

RESPIRATORY VIRUS DETECTION REPORT

September 26 to October 2, 2021
(Surveillance Week 2021-39)



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 (1,104 detections; 31.2% positive), respiratory syncytial virus (769 detections; 10.0% positive), and human parainfluenza virus (319 detections; 8.5% positive) are the most common seasonal respiratory viruses detected in Canada.
 - Activity of enterovirus/rhinovirus is near expected levels for this time of year.
 - 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.
- 31/34 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

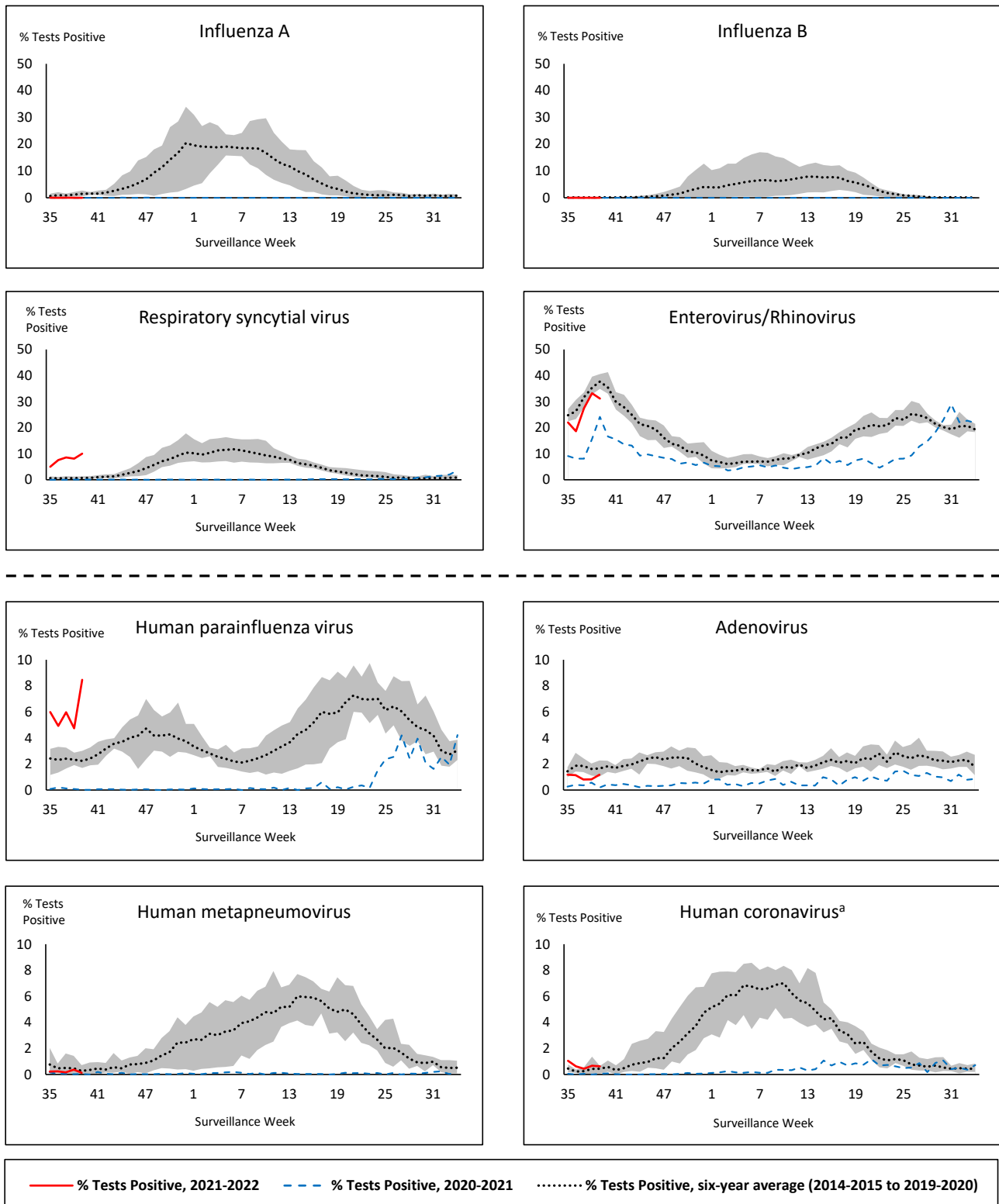
QC: Quebec

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 October 2, 2021 (surveillance week 2021-39)

