

RESPIRATORY VIRUS DETECTION REPORT

October 24 to October 30, 2021
(Surveillance Week 2021-43)



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 43 (October 24 to October 30, 2021):

- Respiratory syncytial virus (1,007 detections; 9.3% positive), enterovirus/rhinovirus (608 detections; 22.0% positive), and human parainfluenza virus (316 detections; 10.0% 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 within expected levels for this time of year.
 - Activity of human parainfluenza virus remains well above expected levels.
- Detections of other respiratory viruses are low.
- The number of tests performed for all viruses are 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

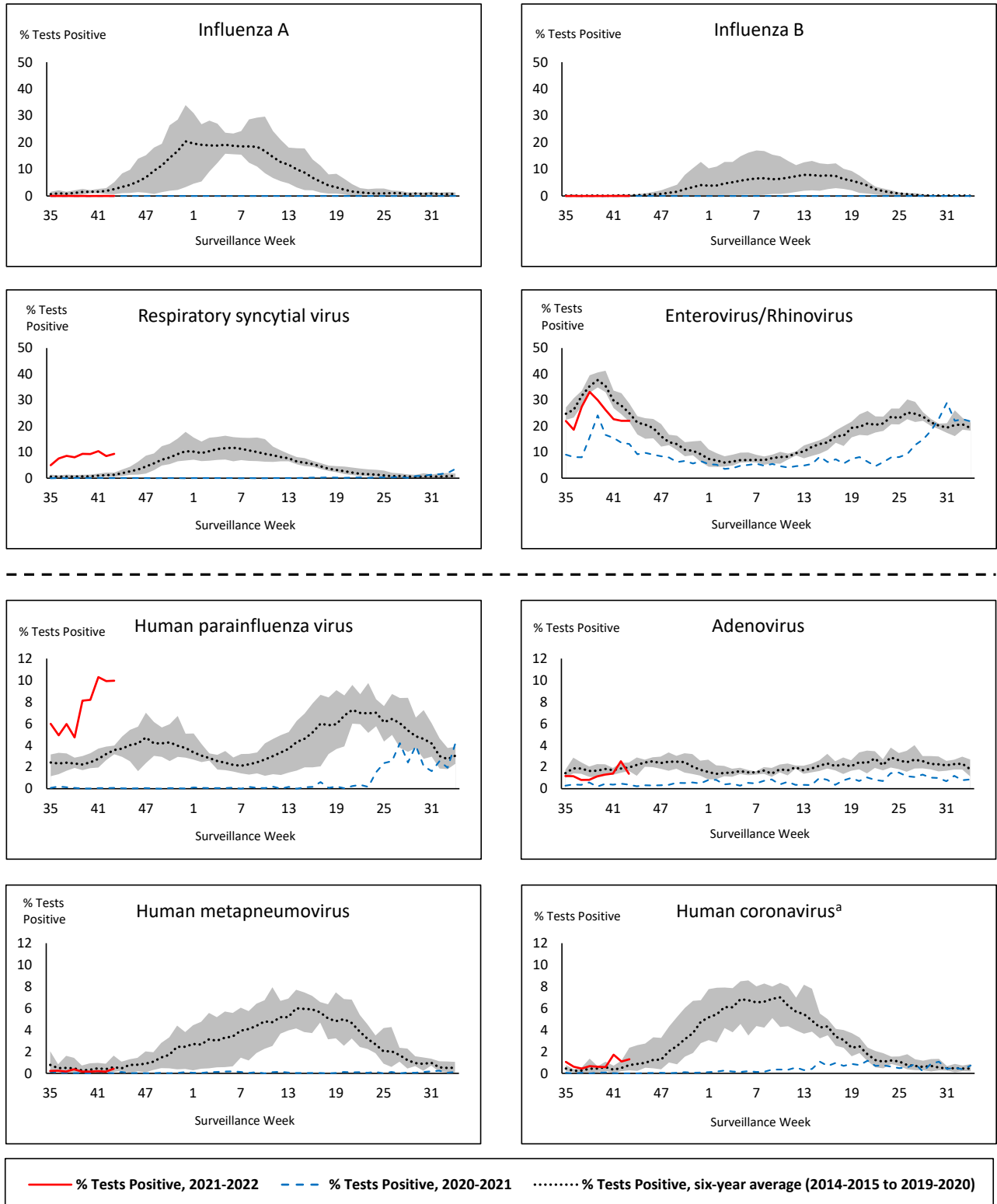
QC: Quebec

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

^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 30, 2021 (surveillance week 2021-43)

