

RESPIRATORY VIRUS DETECTION REPORT

September 12 to September 18, 2021
(Surveillance Week 2021-37)



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 (839 detections; 27.6% positive), respiratory syncytial virus (626 detections; 8.9% positive), and human parainfluenza virus (193 detections; 6.0% positive) are the most common seasonal respiratory viruses detected in Canada. Activity of these viruses has fluctuated in recent weeks.
 - Activity of enterovirus/rhinovirus is slightly below expected levels.
 - Activity of respiratory syncytial virus is above expected levels. Detections have been increasing in recent weeks. 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

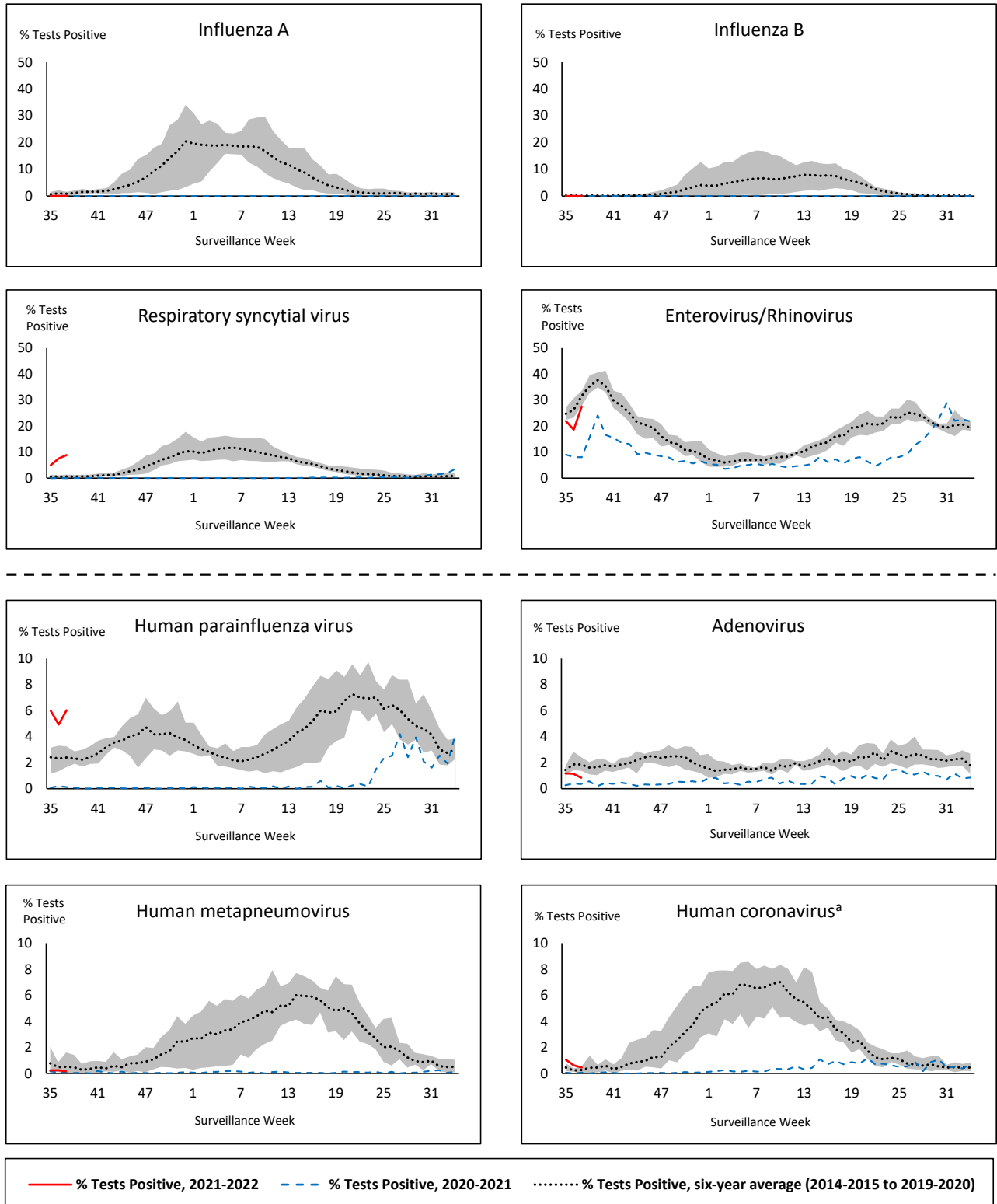
QC: Quebec

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 18, 2021 (surveillance week 2021-37)