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	859	0	0	0	0	0	859	1	859	0	3	9	0	17	860	1	859	0	859	324	N.C.	N.C.
Prince Edward Island	69	0	0	0	0	0	69	0	69	0	0	19	0	0	69	1	69	0	69	19	69	0
Nova Scotia	59	0	0	0	0	0	59	0	51	0	0	4	0	0	51	1	51	0	51	5	51	0
New Brunswick	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Atlantic	987	0	0	0	0	0	987	1	979	0	3	32	0	17	980	3	979	0	979	348	120	0
Région Nord-Est	215	0	0	0	0	0	162	97	3	0	0	0	0	0	3	0	3	0	N.C.	N.C.	3	0
Québec-Chaudière-Appalaches	7	0	0	0	0	0	7	4	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Centre-du-Québec	112	0	0	0	0	0	181	104	21	0	0	2	0	0	21	1	21	0	N.C.	N.C.	21	0
Montréal-Laval	417	0	0	0	0	0	416	207	208	0	0	2	0	0	208	7	208	2	N.C.	N.C.	208	1
Ouest du Québec	240	0	0	0	0	0	240	117	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Montréal	98	0	0	0	0	0	98	62	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	1089	0	0	0	0	0	1104	591	232	0	0	4	0	0	232	8	232	2	N.C.	N.C.	232	1
P.H.O.L. - Ottawa	501	0	0	0	0	0	501	99	501	0	0	0	0	65	501	14	500	3	501	239	500	4
EORLA	112	0	0	0	0	0	112	12	31	0	0	1	0	0	31	0	0	0	31	7	0	0
P.H.O.L. - Kingston	56	0	0	0	0	0	56	2	56	0	0	0	0	15	56	0	55	0	56	32	55	0
UHN / Mount Sinai Hospital	429	0	0	0	0	0	429	1	18	0	0	0	0	0	18	0	18	0	18	1	18	0
P.H.O.L. - Toronto	239	0	0	0	0	0	239	4	239	0	0	0	0	25	239	0	239	0	239	42	239	0
Sick Kids Hospital - Toronto	40	0	0	0	0	0	0	0	40	0	0	6	0	0	40	0	40	0	40	15	40	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	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	11	0	0	0	0	0	11	2	11	0	0	0	0	0	11	0	11	0	11	2	11	0
St. Joseph's - London	46	0	0	0	0	0	46	2	46	0	0	0	0	7	46	1	46	0	46	11	46	0
P.H.O.L. - London	56	0	0	0	0	0	56	0	56	0	0	0	0	8	56	2	56	0	56	23	56	0
P.H.O.L. - Orillia	8	0	0	0	0	0	8	0	8	0	0	0	0	1	8	0	8	0	8	2	8	0
P.H.O.L. - Thunder Bay	5	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	0	5	0	5	0
P.H.O.L. - Sudbury	25	0	0	0	0	0	25	0	25	0	0	0	0	0	25	0	25	0	25	7	25	0
P.H.O.L. - Hamilton	33	0	0	0	0	0	32	1	32	0	0	0	0	1	32	0	32	0	32	8	32	0
P.H.O.L. - Peterborough	7	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	0	7	0	7	0
St. Joseph's - Hamilton	386	0	0	0	0	0	386	19	386	0	0	62	0	0	386	3	386	0	386	85	0	0
Province of Ontario	1954	0	0	0	0	0	1913	142	1461	0	0	69	0	122	1461	20	1428	3	1461	474	1042	4
Province of Manitoba	1650	1	0	0	1	0	1650	4	29	0	0	1	0	0	29	0	73	0	29	7	73	1
Province of Saskatchewan	92	0	0	0	0	0	92	0	101	0	0	10	0	0	101	2	101	0	101	25	101	0
Province of Alberta	1656	0	0	0	0	0	586	7	586	0	1	29	2	0	586	6	586	0	586	125	586	10
Prairies	3398	1	0	0	1	0	2328	11	716	0	1	40	2	0	716	8	760	0	716	157	760	11
British Columbia	1338	0	0	0	0	0	1165	24	377	0	0	28	1	0	377	5	377	0	373	123	373	0
Yukon	165	0	0	0	0	0	165	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	11	0	0	0	0	0	10	0	3	0	0	0	0	0	3	0	3	0	10	1	3	0
Nunavut	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	1	1	1	0
Territories	177	0	0	0	0	0	176	0	4	0	0	0	0	0	4	0	4	0	11	2	4	0
CANADA	8943	1	0	0	1	0	7673	769	3769	0	4	173	3	139	3770	44	3780	5	3540	1104	2531	16

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 October 2, 2021 (surveillance week 2021-35 to 2021-39)