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	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.C.	N.C.
Prince Edward Island	74	0	0	0	0	0	74	0	74	0	0	7	0	0	74	0	74	0	74	22	74	3
Nova Scotia	74	0	0	0	0	0	74	1	38	0	0	2	0	0	38	0	38	0	38	3	38	0
New Brunswick	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.
Atlantic	148	0	0	0	0	0	148	1	112	0	0	9	0	0	112	0	112	0	112	25	112	3
Région Nord-Est	472	0	0	0	0	0	359	138	103	0	0	1	0	0	103	1	2	0	N.C.	N.C.	2	0
Québec-Chaudière-Appalaches	336	0	0	0	0	0	392	172	28	0	0	0	0	0	31	2	28	0	N.C.	N.C.	28	1
Centre-du-Québec	146	0	0	0	0	0	205	94	14	0	0	0	0	0	14	0	14	0	N.C.	N.C.	14	0
Montréal-Laval	677	0	0	1	1	0	677	100	269	0	0	3	0	0	269	10	269	11	N.C.	N.C.	269	1
Ouest du Québec	248	0	0	0	0	0	248	112	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Montérégie	115	0	0	0	0	0	115	21	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	1994	0	0	1	1	0	1996	637	414	0	0	4	0	0	417	13	313	11	N.C.	N.C.	313	2
P.H.O.L. - Ottawa	378	0	0	0	0	0	378	117	378	0	0	0	0	39	378	15	378	1	378	133	378	6
EORLA	164	0	0	0	0	0	164	19	31	0	0	3	0	0	31	0	0	0	31	6	0	0
P.H.O.L. - Kingston	40	0	0	0	0	0	40	2	40	0	0	0	0	11	40	0	40	0	40	20	40	0
UHN / Mount Sinai Hospital	436	0	0	0	0	0	436	0	15	0	0	0	0	0	15	0	15	0	15	2	15	0
P.H.O.L. - Toronto	308	0	0	0	0	0	308	16	308	0	0	0	0	22	308	2	308	0	308	60	308	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	9	0	0	0	0	0	9	0	9	0	0	0	0	1	9	0	9	0	9	4	9	0
P.H.O.L. - Timmins	3	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	0	3	1	3	0
St. Joseph's - London	75	0	0	0	0	0	75	8	28	0	0	0	0	3	28	0	28	0	27	13	27	0
P.H.O.L. - London	111	0	0	0	0	0	111	3	111	0	0	0	0	17	111	2	111	0	111	34	111	1
P.H.O.L. - Orillia	36	0	0	0	0	0	36	2	36	0	0	0	0	5	36	1	36	0	36	12	36	0
P.H.O.L. - Thunder Bay	6	0	0	0	0	0	6	0	6	0	0	0	0	0	6	0	6	0	6	1	6	0
P.H.O.L. - Sudbury	6	0	0	0	0	0	6	0	6	0	0	0	0	0	6	0	6	1	6	0	6	0
P.H.O.L. - Hamilton	53	0	0	0	0	0	53	4	53	0	0	0	0	6	53	1	53	0	53	11	53	0
P.H.O.L. - Peterborough	10	0	0	0	0	0	10	0	9	0	0	0	0	0	9	0	9	0	9	2	9	0
St. Joseph's - Hamilton	467	0	0	0	0	0	467	37	467	0	0	61	0	0	467	3	467	0	467	63	0	0
Province of Ontario	2102	0	0	0	0	0	2102	208	1500	0	0	64	0	104	1500	24	1469	2	1499	362	1001	14
Province of Manitoba	1852	0	1	1	2	0	1852	13	29	0	1	3	0	0	29	1	92	0	29	12	29	0
Province of Saskatchewan	930	0	0	0	0	0	930	2	70	0	0	1	1	0	70	0	70	0	70	12	70	0
Province of Alberta	1702	0	0	0	0	0	626	19	626	0	0	48	3	0	626	4	626	0	626	113	626	13
Prairies	4484	0	1	1	2	0	3408	34	725	0	1	52	4	0	725	5	788	0	725	137	725	13
British Columbia	2920	0	0	0	0	2	2920	127	420	0	0	63	4	11	420	2	405	0	405	83	405	1
Yukon	210	0	0	0	1	1	210	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	16	0	0	0	0	0	15	0	3	0	0	0	0	0	3	0	3	0	15	1	3	0
Nunavut	3	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	0	3	0	1	0
Territories	229	0	0	0	1	1	228	0	6	0	0	0	0	0	6	0	6	0	18	1	4	0
CANADA	11877	0	1	2	4	3	10802	1007	3177	0	1	192	8	115	3180	44	3093	13	2759	608	2560	33

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 (BC) 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 BC and YT, 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 October 30, 2021 (surveillance week 2021-35 to 2021-43)