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	731	0	0	0	0	0	731	2	731	0	0	9	0	4	733	4	731	0	731	292	N.C.	N.C.
Prince Edward Island	75	0	0	0	0	0	75	0	75	0	0	17	0	0	75	1	75	0	75	26	75	1
Nova Scotia	61	0	0	0	0	0	61	1	55	0	0	1	0	0	55	0	55	0	55	4	55	0
New Brunswick	142	0	0	0	0	0	130	1	117	0	0	7	0	0	117	0	117	0	117	5	117	0
Atlantic	1009	0	0	0	0	0	997	4	978	0	0	34	0	4	980	5	978	0	978	327	247	1
Région Nord-Est	688	0	0	0	0	0	210	60	3	0	0	0	0	0	3	0	3	0	N.C.	N.C.	3	0
Québec-Chaudière-Appalaches	17	0	0	0	0	0	68	9	1	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Centre-du-Québec	64	0	0	0	0	0	81	42	21	0	0	0	0	0	21	0	21	0	N.C.	N.C.	14	0
Montréal-Laval	839	0	0	0	0	0	841	387	114	0	0	1	0	0	114	0	114	2	N.C.	N.C.	114	0
Ouest du Québec	72	0	0	0	0	0	72	20	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Montérégie	38	0	0	0	0	0	38	16	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	1718	0	0	0	0	0	1310	534	139	0	0	1	0	0	138	0	138	2	N.C.	N.C.	131	0
P.H.O.L. - Ottawa	361	0	1	0	1	0	361	60	361	0	0	0	0	50	361	11	361	2	361	148	361	4
EORLA	86	0	0	0	0	0	86	8	27	0	0	0	0	0	27	0	0	0	5	0	0	0
P.H.O.L. - Kingston	68	0	0	0	0	0	68	1	68	0	0	0	0	16	68	0	68	0	68	27	68	0
UHN / Mount Sinai Hospital	409	0	0	0	0	0	409	2	24	0	0	0	0	0	24	0	24	0	24	0	24	0
P.H.O.L. - Toronto	197	0	1	0	1	0	196	3	196	0	0	0	0	10	197	1	196	0	196	20	197	0
Sick Kids Hospital - Toronto	44	0	0	0	0	0	0	0	44	0	0	4	0	0	44	1	44	0	44	7	44	0
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	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. - Timmins	5	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	0	5	0	5	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.
P.H.O.L. - London	22	0	0	0	0	0	22	1	22	0	0	0	0	1	22	0	22	0	22	6	22	0
P.H.O.L. - Orillia	7	0	0	0	0	0	7	0	7	0	0	0	0	1	7	0	7	0	7	7	7	0
P.H.O.L. - Thunder Bay	2	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	0	2	0	2	0
P.H.O.L. - Sudbury	14	0	0	0	0	0	14	0	14	0	0	0	0	0	14	0	14	0	14	5	14	0
P.H.O.L. - Hamilton	20	0	0	0	0	0	20	0	20	0	0	0	0	1	20	1	20	0	20	4	20	0
P.H.O.L. - Peterborough	13	0	0	0	0	0	13	0	13	0	0	0	0	1	13	0	13	0	13	2	13	0
St. Joseph's - Hamilton	269	0	0	0	0	0	269	1	269	0	0	31	0	0	269	2	269	0	269	71	0	0
Province of Ontario	1517	0	2	0	2	0	1472	76	1072	0	0	35	0	80	1073	16	1045	2	1050	297	777	4
Province of Manitoba	1524	0	0	0	0	0	1524	2	29	0	0	1	0	0	29	1	78	1	29	8	78	0
Province of Saskatchewan	66	0	0	0	0	0	61	0	69	0	0	0	1	0	69	0	69	0	69	15	68	0
Province of Alberta	1613	0	1	1	2	0	597	3	597	0	1	15	0	0	597	0	597	0	597	117	597	4
Prairies	3203	0	1	1	2	0	2182	5	695	0	1	16	1	0	695	1	744	1	695	140	743	4
British Columbia	953	0	0	0	0	0	953	7	314	0	0	15	5	1	314	4	314	0	306	72	306	1
Yukon	125	0	0	0	0	0	125	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	17	0	0	0	0	0	16	0	4	0	0	0	0	0	4	1	4	0	16	3	4	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	142	0	0	0	0	0	141	0	4	0	0	0	0	0	4	1	4	0	16	3	4	0
CANADA	8542	0	3	1	4	0	7055	626	3202	0	1	101	6	85	3204	27	3223	5	3045	839	2208	10

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 18, 2021 (surveillance week 2021-35 to 2021-37)