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	3476	0	0	0	0	0	3476	7	3476	0	3	24	0	38	3479	12	3476	0	3476	1227	N.C.	N.C.
Prince Edward Island	318	0	0	0	0	0	318	0	318	0	0	67	0	0	318	9	318	0	318	109	318	1
Nova Scotia	272	0	0	0	0	0	272	1	229	0	2	12	0	0	229	2	229	0	229	26	229	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	4437	0	0	0	0	0	4403	9	4273	0	5	114	0	38	4269	23	4273	0	4273	1370	797	1
Région Nord-Est	2090	0	0	0	0	0	809	319	6	0	0	0	0	0	6	0	6	0	N.C.	N.C.	6	0
Québec-Chaudière-Appalaches	94	0	0	0	0	0	248	45	57	0	0	3	0	0	53	1	53	0	N.C.	N.C.	55	0
Centre-du-Québec	330	0	0	0	0	0	459	235	83	0	0	8	0	0	83	1	83	0	N.C.	N.C.	76	0
Montréal-Laval	3305	0	0	1	1	0	3308	1449	731	1	0	7	0	0	731	24	731	12	N.C.	N.C.	731	1
Ouest du Québec	453	0	0	0	0	0	454	192	3	0	0	0	0	0	0	0	3	0	N.C.	N.C.	3	0
Montérégie	254	0	0	0	0	0	254	139	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	6526	0	0	1	1	0	5532	2379	880	1	0	18	0	0	873	26	876	12	N.C.	N.C.	871	1
P.H.O.L. - Ottawa	1691	0	1	0	1	0	1691	243	1691	0	0	0	0	263	1691	49	1690	10	1691	740	1690	32
EORLA	498	0	0	0	0	0	498	32	117	0	0	4	0	0	117	0	0	0	117	25	25	1
P.H.O.L. - Kingston	238	0	0	0	0	0	238	8	238	0	0	0	0	62	238	4	237	1	238	103	237	1
UHN / Mount Sinai Hospital	2032	0	0	1	1	0	2032	4	82	0	0	0	0	0	82	0	82	0	82	3	82	0
P.H.O.L. - Toronto	952	0	1	0	1	0	951	8	951	0	0	0	0	69	952	2	951	2	951	158	952	0
Sick Kids Hospital - Toronto	178	0	0	0	0	0	0	0	178	0	0	15	0	0	178	1	178	1	178	43	178	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	38	0	0	0	0	0	38	2	38	0	0	0	0	3	38	0	38	0	38	4	38	0
St. Joseph's - London	160	0	0	0	0	0	160	4	161	0	0	7	0	10	161	1	161	1	165	33	165	0
P.H.O.L. - London	185	0	0	0	0	0	185	2	185	0	0	0	0	12	185	2	185	0	185	49	185	0
P.H.O.L. - Orillia	52	0	0	0	0	0	52	1	52	0	0	0	0	5	52	1	51	0	52	21	51	0
P.H.O.L. - Thunder Bay	33	0	0	0	0	0	33	0	33	0	0	0	0	0	33	0	33	0	33	11	33	0
P.H.O.L. - Sudbury	72	0	0	0	0	0	72	0	72	0	0	0	0	0	72	0	72	0	72	17	72	0
P.H.O.L. - Hamilton	109	0	0	0	0	0	108	1	108	0	0	0	0	6	108	1	108	4	108	31	108	0
P.H.O.L. - Peterborough	45	0	0	0	0	0	45	1	45	0	0	0	0	3	45	0	44	0	45	7	44	0
St. Joseph's - Hamilton	1383	0	0	0	0	0	1377	32	1377	0	0	158	0	0	1377	7	1377	1	1377	282	0	0
Province of Ontario	7674	0	2	1	3	0	7488	338	5336	0	0	184	0	433	5337	68	5215	20	5340	1530	3868	34
Manitoba	7310	1	0	0	1	0	7310	11	136	0	0	4	0	0	136	2	399	2	136	55	399	1
Province of Saskatchewan	452	0	0	0	0	0	424	1	412	0	0	11	2	0	412	5	412	0	412	103	411	0
Province of Alberta	8878	0	1	2	3	0	3573	20	3573	0	3	88	10	0	3573	17	3573	1	3573	744	3573	38
Prairies	16640	1	1	2	4	0	11307	32	4121	0	3	103	12	0	4121	24	4384	3	4121	902	4383	39
British Columbia	5470	0	0	1	1	0	5297	51	1903	0	0	80	9	5	1903	24	1903	3	1872	449	1868	4
Yukon	914	0	0	0	0	0	967	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	109	0	0	0	0	0	101	0	20	0	0	0	0	0	20	2	20	0	101	16	20	0
Nunavut	3	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	0	3	1	3	0
Territories	1026	0	0	0	0	0	1071	2	23	0	0	0	0	0	23	2	23	0	104	17	23	0
CANADA	41773	1	3	5	9	0	35098	2811	16536	1	8	499	21	476	16526	167	16674	38	15710	4268	11810	79

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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