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	4433	0	0	0	0	0	4433	8	4433	0	3	54	0	47	4436	12	4433	1	4433	1402	N.C.	N.C.
Prince Edward Island	721	0	0	0	0	0	721	0	721	0	0	132	0	0	721	10	721	0	721	220	721	10
Nova Scotia	586	0	0	0	0	0	586	4	439	0	2	25	0	0	439	3	439	0	439	47	439	0
New Brunswick	957	0	0	0	0	0	857	3	775	0	0	18	0	0	768	0	775	0	775	14	684	0
Atlantic	6697	0	0	0	0	0	6597	15	6368	0	5	229	0	47	6364	25	6368	1	6368	1683	1844	10
Région Nord-Est	4155	0	0	0	0	0	2159	833	395	0	0	5	0	0	395	10	11	0	N.C.	N.C.	294	2
Québec-Chaudière-Appalaches	870	0	0	0	0	2	1363	588	239	0	0	4	0	0	240	8	159	0	N.C.	N.C.	161	1
Centre-du-Québec	890	0	0	0	0	0	1255	644	181	0	0	9	0	0	181	4	181	0	N.C.	N.C.	174	0
Montréal-Laval	5745	0	0	2	2	3	5750	2007	1578	1	0	13	0	0	1578	94	1578	29	N.C.	N.C.	1578	4
Ouest du Québec	1316	0	0	0	0	0	1284	581	4	0	0	0	0	0	0	0	3	0	N.C.	N.C.	3	0
Montérégie	765	0	0	0	0	0	765	288	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	13741	0	0	2	2	5	12576	4941	2397	1	0	31	0	0	2394	116	1932	29	N.C.	N.C.	2210	7
P.H.O.L. - Ottawa	3441	1	1	0	2	0	3441	746	3441	0	0	0	0	441	3441	122	3440	14	3441	1388	3440	58
EORLA	1180	0	0	0	0	0	1155	132	232	0	0	9	0	0	232	1	1	0	232	51	25	1
P.H.O.L. - Kingston	405	0	0	0	0	0	405	12	404	0	0	0	0	105	404	6	403	1	404	164	403	7
UHN / Mount Sinai Hospital	3712	0	0	1	1	0	3712	6	138	0	0	0	0	0	138	0	138	0	138	7	138	0
P.H.O.L. - Toronto	2161	0	1	0	1	0	2160	50	2160	0	0	0	0	150	2161	13	2160	2	2160	414	2161	21
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	35	0	0	0	0	0	35	0	35	0	0	0	0	1	35	0	35	0	35	12	35	0
P.H.O.L. - Timmins	58	0	0	0	0	0	58	2	58	0	0	0	0	4	58	0	58	0	58	10	58	0
St. Joseph's - London	351	0	0	0	0	0	351	17	301	0	0	7	0	41	301	8	301	1	304	73	303	0
P.H.O.L. - London	550	0	0	0	0	0	550	8	550	0	0	0	0	80	550	7	550	0	550	165	550	2
P.H.O.L. - Orillia	142	0	0	0	0	0	142	5	142	0	0	0	0	18	142	3	140	1	142	51	140	0
P.H.O.L. - Thunder Bay	64	0	0	0	0	0	64	0	64	0	0	0	0	0	64	0	64	0	64	30	64	0
P.H.O.L. - Sudbury	123	0	0	0	0	0	123	0	123	0	0	0	0	2	123	0	123	1	123	22	123	0
P.H.O.L. - Hamilton	295	0	1	0	1	0	292	5	292	0	0	0	0	27	292	3	292	4	292	86	292	0
P.H.O.L. - Peterborough	140	0	0	0	0	0	140	6	139	0	0	0	0	5	139	1	138	0	139	29	138	0
St. Joseph's - Hamilton	3048	0	0	0	0	0	3042	113	3042	0	0	440	0	0	3042	16	3042	3	3042	608	0	0
Province of Ontario	15927	1	3	1	5	0	15670	1102	11343	0	0	473	0	874	11344	181	11107	28	11346	3169	8092	89
Manitoba	14323	1	1	2	4	0	14323	50	235	1	1	11	0	0	235	5	733	2	235	101	618	2
Province of Saskatchewan	3087	0	0	0	0	0	3059	12	698	0	0	16	3	0	698	9	698	0	698	155	697	0
Province of Alberta	15888	0	1	2	3	0	6177	81	6177	0	3	273	25	0	6177	42	6177	1	6177	1239	6177	93
Prairies	33298	1	2	4	7	0	23559	143	7110	1	4	300	28	0	7110	56	7608	3	7110	1495	7492	95
British Columbia	14830	0	1	2	4	3	14830	317	4028	0	0	342	25	38	4028	32	4009	11	3949	954	3945	13
Yukon	1964	0	0	1	2	2	2036	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	162	0	0	0	0	0	150	0	29	0	0	0	0	0	29	2	29	0	149	22	29	0
Nunavut	11	0	0	0	0	0	9	0	9	0	0	0	0	0	9	0	9	0	9	4	6	0
Territories	2137	0	0	1	2	2	2195	3	38	0	0	0	0	0	38	2	38	0	158	26	35	0
CANADA	86630	2	6	10	20	10	75427	6521	31284	2	9	1375	53	959	31278	412	31062	72	28931	7327	23618	214

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.

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 (BC) 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 BC and YT, 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