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	1664	0	0	0	0	0	1664	6	1664	0	0	10	0	7	1666	9	1664	0	1664	472	N.C.	N.C.
Prince Edward Island	186	0	0	0	0	0	186	0	186	0	0	31	0	0	186	6	186	0	186	64	186	1
Nova Scotia	148	0	0	0	0	0	148	1	129	0	2	7	0	0	129	0	129	0	129	10	129	0
New Brunswick	311	0	0	0	0	0	283	1	232	0	0	8	0	0	225	0	232	0	232	6	232	0
Atlantic	2309	0	0	0	0	0	2281	8	2211	0	2	56	0	7	2206	15	2211	0	2211	552	547	1
Région Nord-Est	1354	0	0	0	0	0	363	107	3	0	0	0	0	0	3	0	3	0	N.C.	N.C.	3	0
Québec-Chaudière-Appalaches	75	0	0	0	0	0	180	38	54	0	0	3	0	0	53	1	53	0	N.C.	N.C.	53	0
Centre-du-Québec	115	0	0	0	0	0	134	57	44	0	0	6	0	0	44	0	44	0	N.C.	N.C.	37	0
Montréal-Laval	2155	0	0	1	1	0	2159	943	322	1	0	4	0	0	322	12	322	6	N.C.	N.C.	322	0
Ouest du Québec	141	0	0	0	0	0	141	40	3	0	0	0	0	0	0	0	3	0	N.C.	N.C.	3	0
Montérégie	95	0	0	0	0	0	95	38	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	3935	0	0	1	1	0	3072	1223	426	1	0	13	0	0	422	13	425	6	N.C.	N.C.	418	0
P.H.O.L. - Ottawa	930	0	1	0	1	0	930	103	930	0	0	0	0	180	930	31	930	4	930	376	930	20
EORLA	259	0	0	0	0	0	259	12	61	0	0	2	0	0	61	0	0	0	39	6	25	1
P.H.O.L. - Kingston	114	0	0	0	0	0	114	2	114	0	0	0	0	27	114	3	114	0	114	42	114	0
UHN / Mount Sinai Hospital	1157	0	0	1	1	0	1157	2	50	0	0	0	0	0	50	0	50	0	50	1	50	0
P.H.O.L. - Toronto	476	0	1	0	1	0	475	4	475	0	0	0	0	29	476	2	475	0	475	65	476	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	3	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	0	3	0	3	0
P.H.O.L. - Timmins	15	0	0	0	0	0	15	0	15	0	0	0	0	2	15	0	15	0	15	0	15	0
St. Joseph's - London	46	0	0	0	0	0	46	1	46	0	0	4	0	0	46	0	46	0	46	6	46	0
P.H.O.L. - London	86	0	0	0	0	0	86	1	86	0	0	0	0	2	86	0	86	0	86	15	86	0
P.H.O.L. - Orillia	32	0	0	0	0	0	32	1	32	0	0	0	0	1	32	0	32	0	32	14	32	0
P.H.O.L. - Thunder Bay	21	0	0	0	0	0	21	0	21	0	0	0	0	0	21	0	21	0	21	9	21	0
P.H.O.L. - Sudbury	31	0	0	0	0	0	31	0	31	0	0	0	0	0	31	0	31	0	31	7	31	0
P.H.O.L. - Hamilton	45	0	0	0	0	0	45	0	45	0	0	0	0	3	45	1	45	4	45	9	45	0
P.H.O.L. - Peterborough	29	0	0	0	0	0	29	0	29	0	0	0	0	2	29	0	29	0	29	5	29	0
St. Joseph's - Hamilton	699	0	0	0	0	0	693	6	693	0	0	72	0	0	693	4	693	1	693	119	0	0
Province of Ontario	4046	0	2	1	3	0	3936	132	2734	0	0	86	0	246	2735	42	2673	9	2712	695	2006	21
Manitoba	3988	0	0	0	0	0	3988	4	71	0	0	1	0	0	71	2	233	2	71	24	233	0
Province of Saskatchewan	199	0	0	0	0	0	194	1	211	0	0	1	2	0	211	2	211	0	211	49	210	0
Province of Alberta	5158	0	1	2	3	0	2101	6	2101	0	2	36	5	0	2101	7	2101	1	2101	405	2101	19
Prairies	9345	0	1	2	3	0	6283	11	2383	0	2	38	7	0	2383	11	2545	3	2383	478	2544	19
British Columbia	2908	0	0	1	1	0	2908	15	948	0	0	27	5	3	948	8	948	0	930	172	926	4
Yukon	486	0	0	0	0	0	558	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	86	0	0	0	0	0	81	0	13	0	0	0	0	0	13	2	13	0	81	10	13	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	574	0	0	0	0	0	641	2	15	0	0	0	0	0	15	2	15	0	83	10	15	0
CANADA	23117	0	3	5	8	0	19121	1391	8717	1	4	220	12	256	8709	91	8817	18	8319	1907	6456	45

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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

