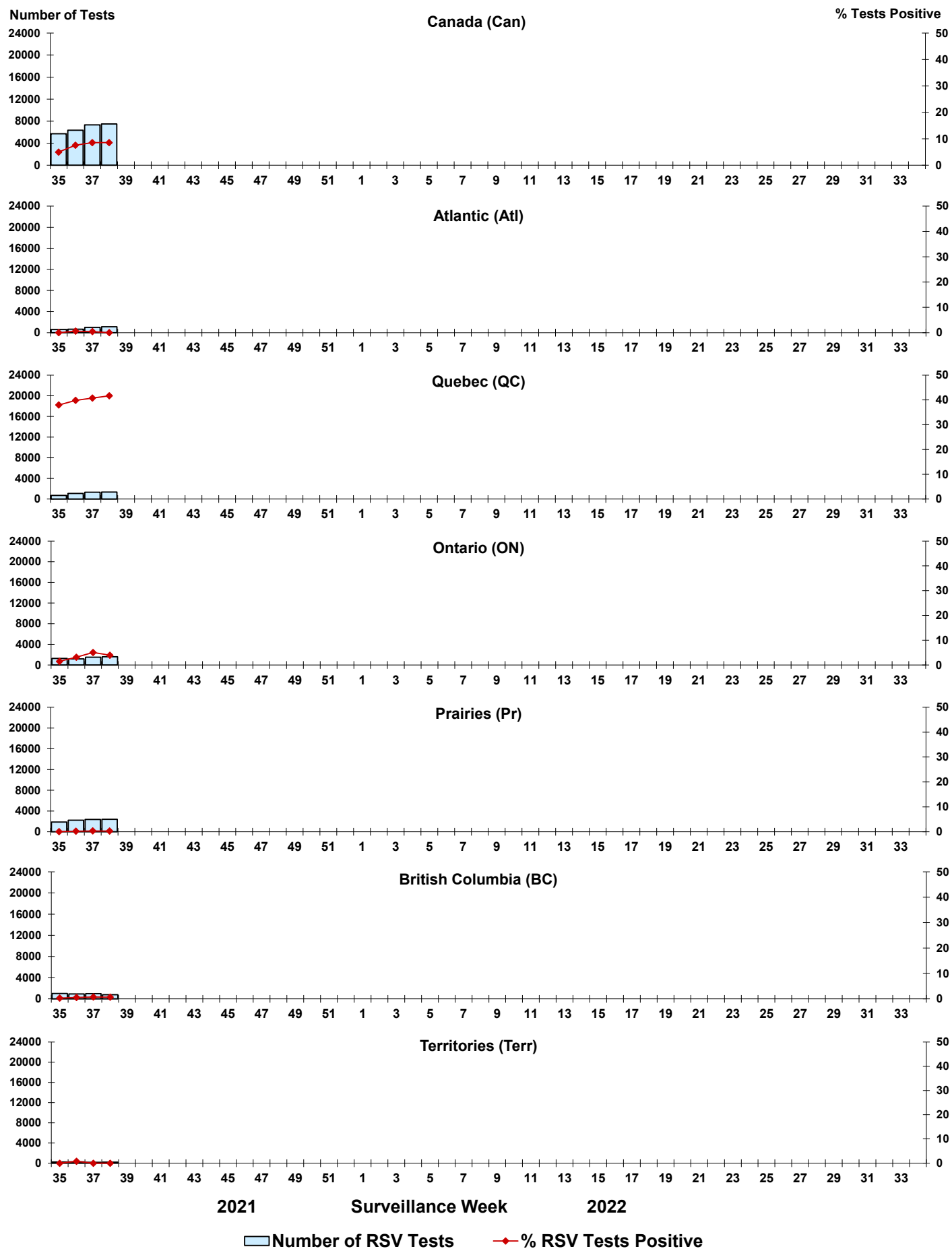


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



Legend: █ Number of