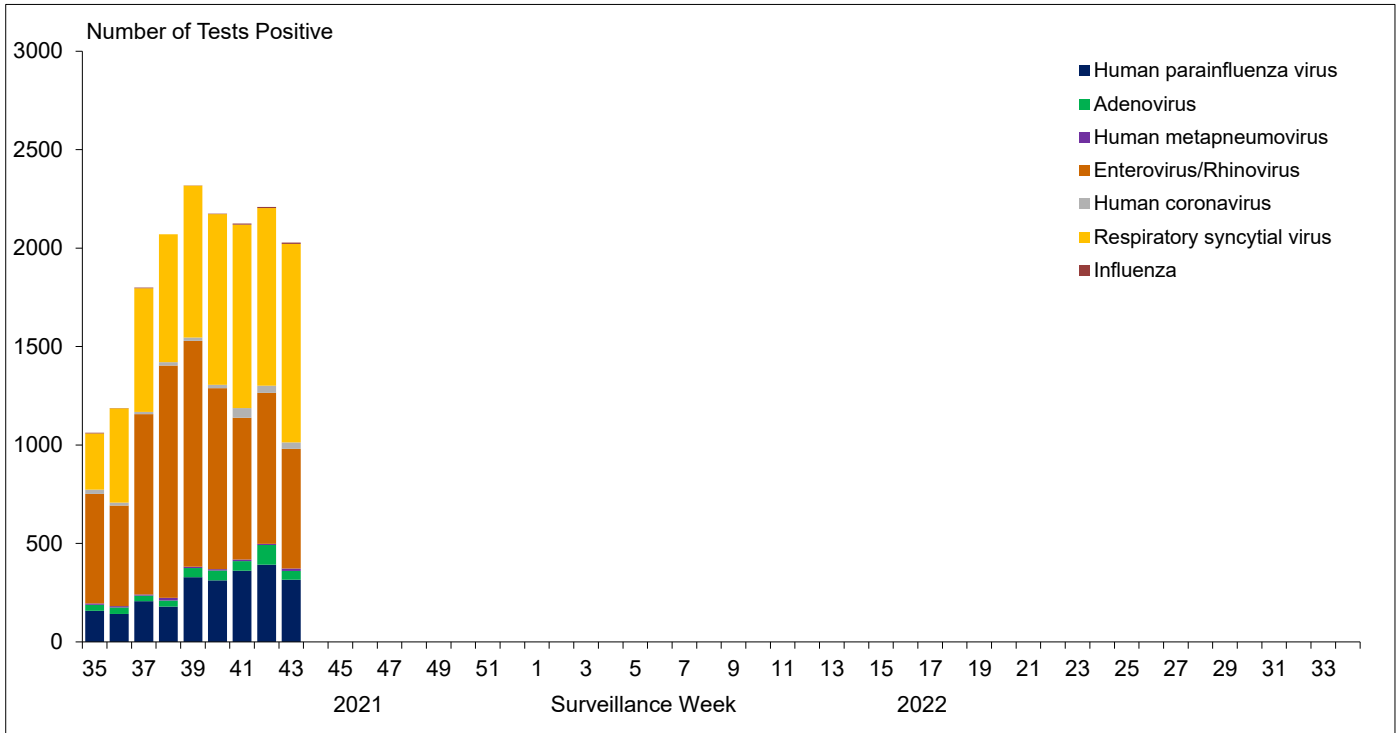


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