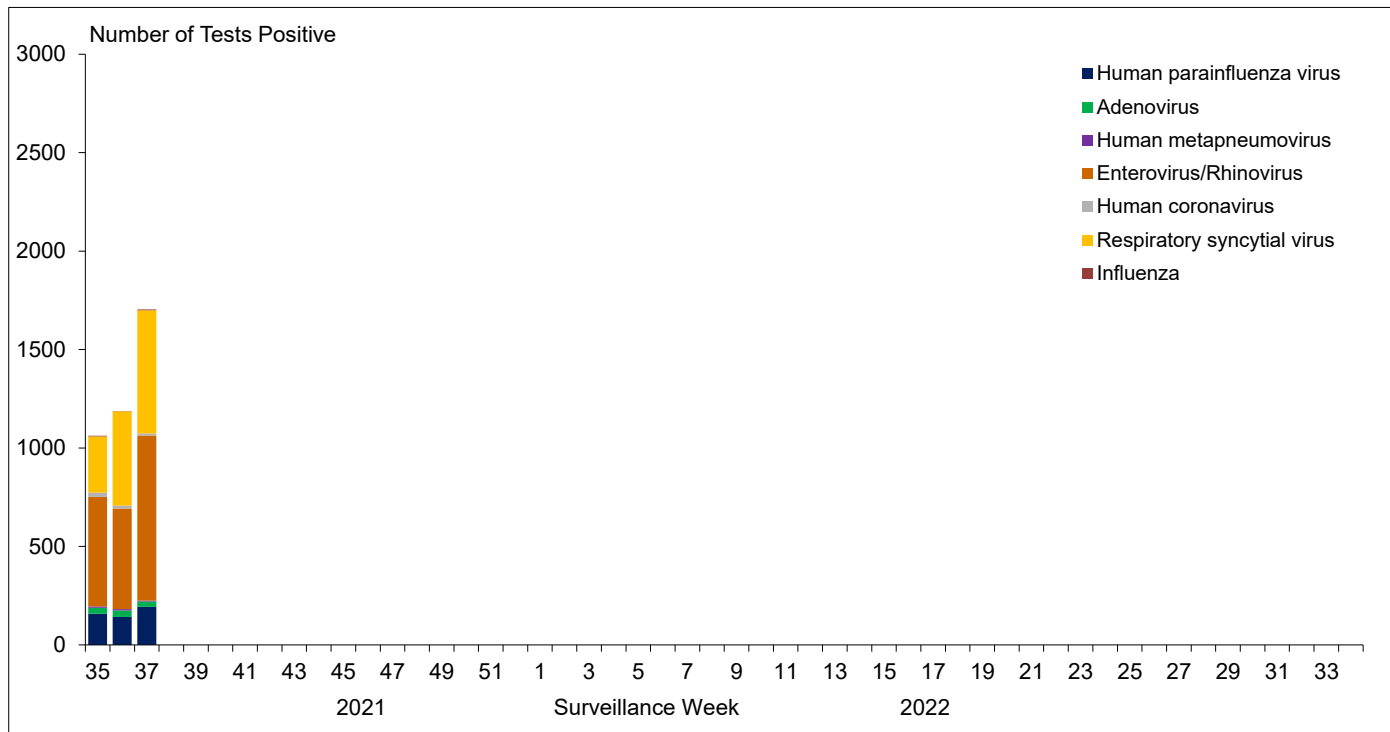


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

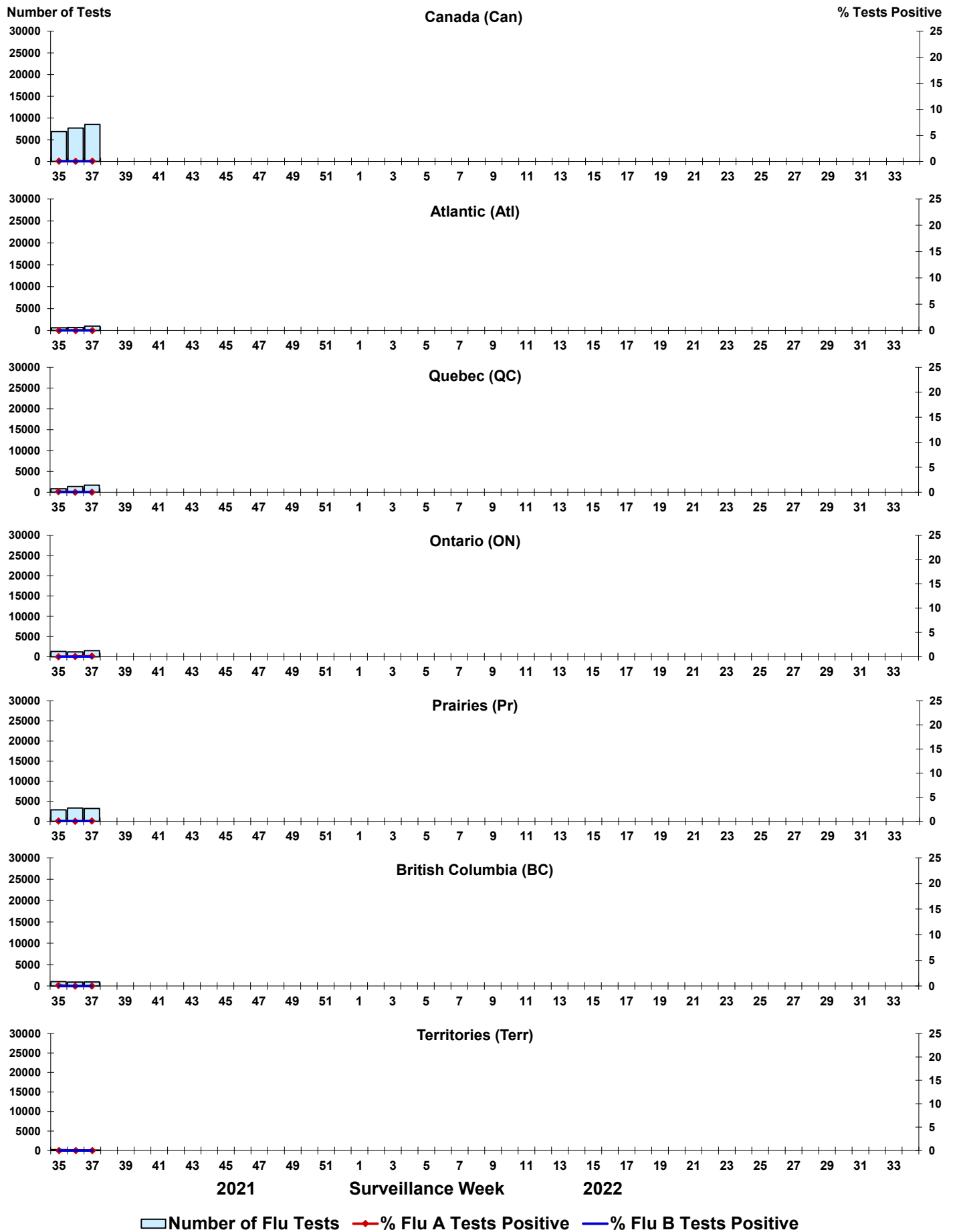