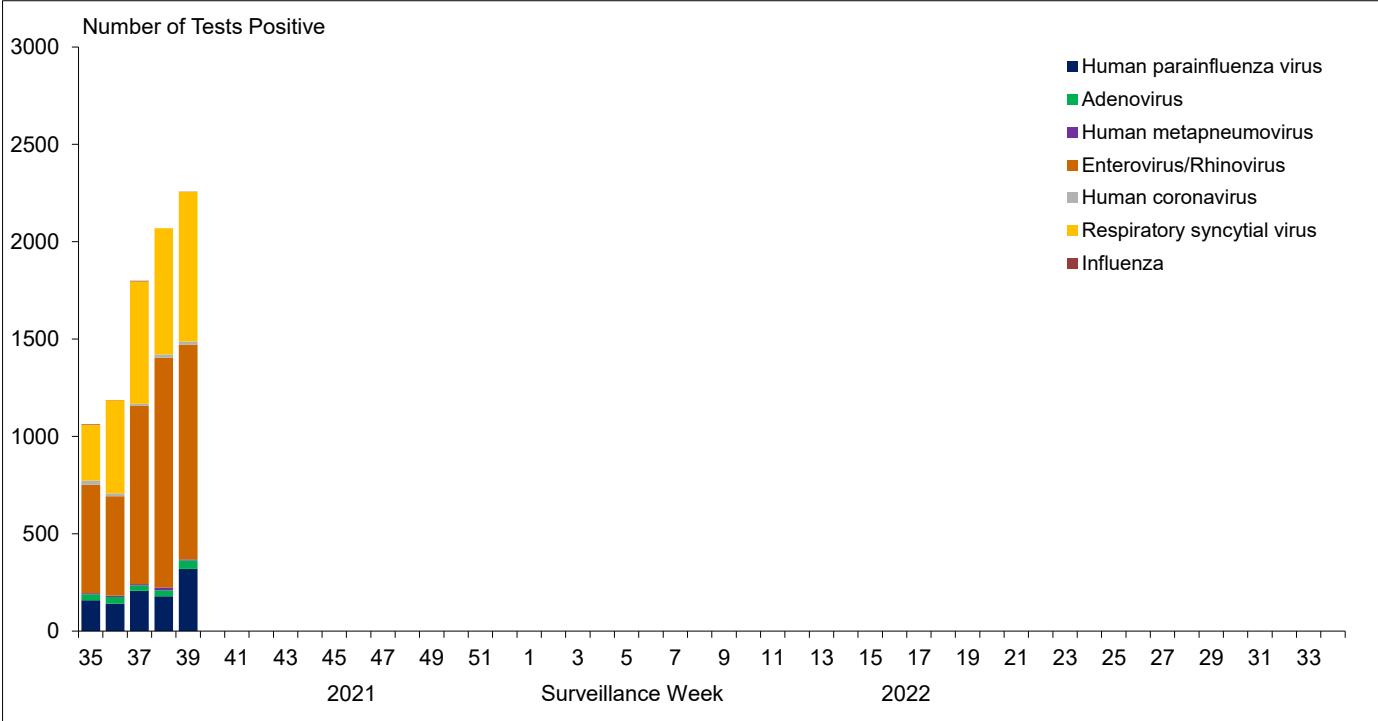


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