RSV Tests ◆ % RSV Tests Positive

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

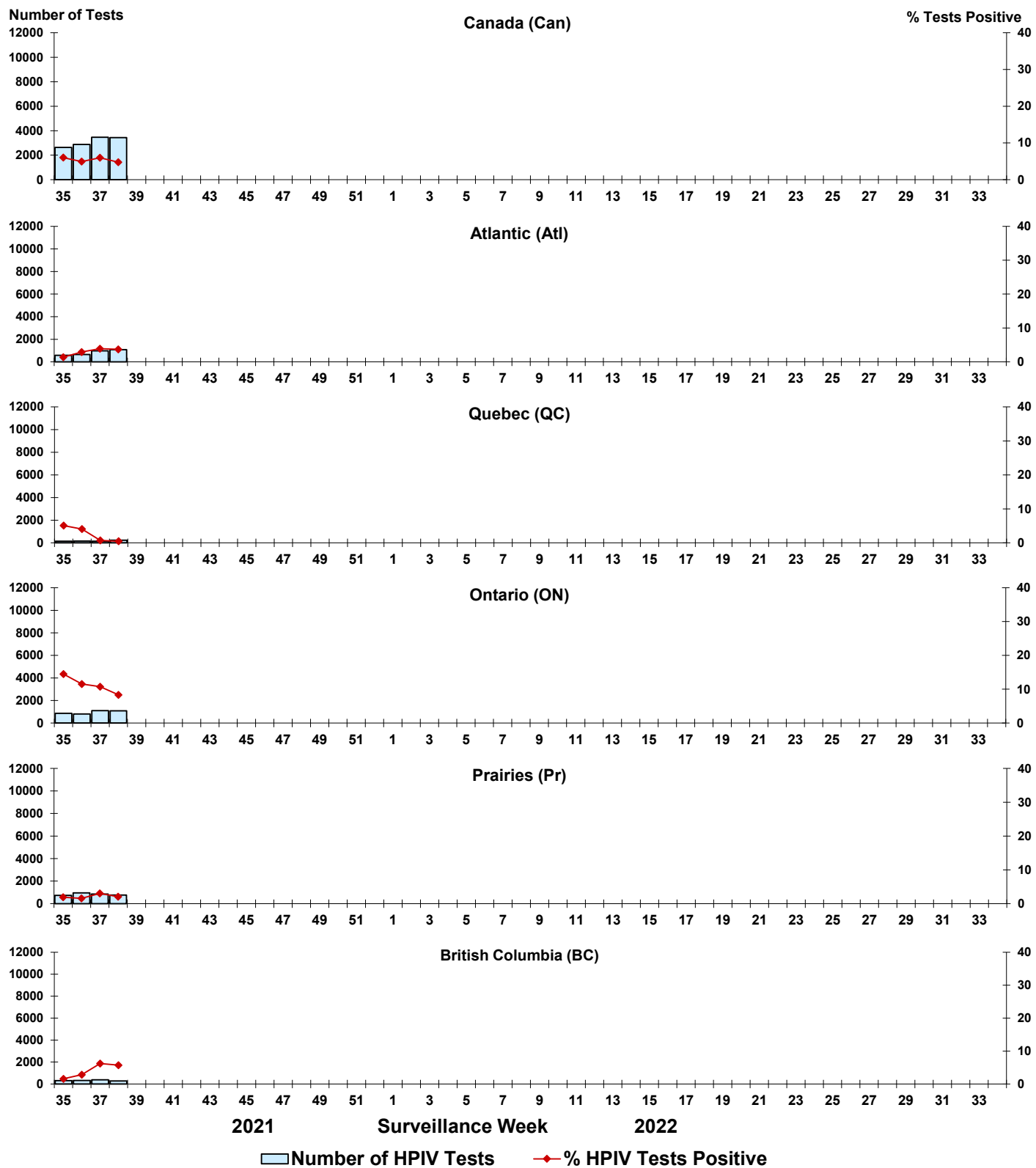