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

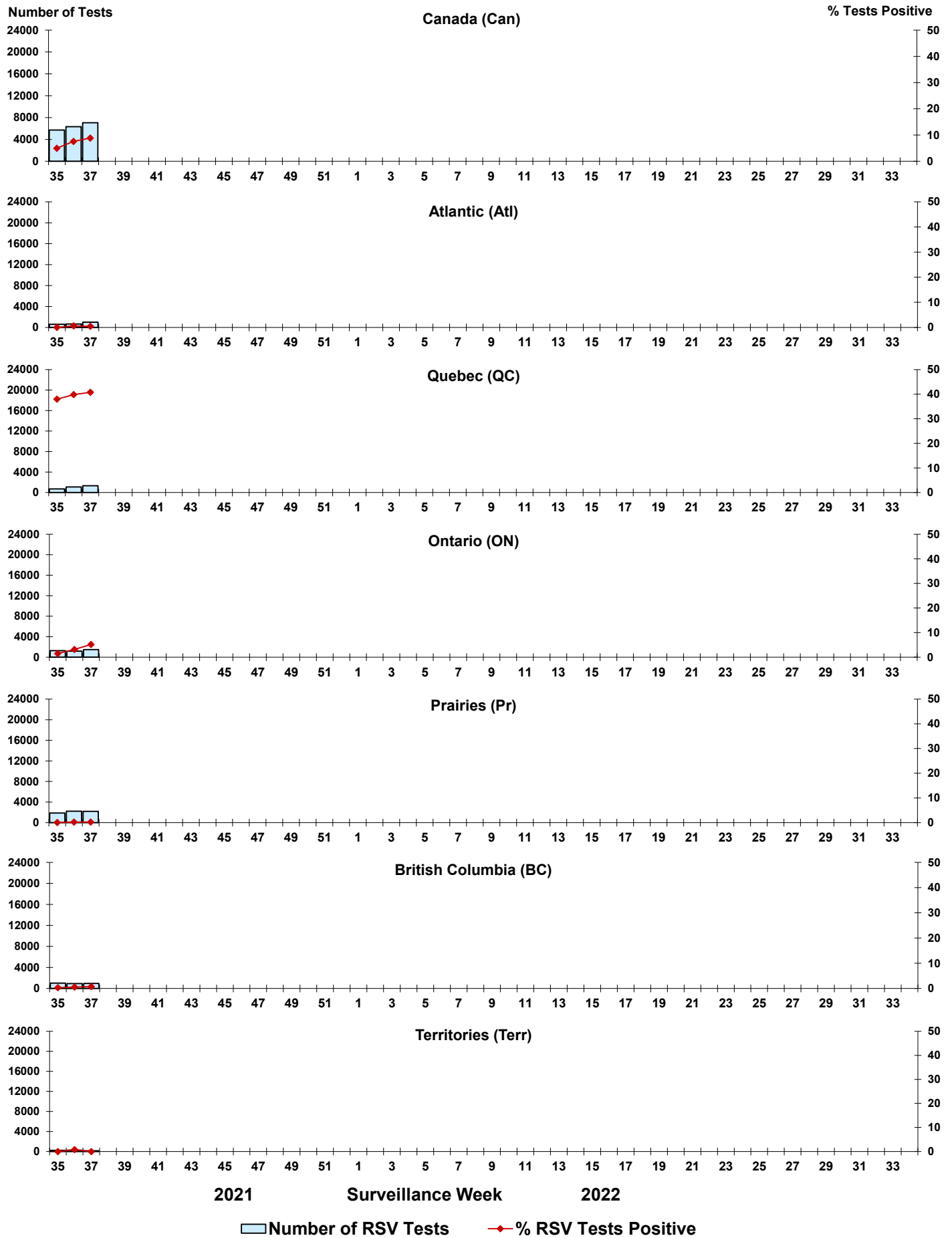


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

