

RESPIRATORY VIRUS DETECTION REPORT

October 10 to October 16, 2021
(Surveillance Week 2021-41)



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

In week 41 (October 10 to October 16, 2021):

- Respiratory syncytial virus (931 detections; 10.5% positive), enterovirus/rhinovirus (716 detections; 23.4% positive), and human parainfluenza virus (353 detections; 10.4% positive) are the most common seasonal respiratory viruses detected in Canada.
 - Activity of respiratory syncytial virus remains well above expected levels. The majority of detections are found in Quebec and Eastern Ontario.
 - Activity of enterovirus/rhinovirus is decreasing and remains near expected levels for this time of year.
 - Activity of human parainfluenza virus is increasing and remains well 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

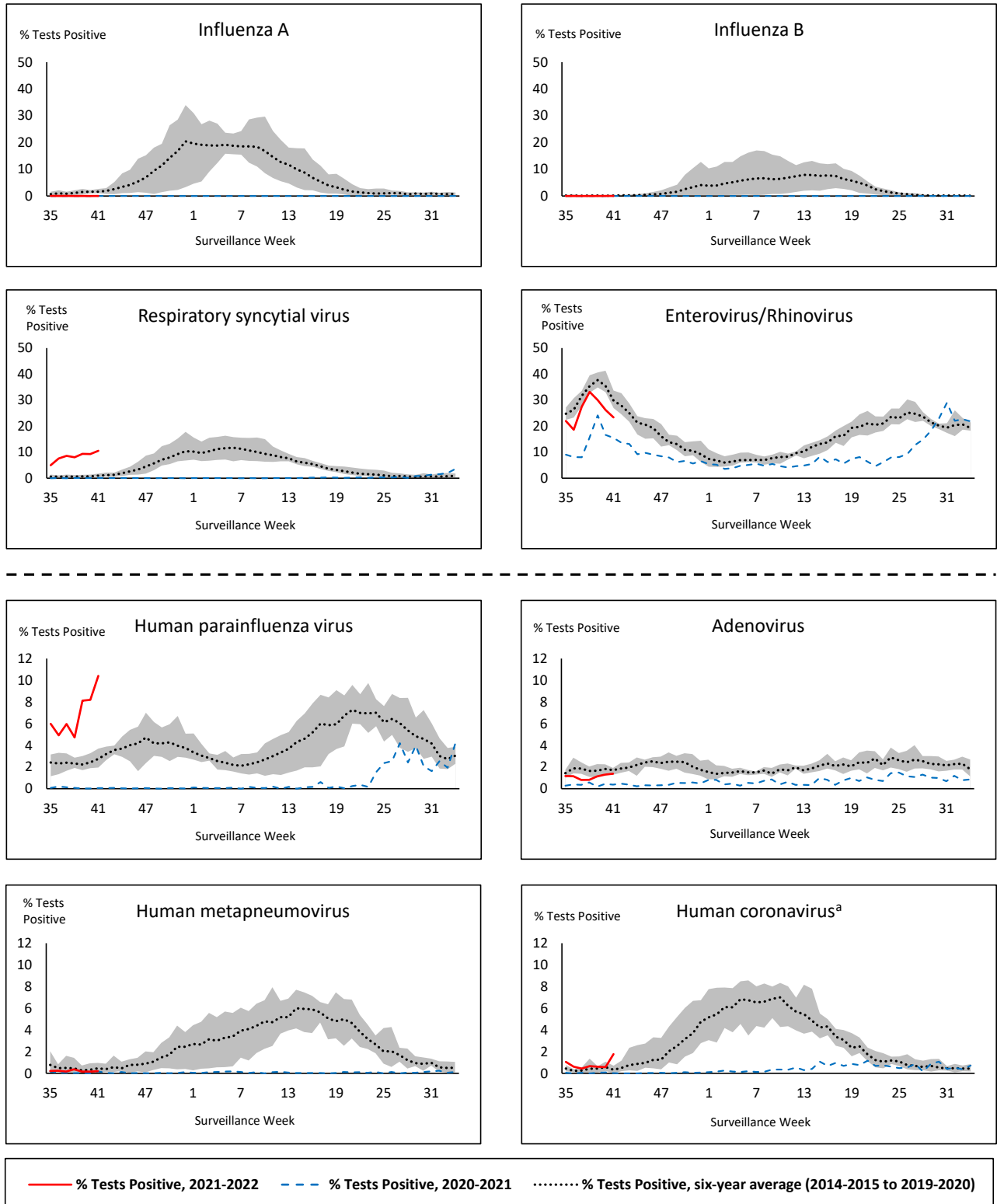
QC: Quebec

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 October 16, 2021 (surveillance week 2021-41)