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

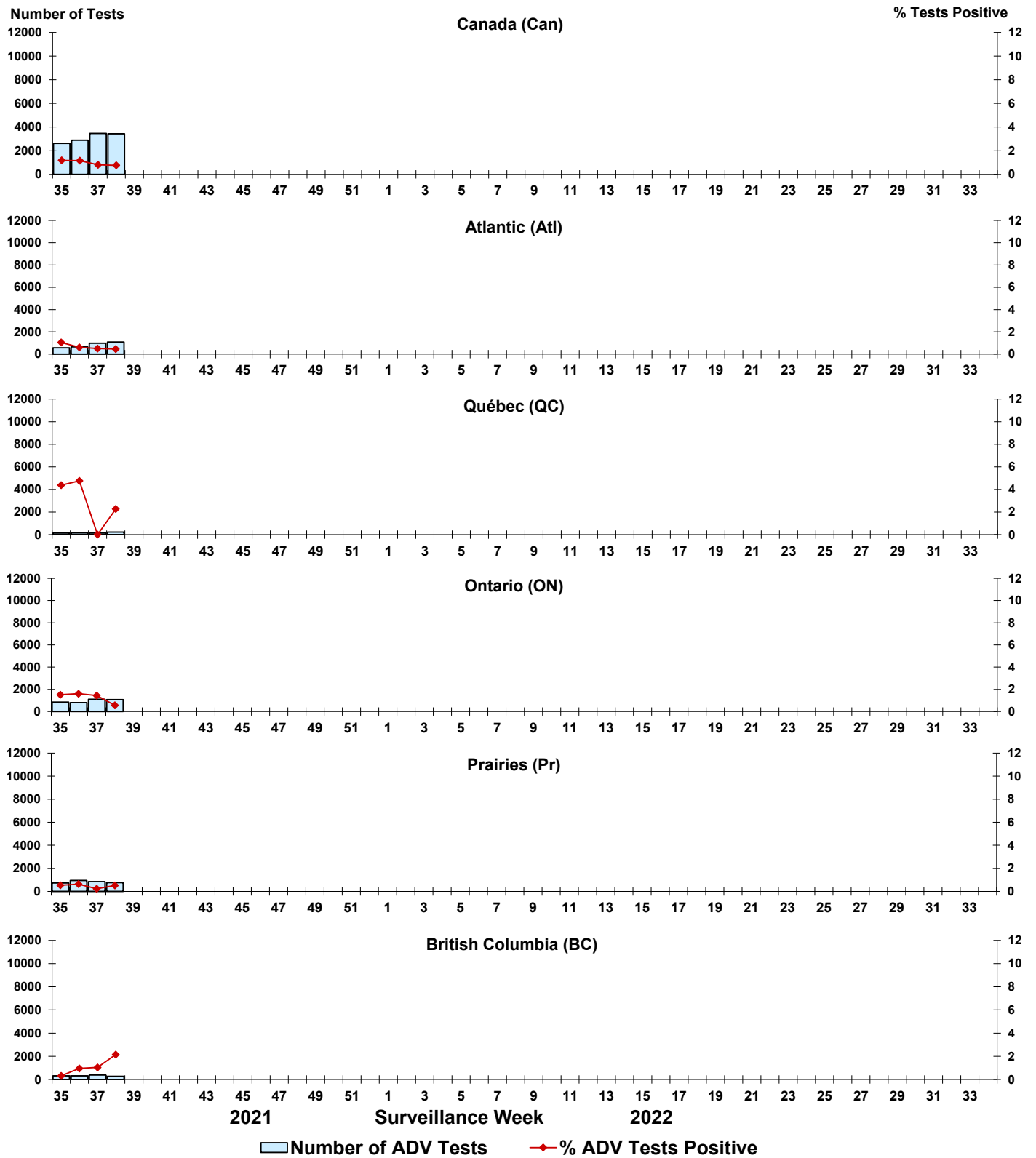