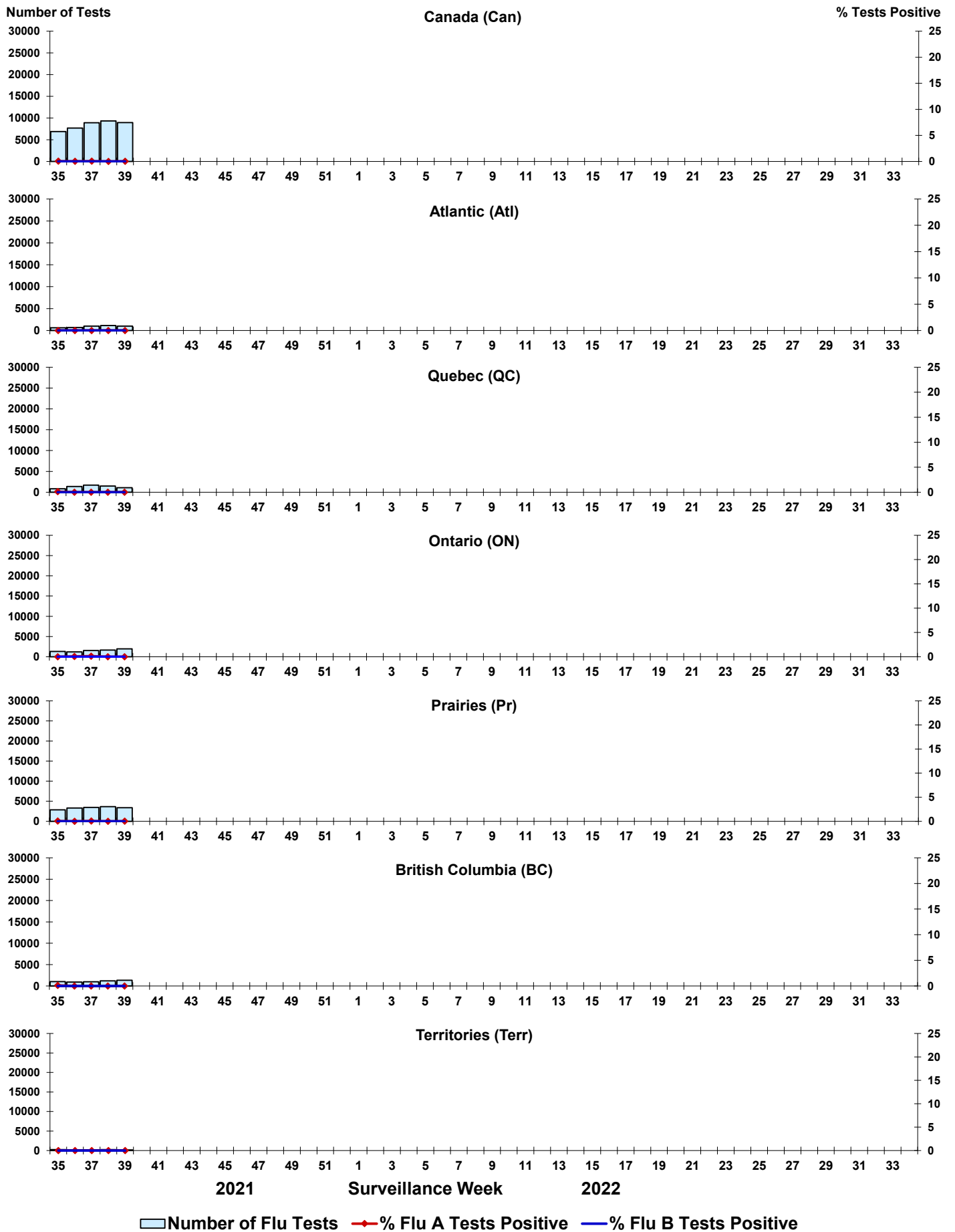
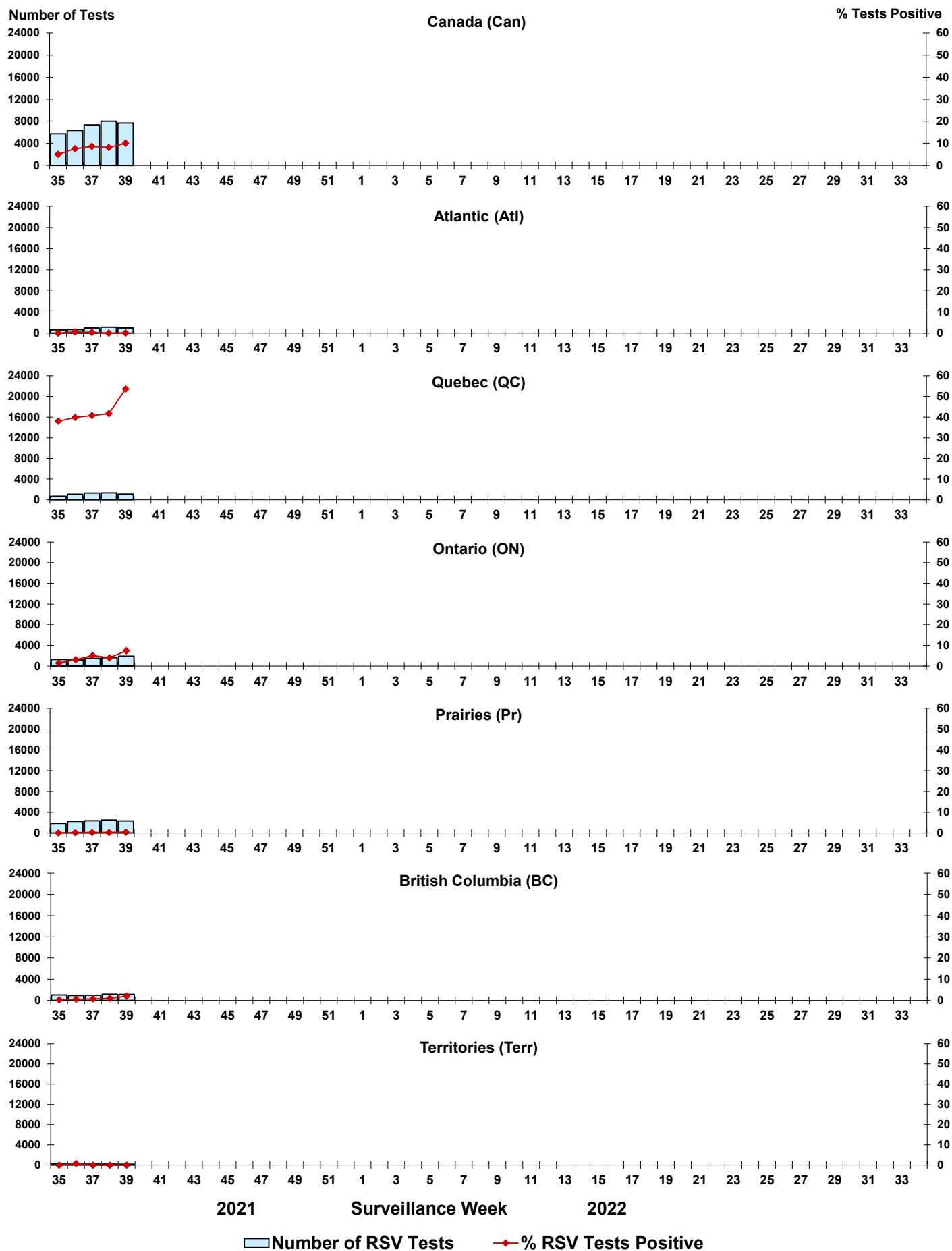