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	293	0	0	0	0	0	293	0	293	0	0	13	0	0	293	0	293	1	293	43	N.C.	N.C.
Prince Edward Island	119	0	0	0	0	0	119	0	119	0	0	21	0	0	119	0	119	0	119	35	119	4
Nova Scotia	82	0	0	0	0	0	82	1	53	0	0	1	0	0	53	1	53	0	53	8	53	0
New Brunswick	120	0	0	0	0	0	114	0	78	0	0	0	0	0	78	0	78	0	78	2	78	0
Atlantic	614	0	0	0	0	0	608	1	543	0	0	35	0	0	543	1	543	1	543	88	250	4
Région Nord-Est	469	0	0	0	0	0	276	146	107	0	0	3	0	0	107	7	1	0	N.C.	N.C.	107	1
Québec-Chaudière-Appalaches	183	0	0	0	0	1	246	162	39	0	0	0	0	0	39	3	39	0	N.C.	N.C.	39	0
Centre-du-Québec	122	0	0	0	0	0	221	111	48	0	0	0	0	0	48	3	48	0	N.C.	N.C.	48	0
Montréal-Laval	523	0	0	0	0	2	526	141	141	0	0	0	0	0	141	4	141	2	N.C.	N.C.	141	2
Ouest du Québec	276	0	0	0	0	0	276	120	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Montérégie	131	0	0	0	0	0	131	37	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	1704	0	0	0	3	1676	717	335	0	0	0	3	0	0	335	17	229	2	N.C.	N.C.	335	3
P.H.O.L. - Ottawa	340	0	0	0	0	0	340	103	340	0	0	0	0	38	340	13	340	0	340	120	340	3
EORLA	172	0	0	0	0	0	147	29	25	0	0	1	0	0	25	0	0	0	25	5	0	0
P.H.O.L. - Kingston	46	0	0	0	0	0	46	0	46	0	0	0	0	10	46	0	46	0	46	14	46	6
UHN / Mount Sinai Hospital	361	0	0	0	0	0	361	1	21	0	0	0	0	0	21	0	21	0	21	2	21	0
P.H.O.L. - Toronto	310	0	0	0	0	0	310	8	310	0	0	0	0	21	310	3	310	0	310	65	310	7
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	1	4	0
P.H.O.L. - Timmins	6	0	0	0	0	0	6	0	6	0	0	0	0	0	6	0	6	0	6	2	6	0
St. Joseph's - London	42	0	0	0	0	0	42	1	41	0	0	0	0	11	41	3	41	0	41	13	41	0
P.H.O.L. - London	78	0	0	0	0	0	78	0	78	0	0	0	0	16	78	1	78	0	78	31	78	0
P.H.O.L. - Orillia	22	0	0	0	0	0	22	0	22	0	0	0	0	5	22	0	22	0	22	9	22	0
P.H.O.L. - Thunder Bay	16	0	0	0	0	0	16	0	16	0	0	0	0	0	16	0	16	0	16	11	16	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	0	14	0
P.H.O.L. - Hamilton	45	0	1	0	1	0	44	0	44	0	0	0	0	3	44	0	44	0	44	12	44	0
P.H.O.L. - Peterborough	33	0	0	0	0	0	33	1	33	0	0	0	0	1	33	1	33	0	33	9	33	0
St. Joseph's - Hamilton	404	0	0	0	0	0	404	13	404	0	0	83	0	0	404	2	404	1	404	83	0	0
Province of Ontario	1893	0	1	0	1	0	1867	156	1404	0	0	84	0	105	1404	23	1379	1	1404	377	975	16
Province of Manitoba	1687	0	0	1	1	0	1687	7	30	0	0	0	0	0	30	1	82	0	30	5	82	0
Province of Saskatchewan	285	0	0	0	0	0	285	0	74	0	0	2	0	0	74	0	74	0	74	12	74	0
Province of Alberta	1484	0	0	0	0	0	561	11	561	0	0	40	2	0	561	4	561	0	561	87	561	21
Prairies	3456	0	0	1	1	0	2533	18	665	0	0	42	2	0	665	5	717	0	665	104	717	21
British Columbia	1890	0	0	1	1	0	1890	38	448	0	0	67	7	8	448	1	448	3	440	145	440	4
Yukon	263	0	0	0	0	0	263	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	13	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	12	2	0	0
Nunavut	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Territories	277	0	0	0	0	0	276	1	0	0	0	0	0	0	0	0	0	0	12	2	0	0
CANADA	9834	0	1	2	3	3	8850	931	3395	0	0	231	9	113	3395	47	3316	7	3064	716	2717	48

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 16, 2021 (surveillance week 2021-35 to 2021-41)