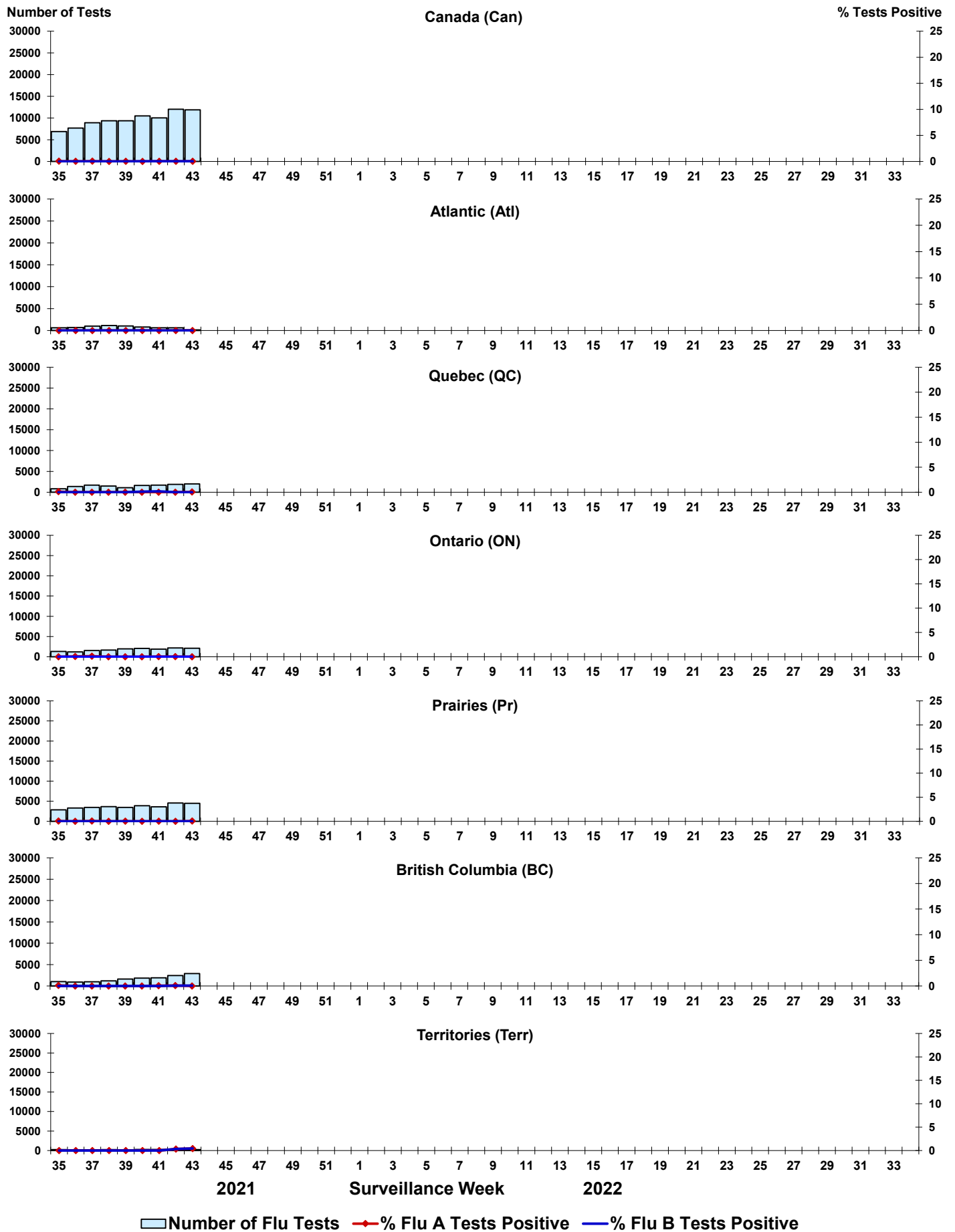
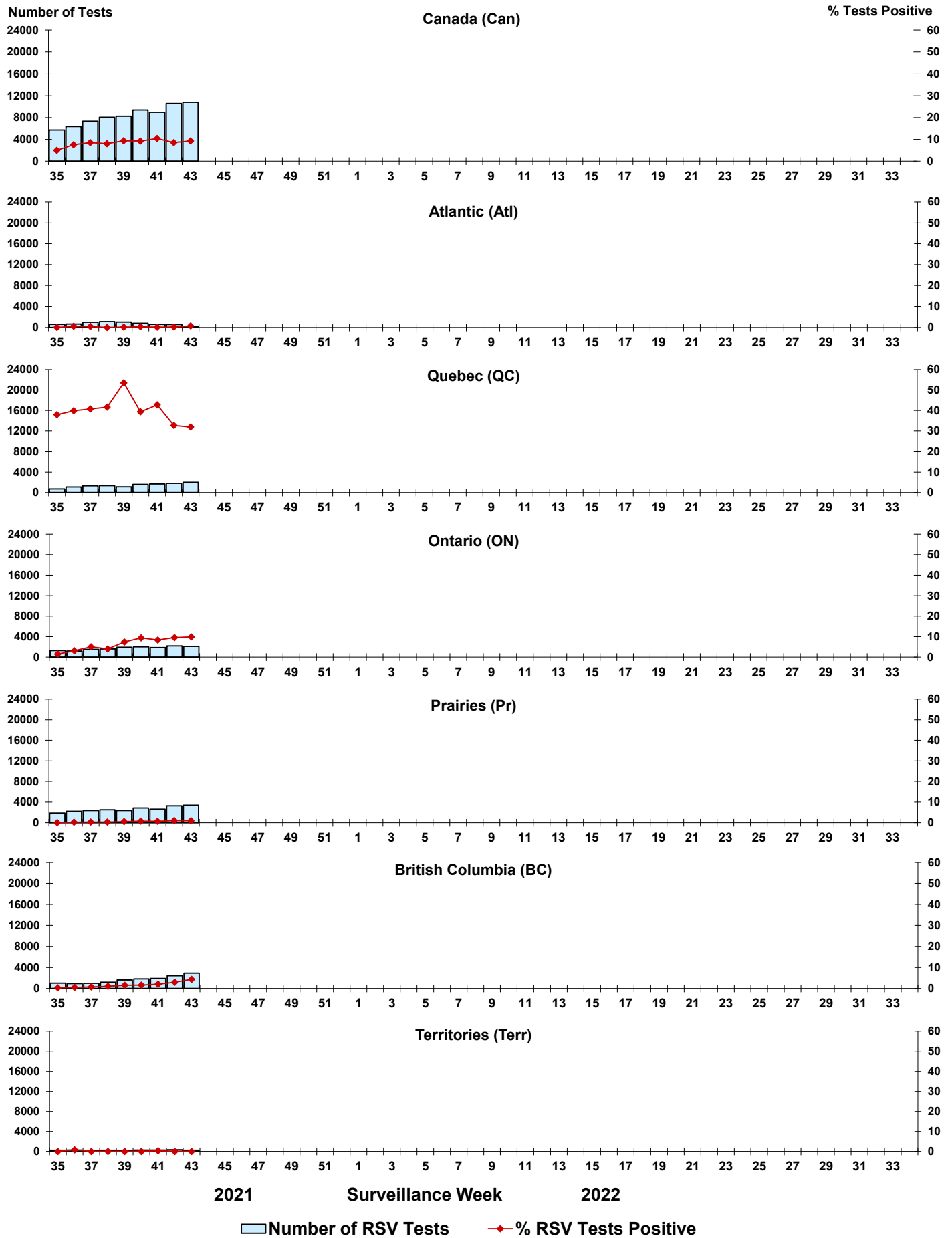