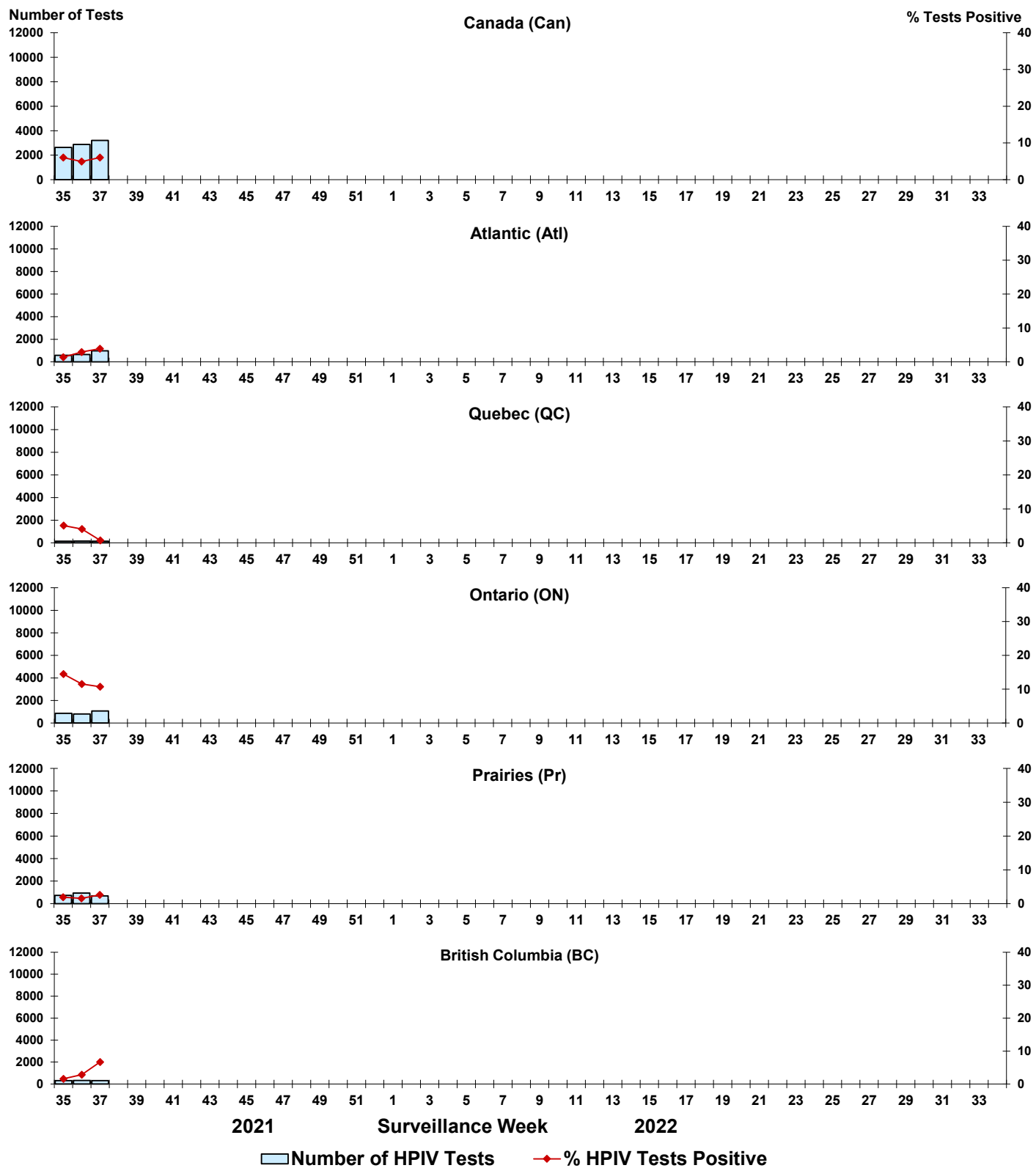


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