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	4158	0	0	0	0	0	4158	8	4158	0	3	45	0	41	4161	12	4158	1	4158	1356	N.C.	N.C.
Prince Edward Island	546	0	0	0	0	0	546	0	546	0	0	113	0	0	546	10	546	0	546	173	546	6
Nova Scotia	426	0	0	0	0	0	426	3	336	0	2	19	0	0	336	3	336	0	336	41	336	0
New Brunswick	785	0	0	0	0	0	738	2	588	0	0	15	0	0	581	0	588	0	588	14	497	0
Atlantic	5915	0	0	0	0	0	5868	13	5628	0	5	192	0	41	5624	25	5628	1	5628	1584	1379	6
Région Nord-Est	3114	0	0	0	0	0	1388	572	114	0	0	3	0	0	114	7	8	0	N.C.	N.C.	114	1
Québec-Chaudière-Appalaches	375	0	0	0	0	2	787	353	172	0	0	4	0	0	168	5	92	0	N.C.	N.C.	94	0
Centre-du-Québec	580	0	0	0	0	0	808	425	147	0	0	9	0	0	147	4	147	0	N.C.	N.C.	140	0
Montréal-Laval	4481	0	0	1	1	3	4486	1769	1093	1	0	9	0	0	1093	33	1093	17	N.C.	N.C.	1093	3
Ouest du Québec	831	0	0	0	0	0	832	375	3	0	0	0	0	0	0	0	3	0	N.C.	N.C.	3	0
Montérégie	490	0	0	0	0	0	490	225	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	9871	0	0	1	1	5	8791	3719	1529	1	0	25	0	0	1522	49	1343	17	N.C.	N.C.	1444	4
P.H.O.L. - Ottawa	2547	0	1	0	1	0	2547	493	2547	0	0	0	0	353	2547	83	2546	11	2547	1087	2546	40
EORLA	817	0	0	0	0	0	792	84	181	0	0	6	0	0	181	0	1	0	181	39	25	1
P.H.O.L. - Kingston	330	0	0	0	0	0	330	9	329	0	0	0	0	84	329	5	328	1	329	135	328	7
UHN / Mount Sinai Hospital	2812	0	0	1	1	0	2812	6	115	0	0	0	0	0	115	0	115	0	115	5	115	0
P.H.O.L. - Toronto	1533	0	1	0	1	0	1532	20	1532	0	0	0	0	107	1533	11	1532	2	1532	277	1533	11
Sick Kids Hospital - Toronto	222	0	0	0	0	0	0	0	222	0	0	17	0	0	222	1	222	1	222	59	222	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	18	0	0	0	0	0	18	0	18	0	0	0	0	0	18	0	18	0	18	7	18	0
P.H.O.L. - Timmins	51	0	0	0	0	0	51	2	51	0	0	0	0	3	51	0	51	0	51	9	51	0
St. Joseph's - London	234	0	0	0	0	0	234	7	233	0	0	7	0	29	233	5	233	1	237	55	236	0
P.H.O.L. - London	346	0	0	0	0	0	346	3	346	0	0	0	0	43	346	3	346	0	346	103	346	0
P.H.O.L. - Orillia	92	0	0	0	0	0	92	1	92	0	0	0	0	13	92	1	90	1	92	34	90	0
P.H.O.L. - Thunder Bay	56	0	0	0	0	0	56	0	56	0	0	0	0	0	56	0	56	0	56	27	56	0
P.H.O.L. - Sudbury	106	0	0	0	0	0	106	0	106	0	0	0	0	1	106	0	106	0	106	21	106	0
P.H.O.L. - Hamilton	192	0	1	0	1	0	190	1	190	0	0	0	0	15	190	2	190	4	190	60	190	0
P.H.O.L. - Peterborough	100	0	0	0	0	0	100	3	100	0	0	0	0	4	100	1	99	0	100	22	99	0
St. Joseph's - Hamilton	2170	0	0	0	0	0	2164	55	2164	0	0	315	0	0	2164	9	2164	3	2164	476	0	0
Province of Ontario	11626	0	3	1	4	0	11370	684	8282	0	0	345	0	652	8283	121	8097	24	8286	2416	5961	59
Manitoba	10892	1	0	1	2	0	10892	26	187	0	0	8	0	0	187	3	564	2	187	79	564	1
Province of Saskatchewan	1105	0	0	0	0	0	1077	2	561	0	0	13	2	0	561	8	561	0	561	134	560	0
Province of Alberta	12075	0	1	2	3	0	4807	46	4807	0	3	160	18	0	4807	31	4807	1	4807	970	4807	66
Prairies	24072	1	1	3	5	0	16776	74	5555	0	3	181	20	0	5555	42	5932	3	5555	1183	5931	67
British Columbia	9456	0	0	2	2	0	9456	118	3015	0	0	181	18	17	3015	27	3011	8	2967	742	2963	9
Yukon	1454	0	0	0	0	0	1526	3	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	135	0	0	0	0	0	125	0	24	0	0	0	0	0	24	2	24	0	124	20	24	0
Nunavut	5	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	0	4	2	4	0
Territories	1594	0	0	0	0	0	1655	3	28	0	0	0	0	0	28	2	28	0	128	22	28	0
CANADA	62534	1	4	7	12	5	53916	4611	24037	1	8	924	38	710	24027	266	24039	53	22564	5947	17706	145

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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