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



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

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

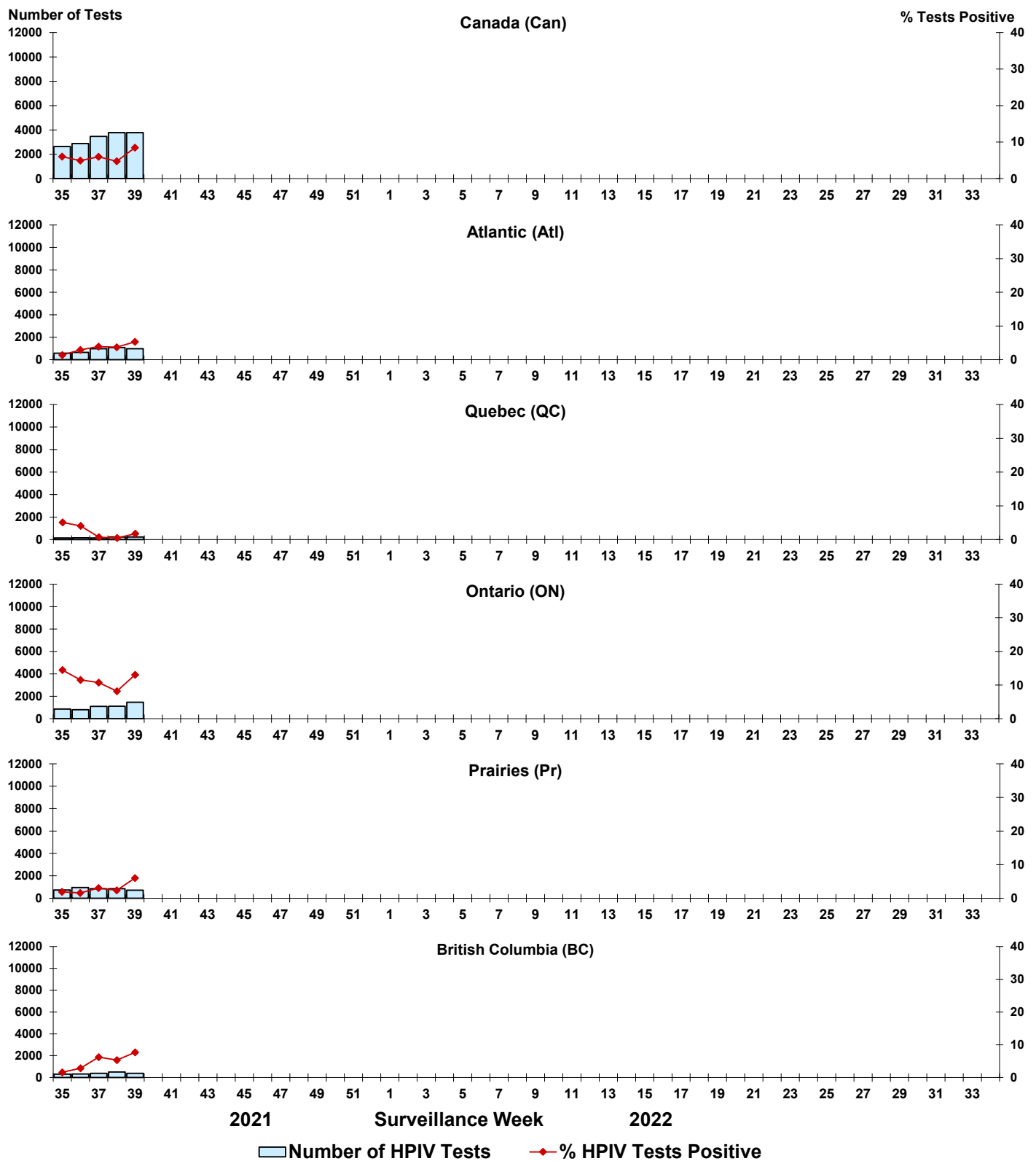


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

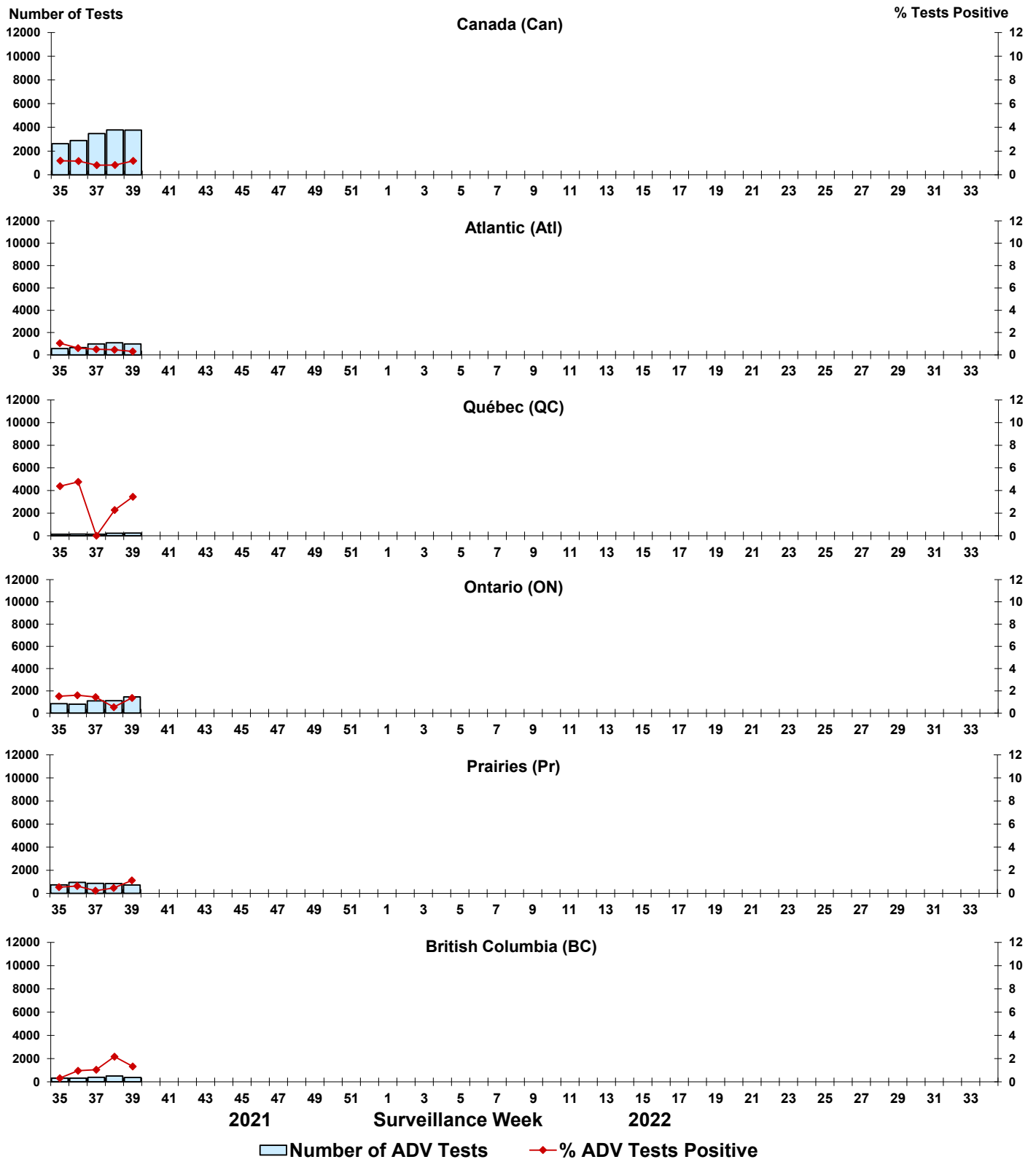


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