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week



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

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

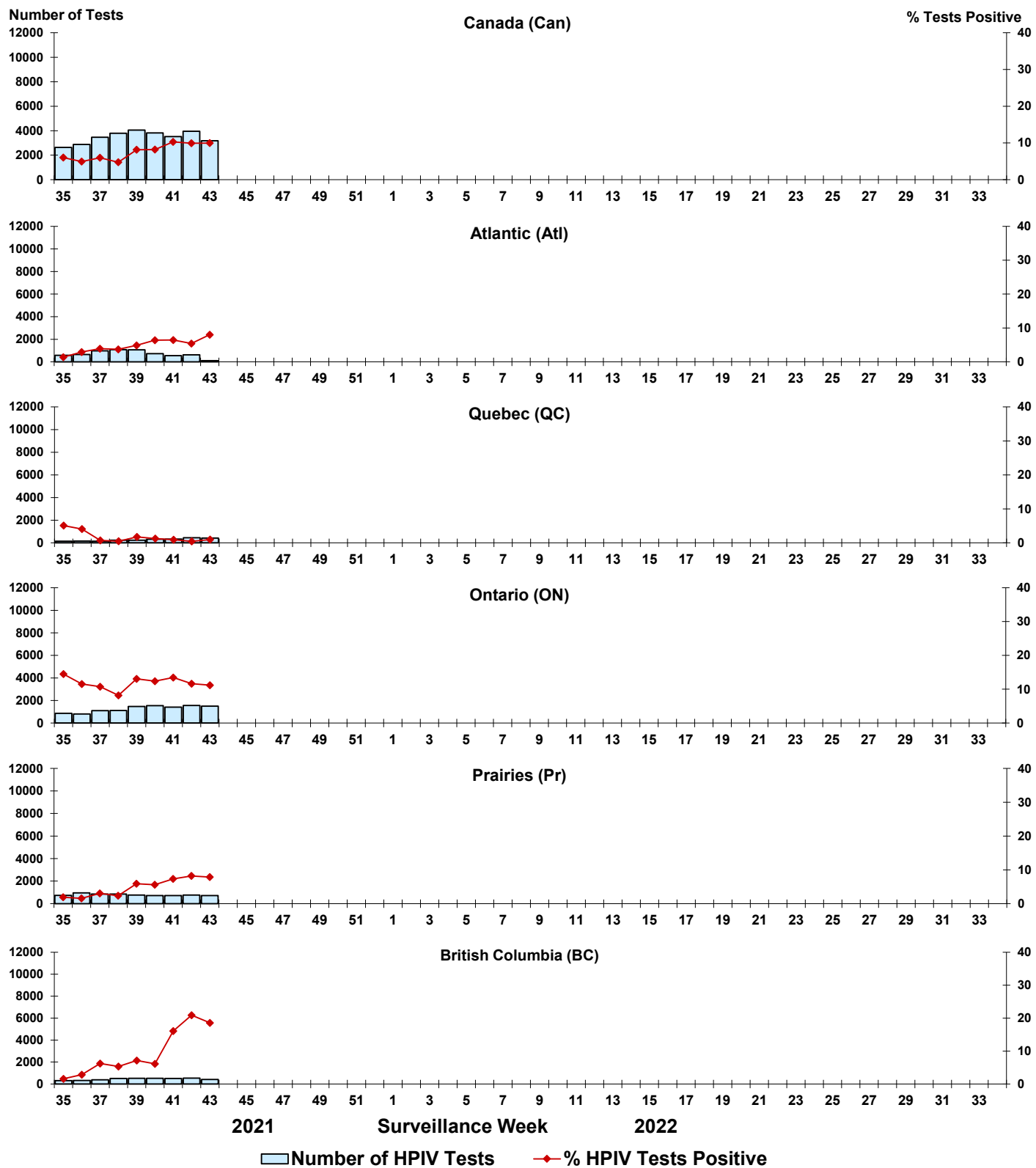


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

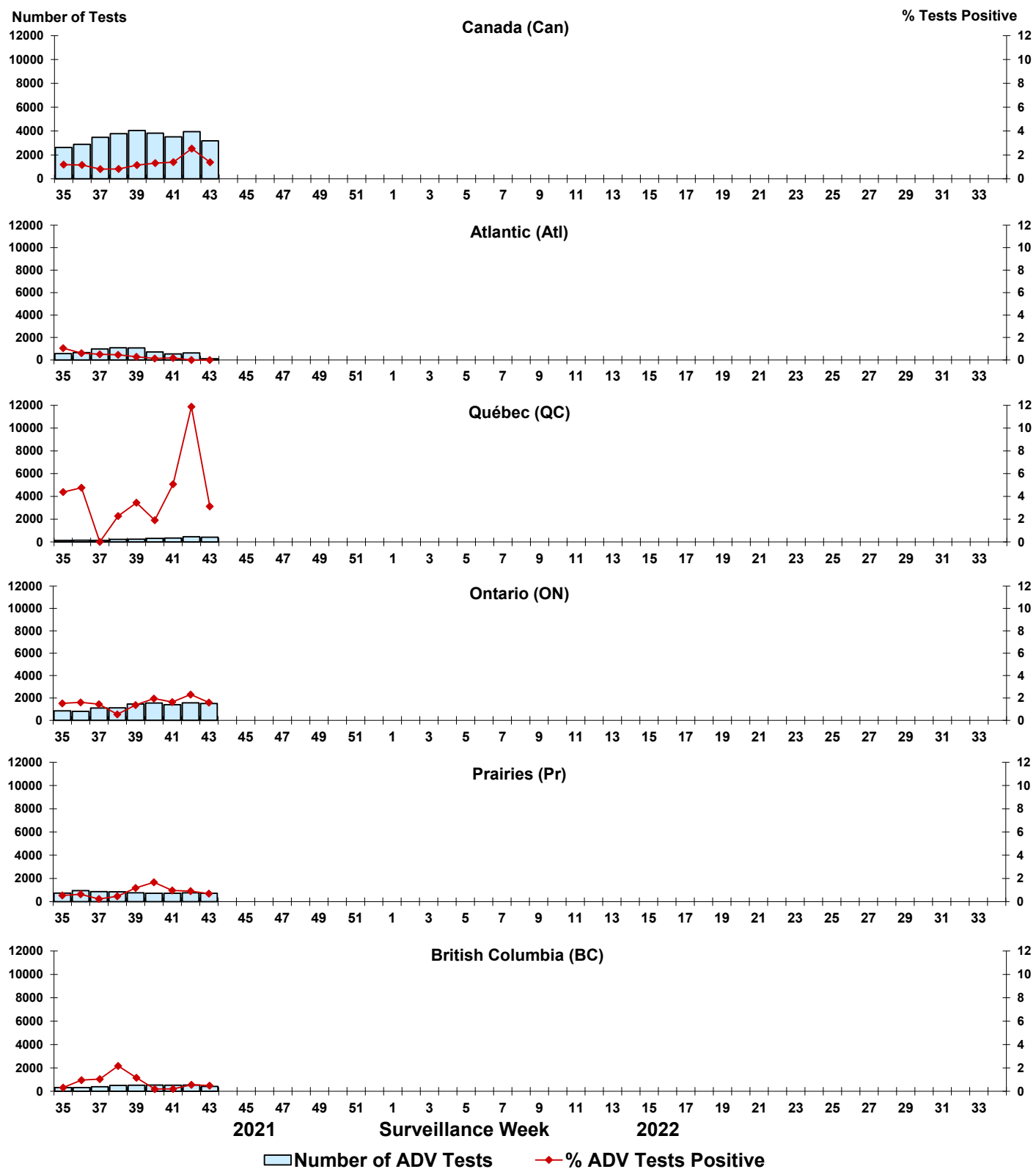


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