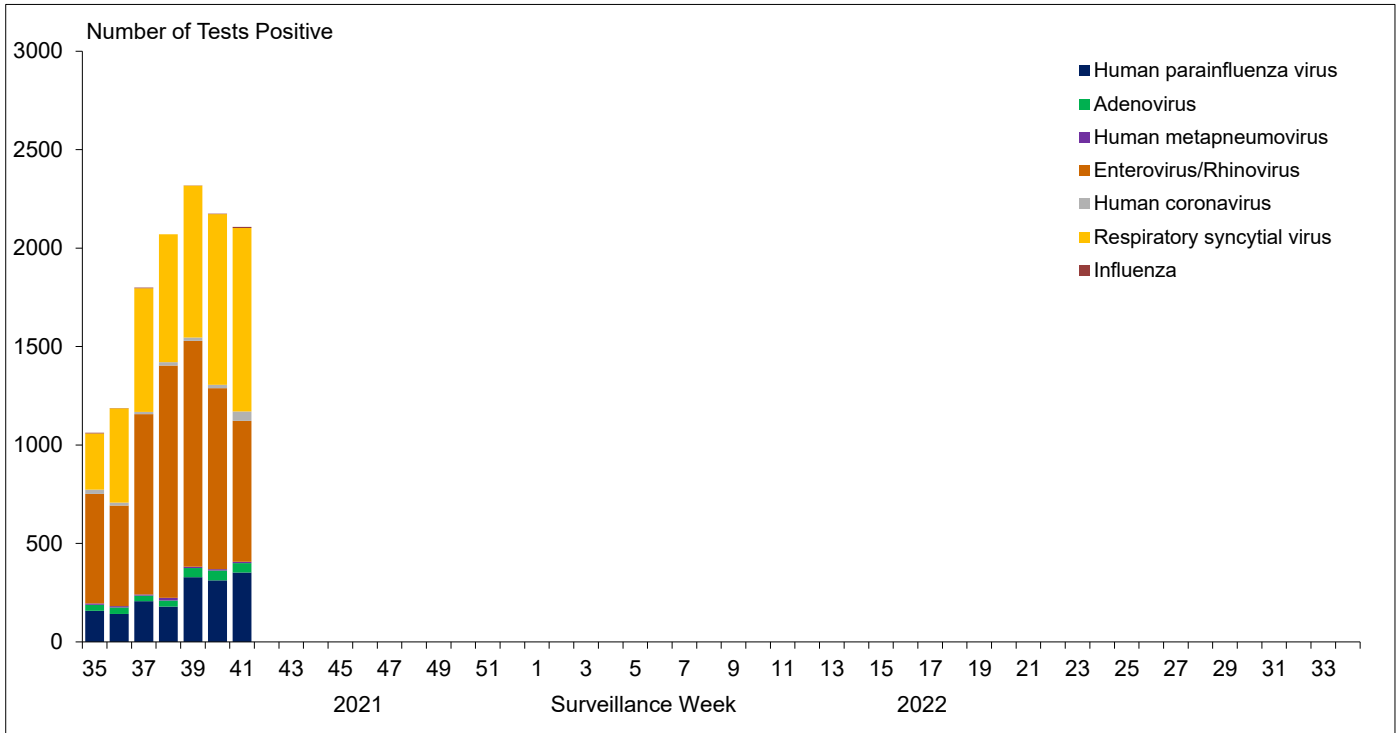


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

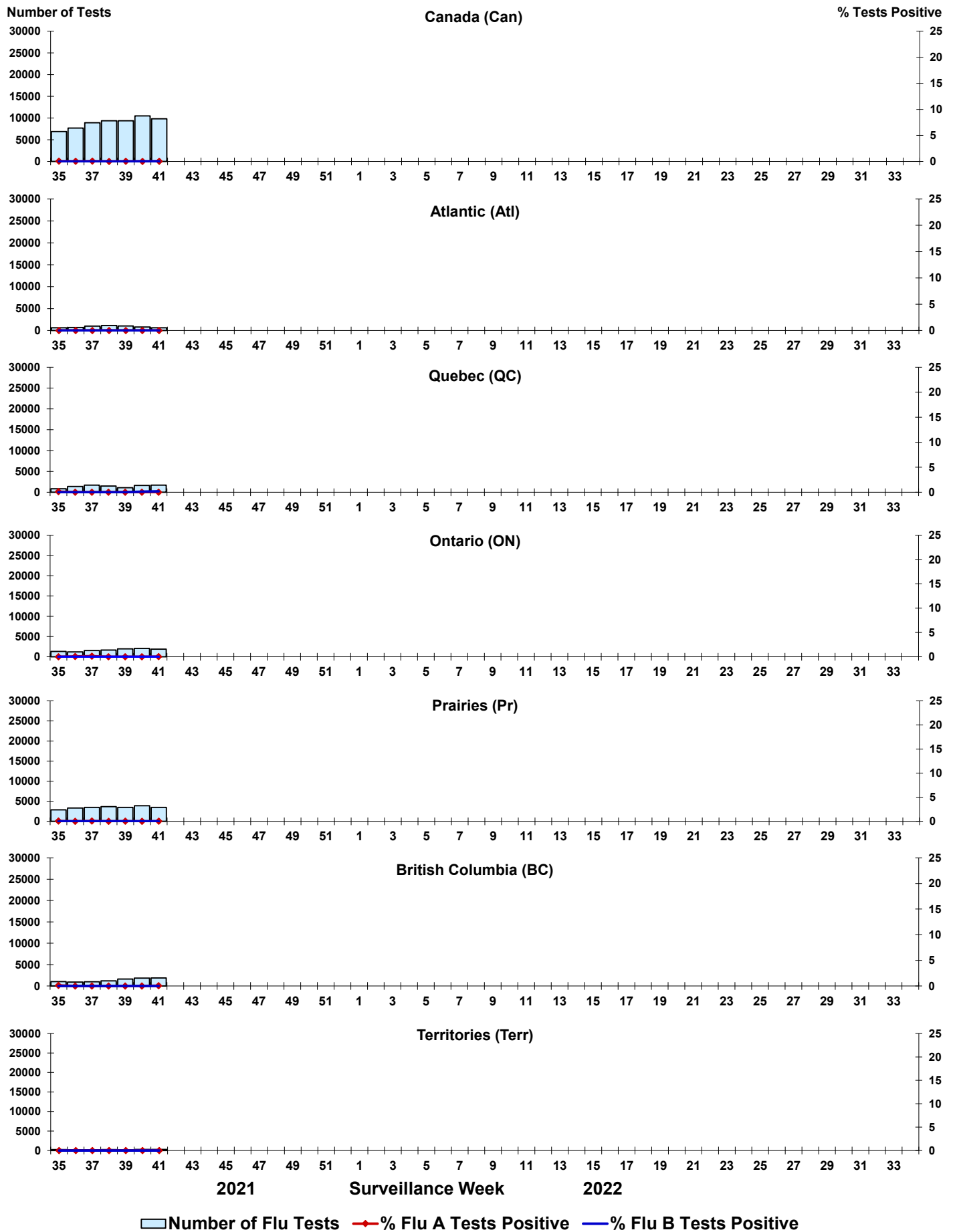