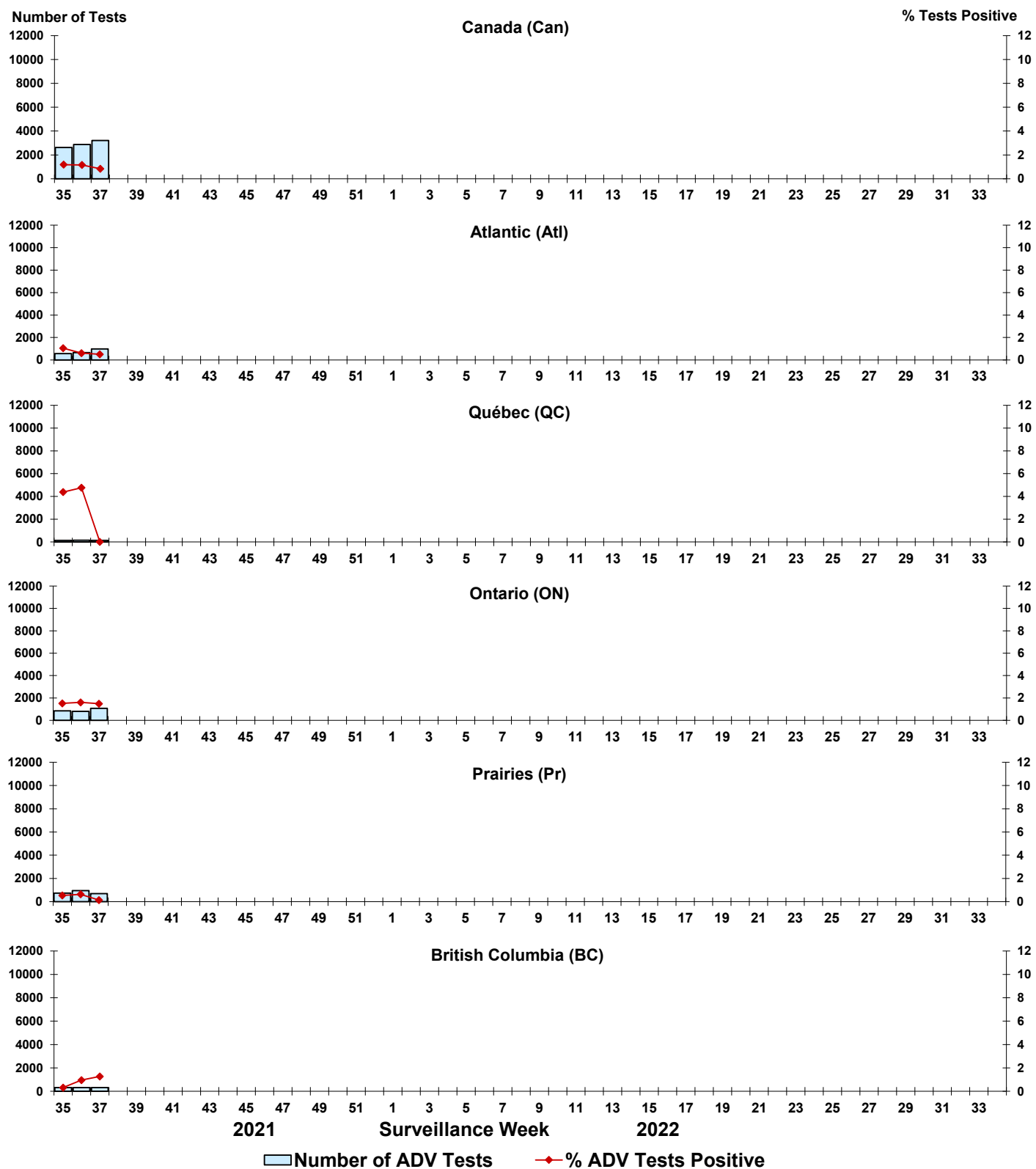


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

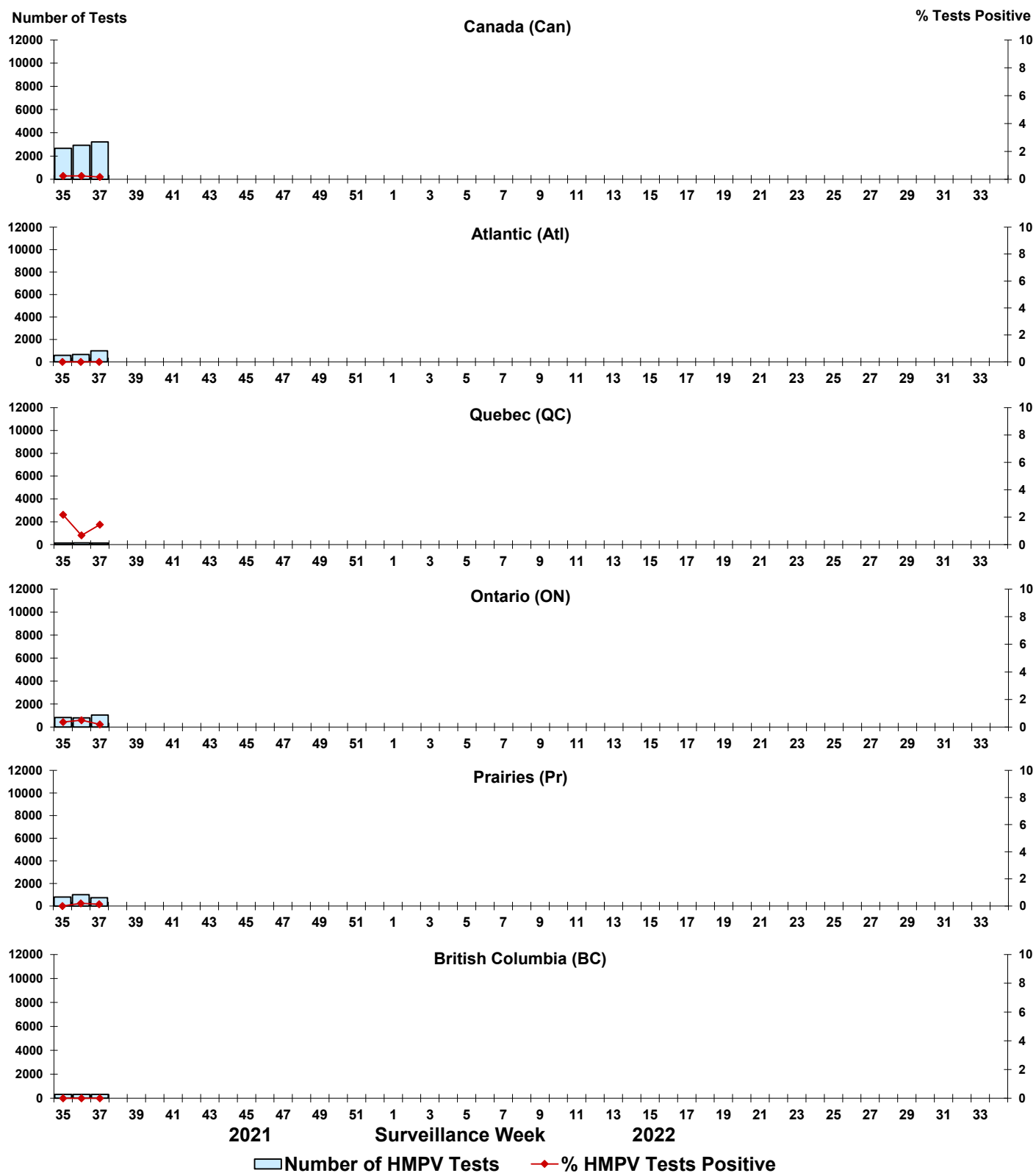