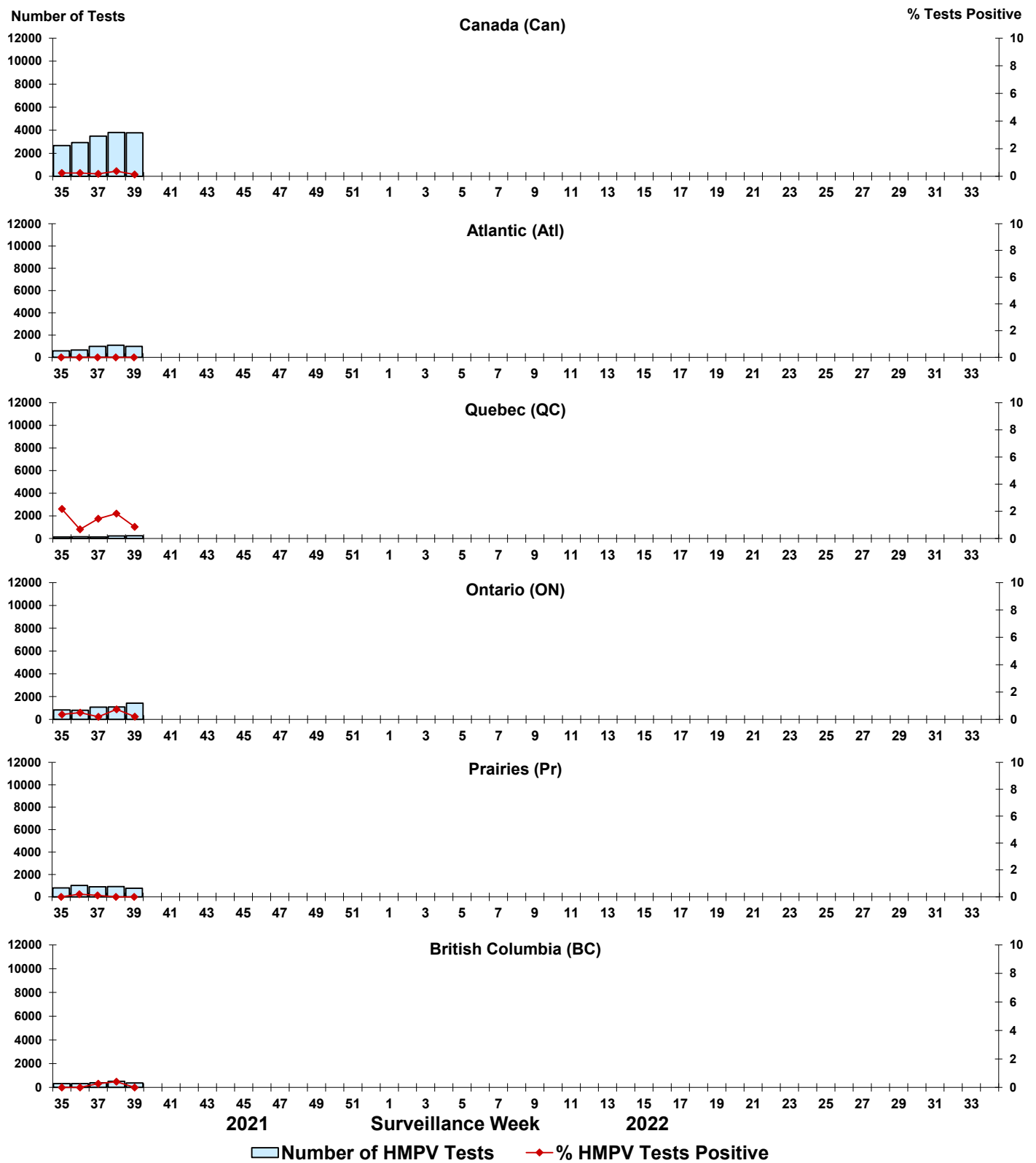


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

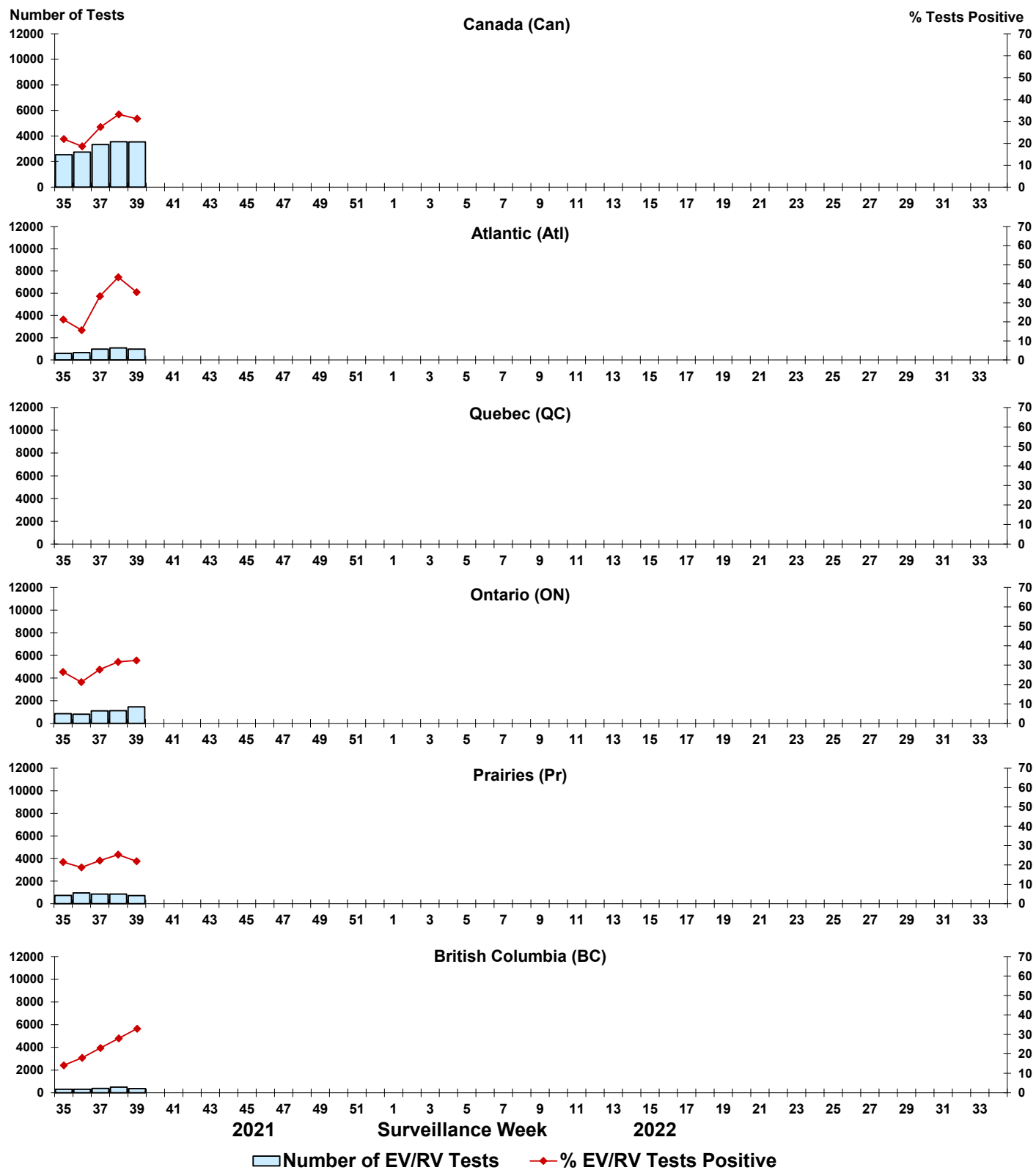


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