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

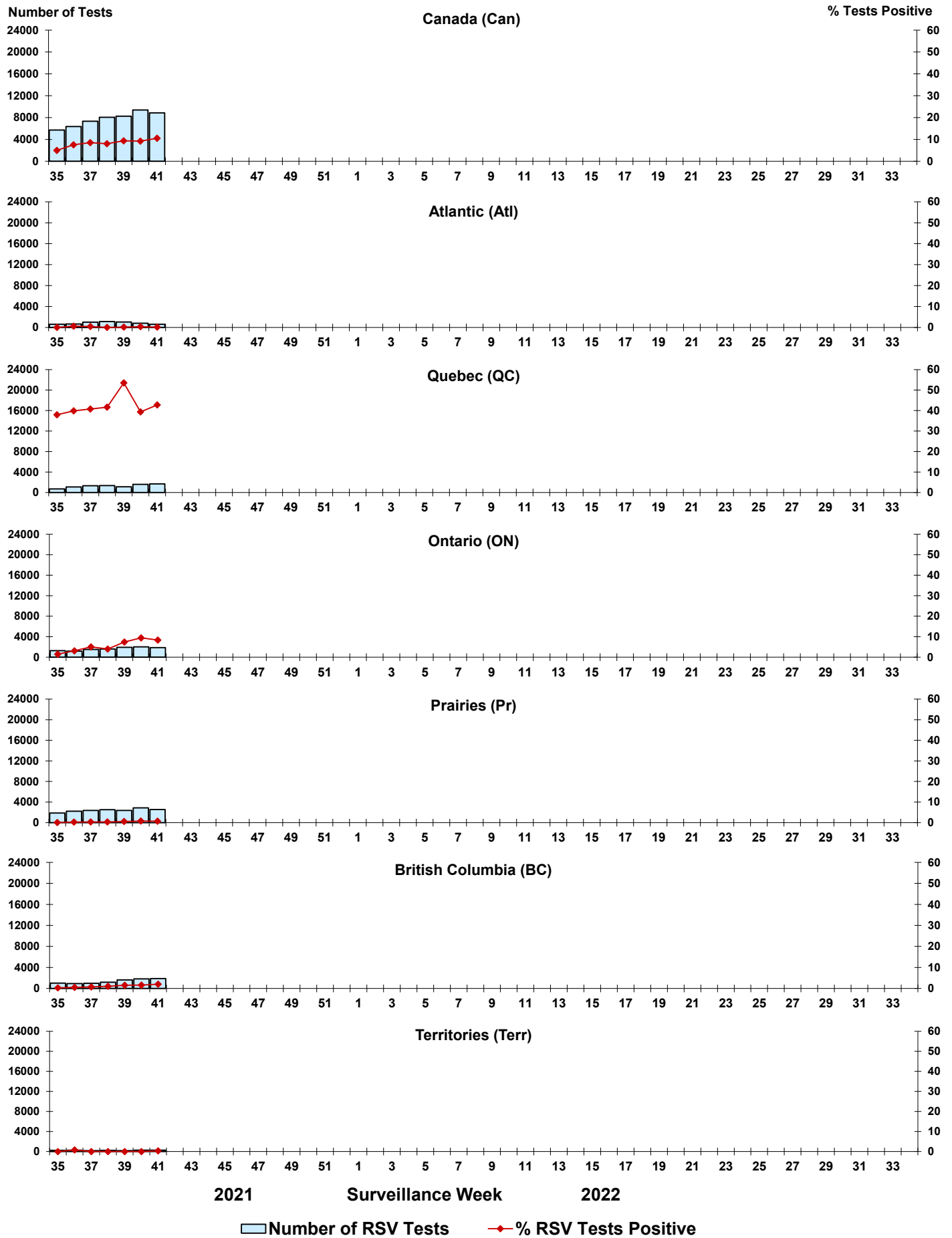


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