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

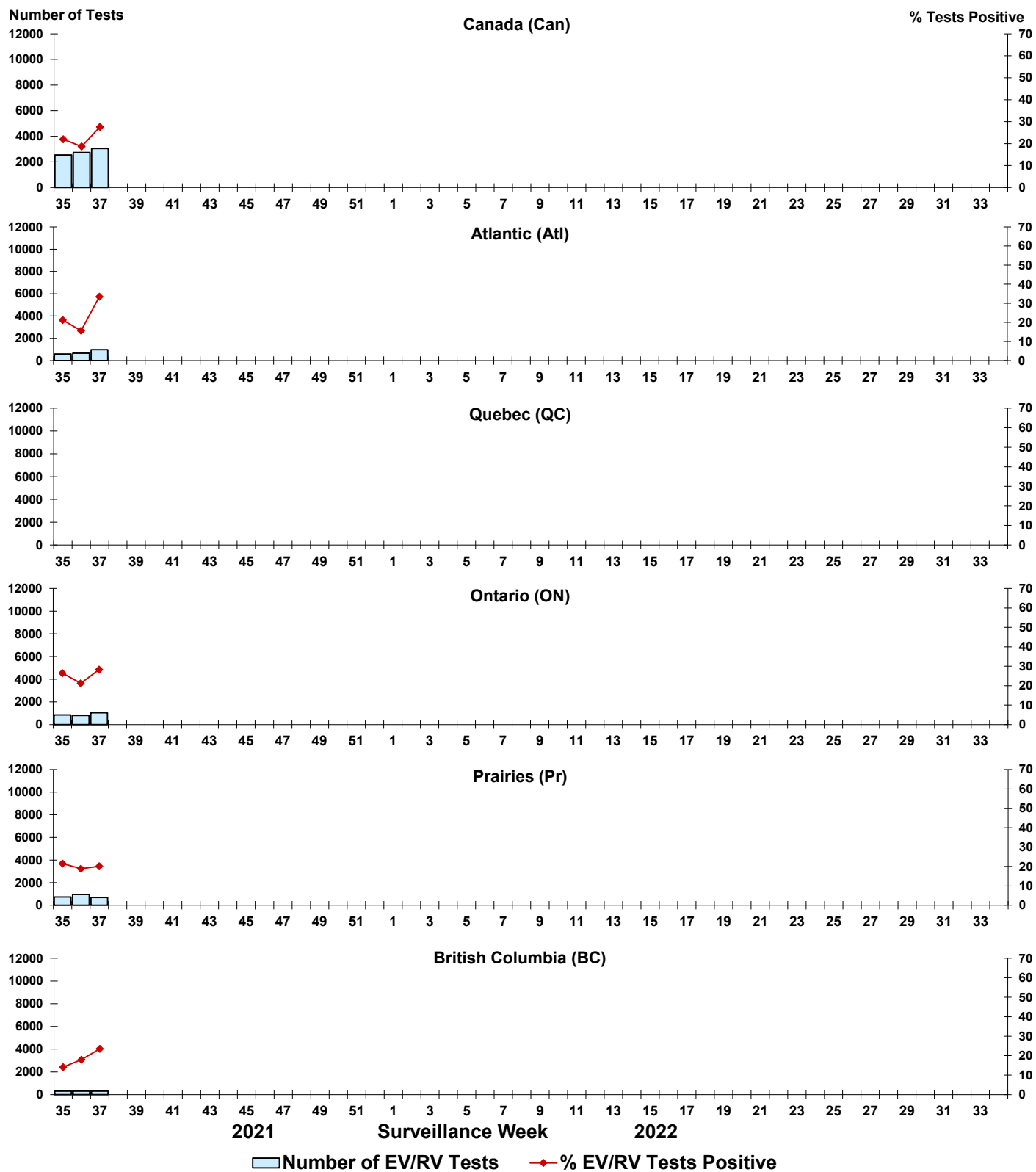


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