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

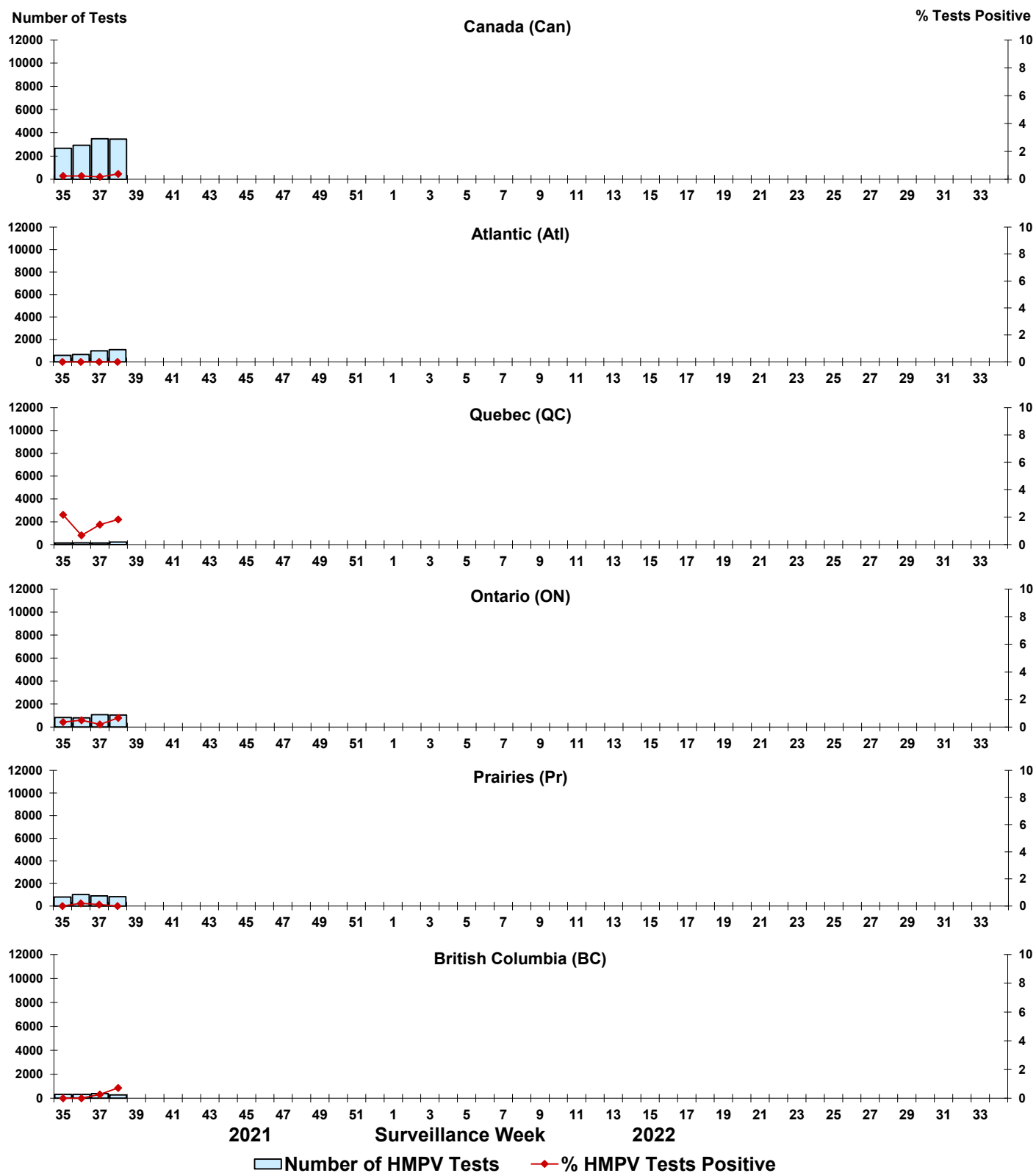


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