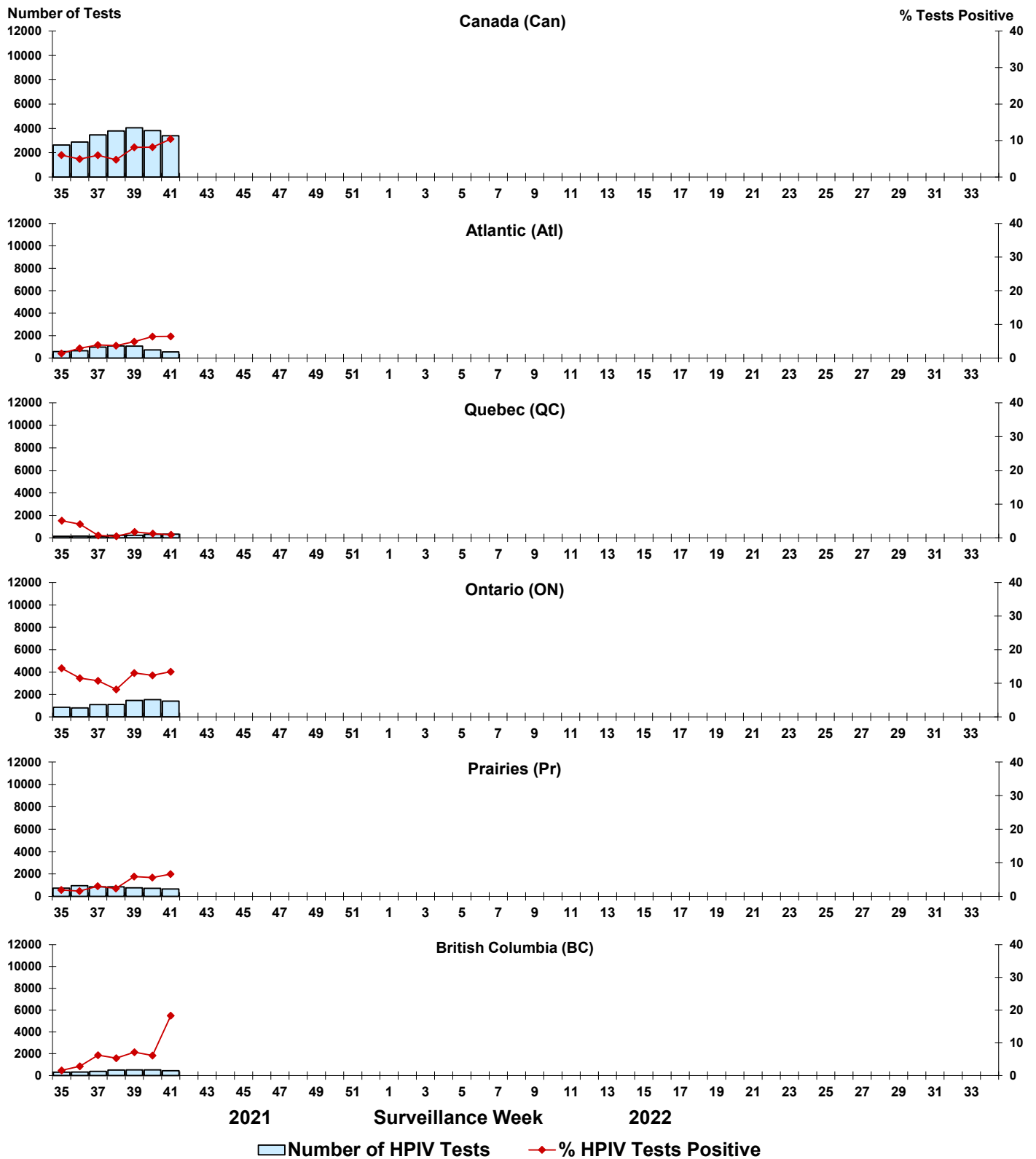


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