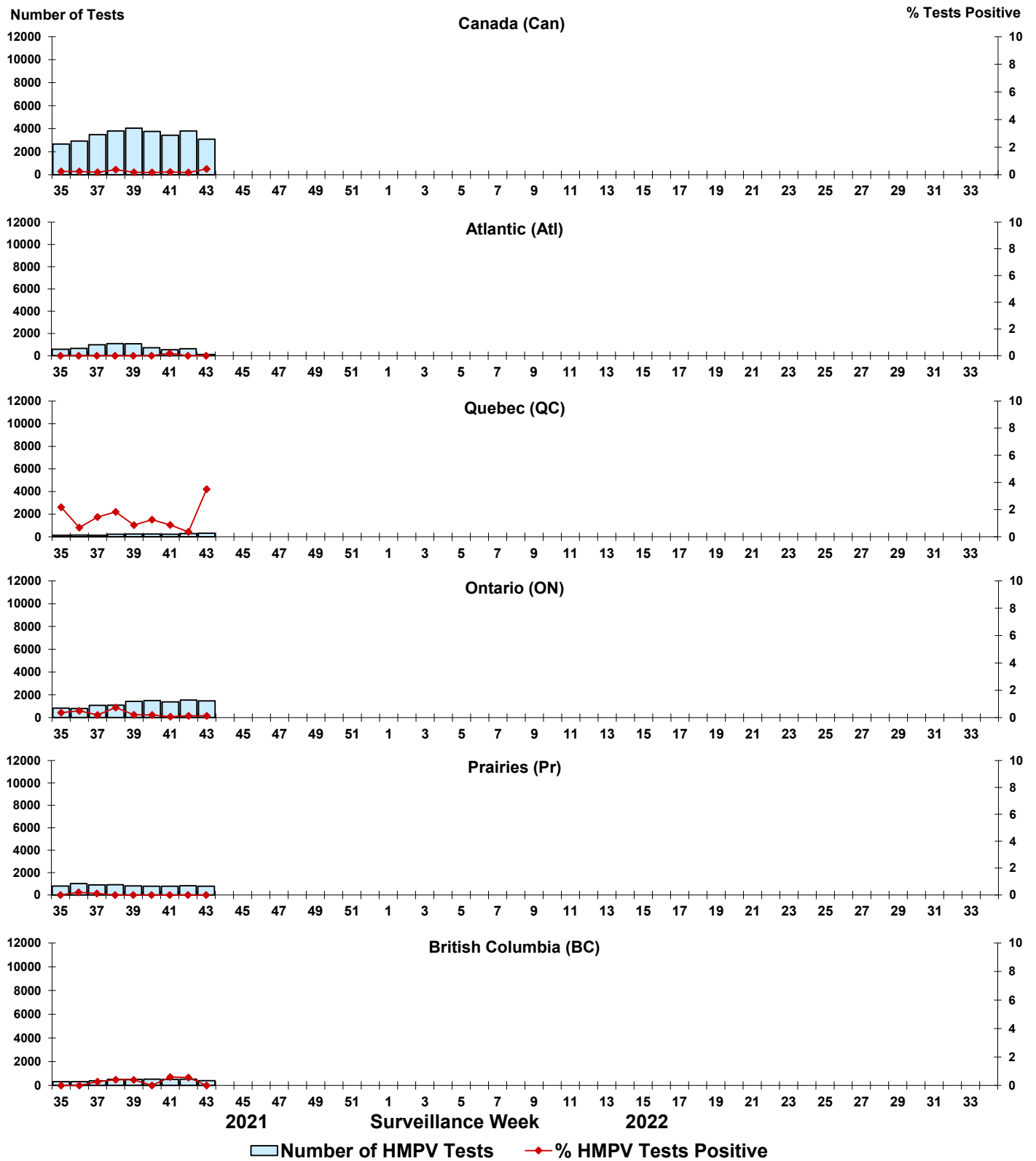


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

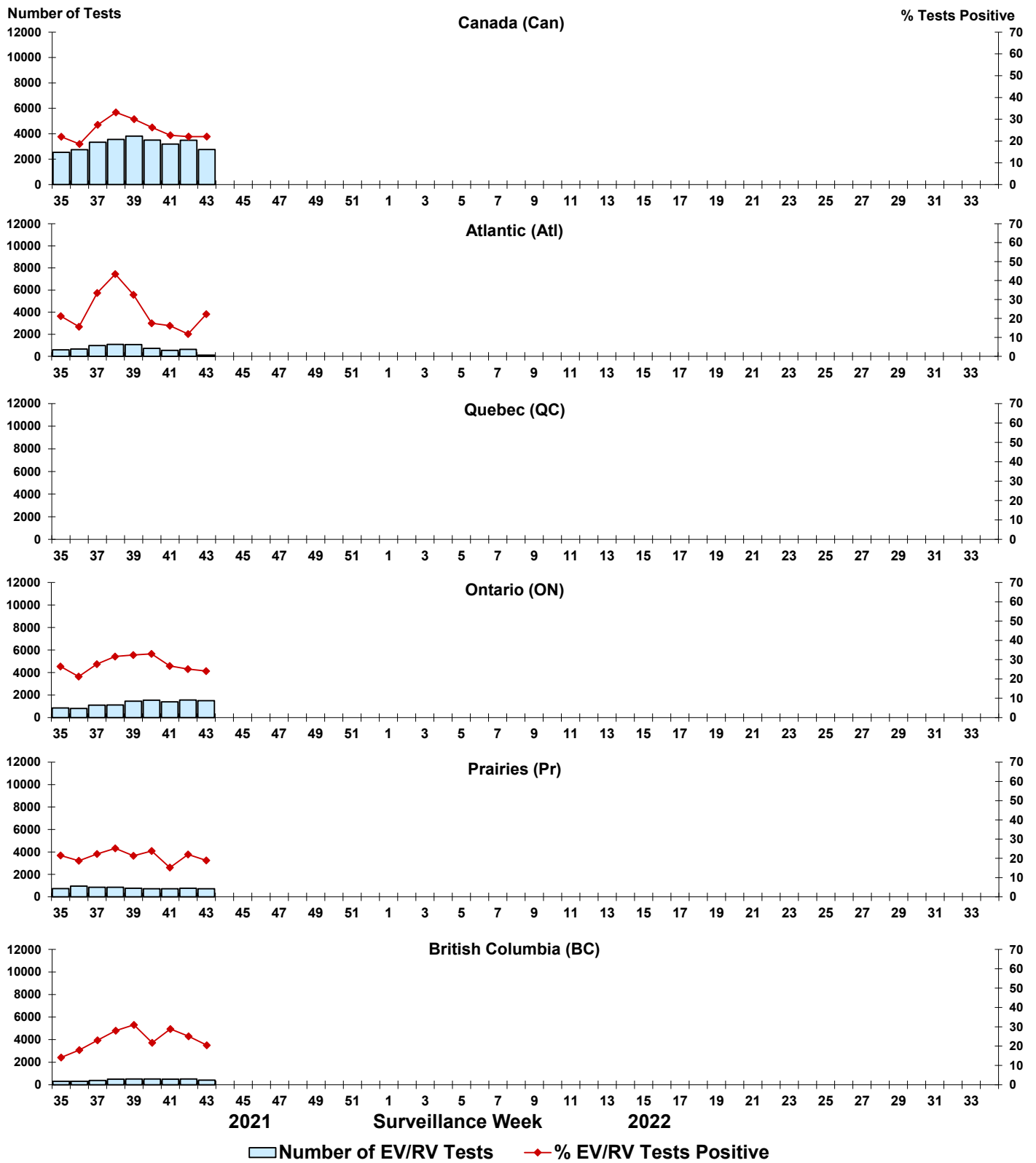


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