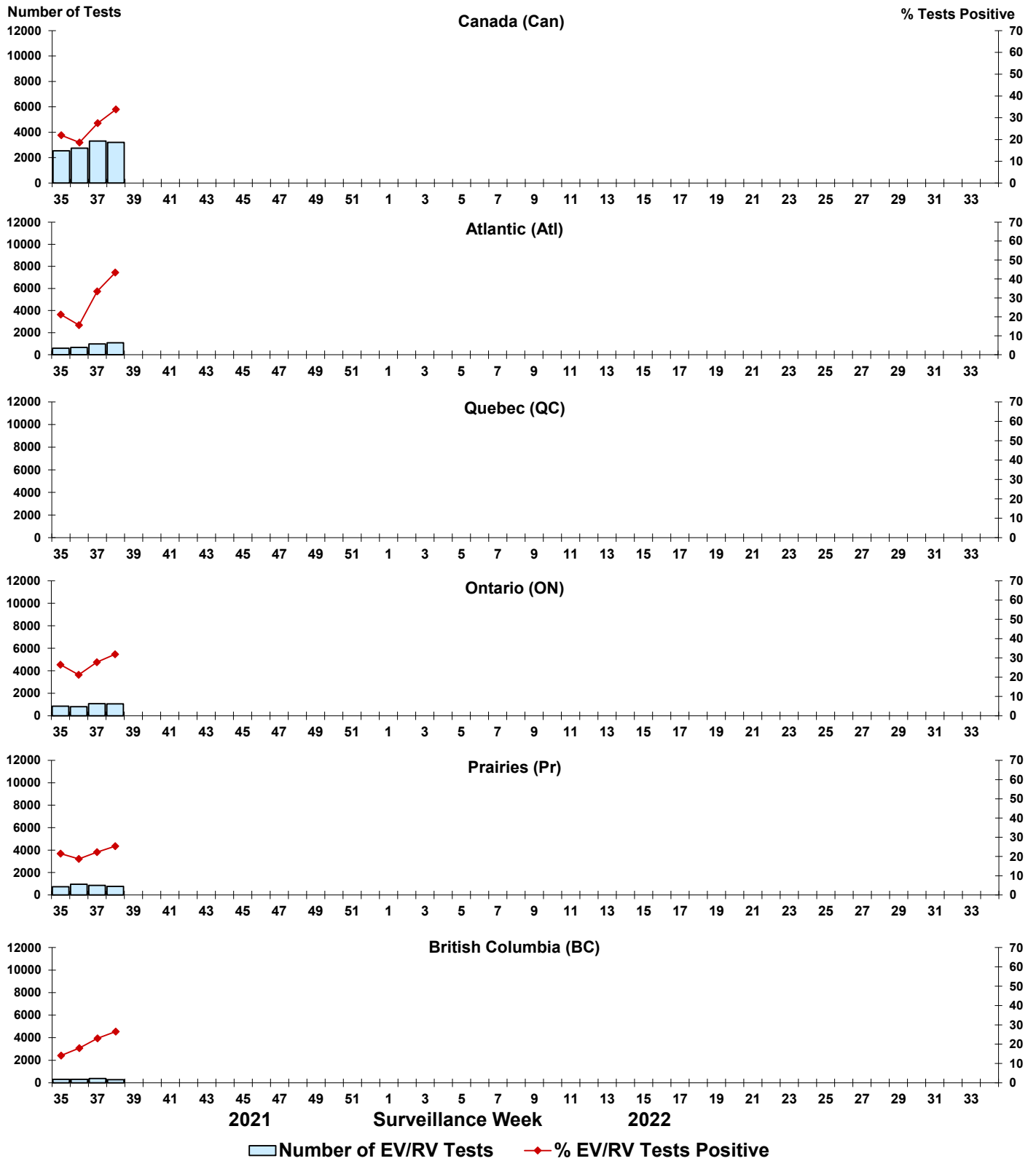


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