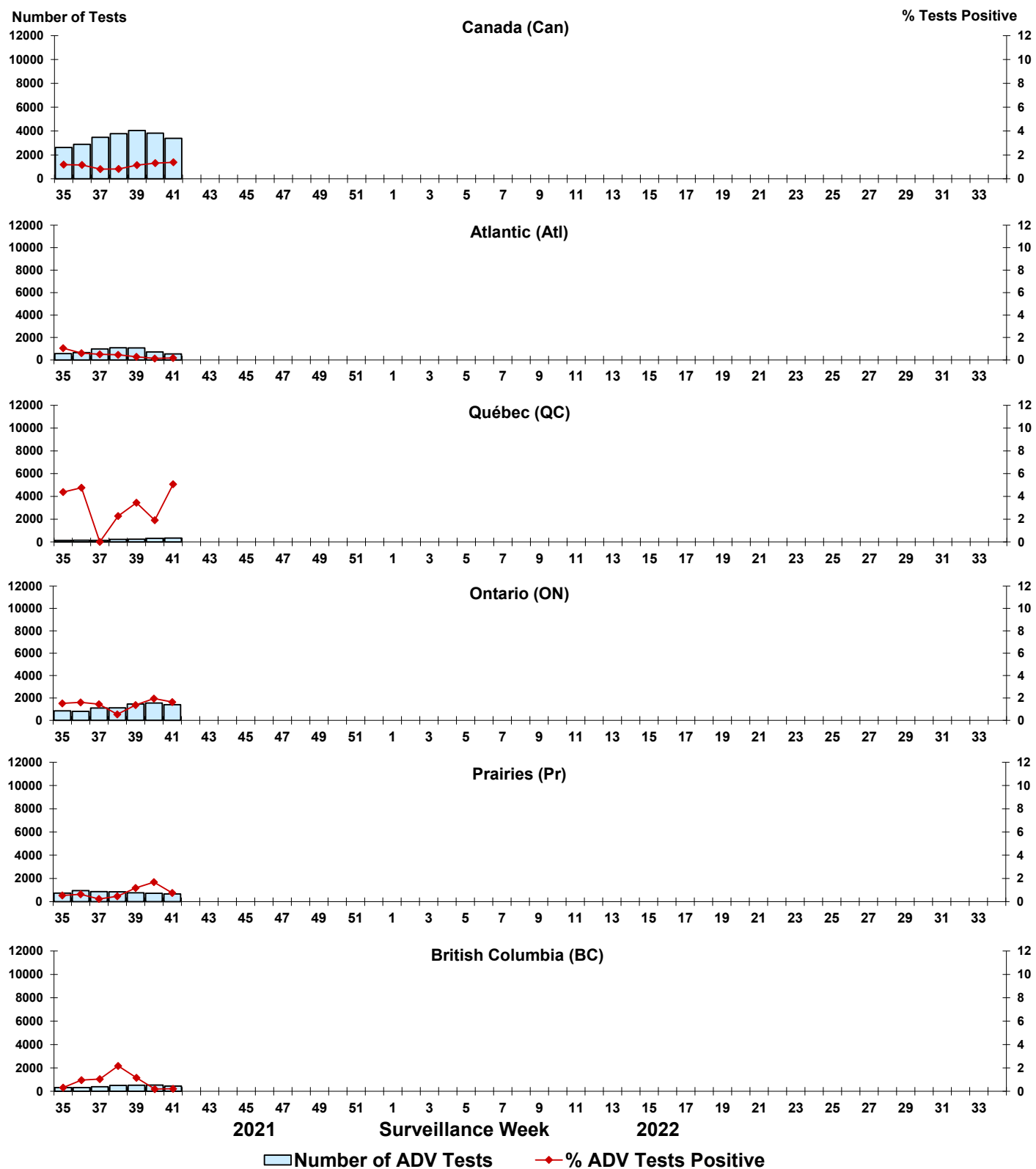


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

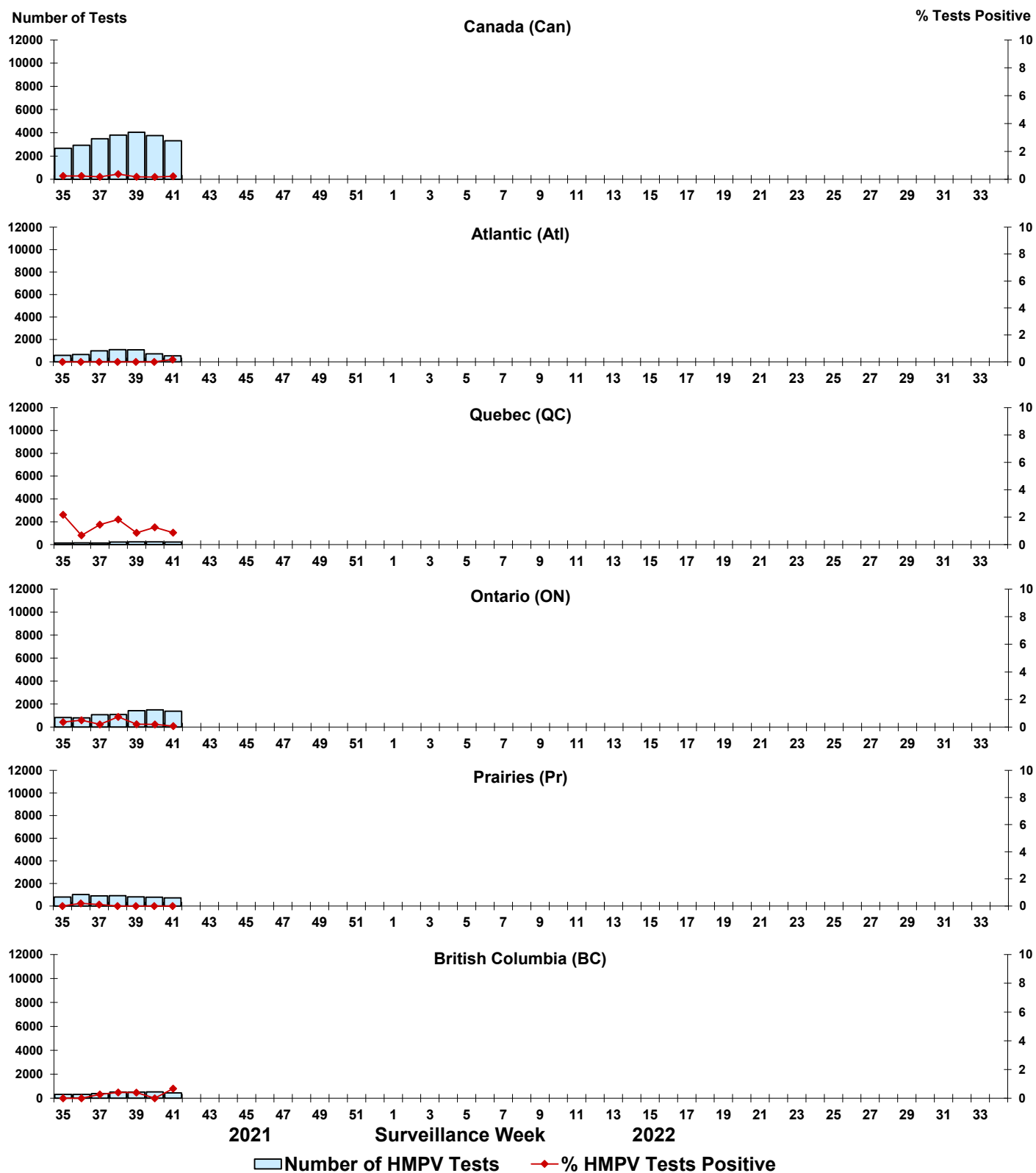


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

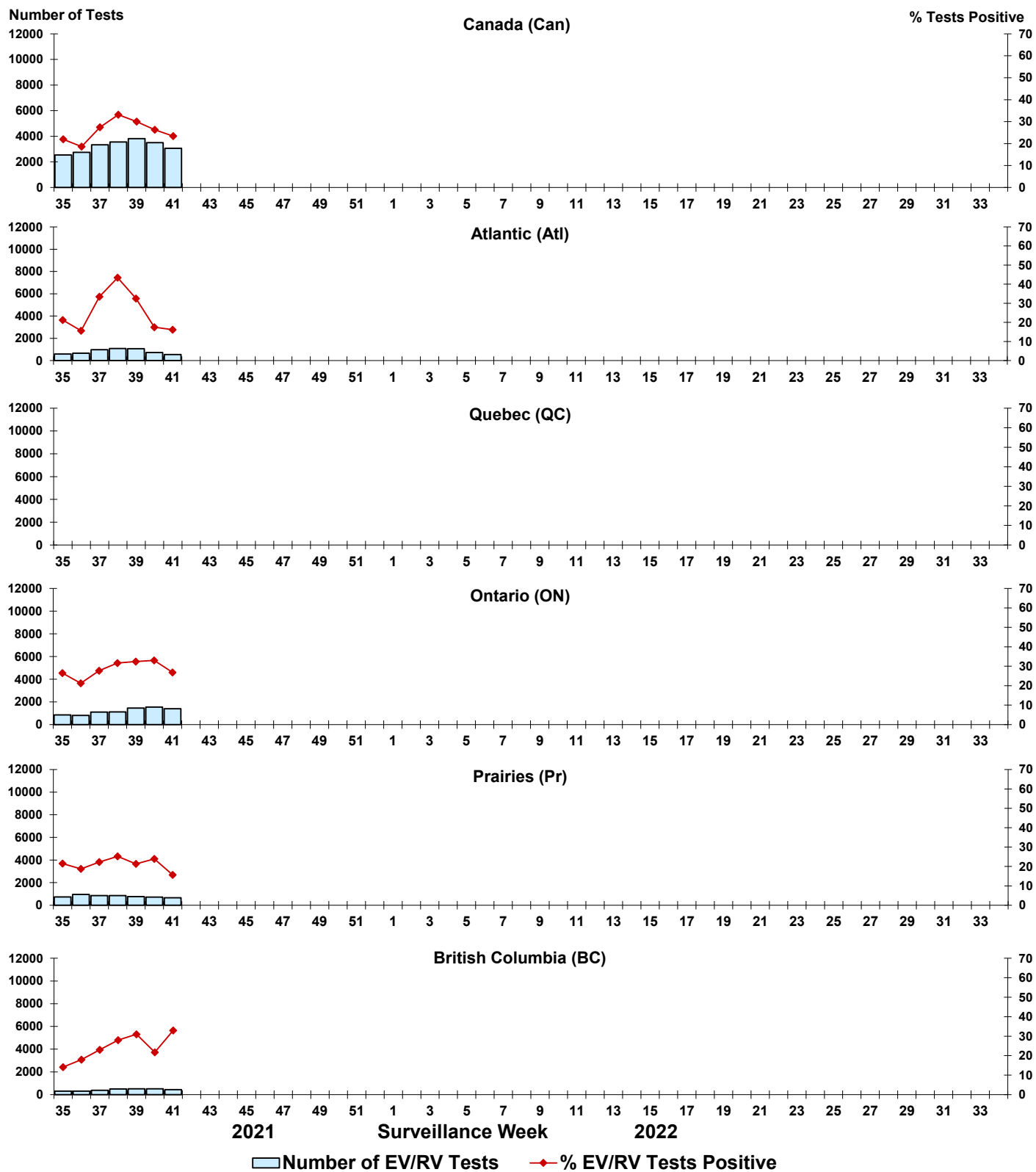


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

