

RESPIRATORY VIRUS DETECTION REPORT

October 9 to October 15, 2022
(Surveillance Week 2022-41)



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

Respiratory virus activity is increasing in Canada, but is within expected levels for most viruses.

- Enterovirus/Rhinovirus remains the most common seasonal respiratory virus detected in Canada (808 detections; 16.6% positive), but activity has decreased and remains far below expected levels for this time of year.
- Overall activity of influenza A and respiratory syncytial virus is low, but has increased in recent weeks.
 - Influenza A activity (238 detections; 1.6% positive) is within expected levels for this time of year.
 - Respiratory syncytial virus activity (486 detections; 3.5% positive) is above expected levels for this time of year.
- Activity of other respiratory viruses is low and stable.
- 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

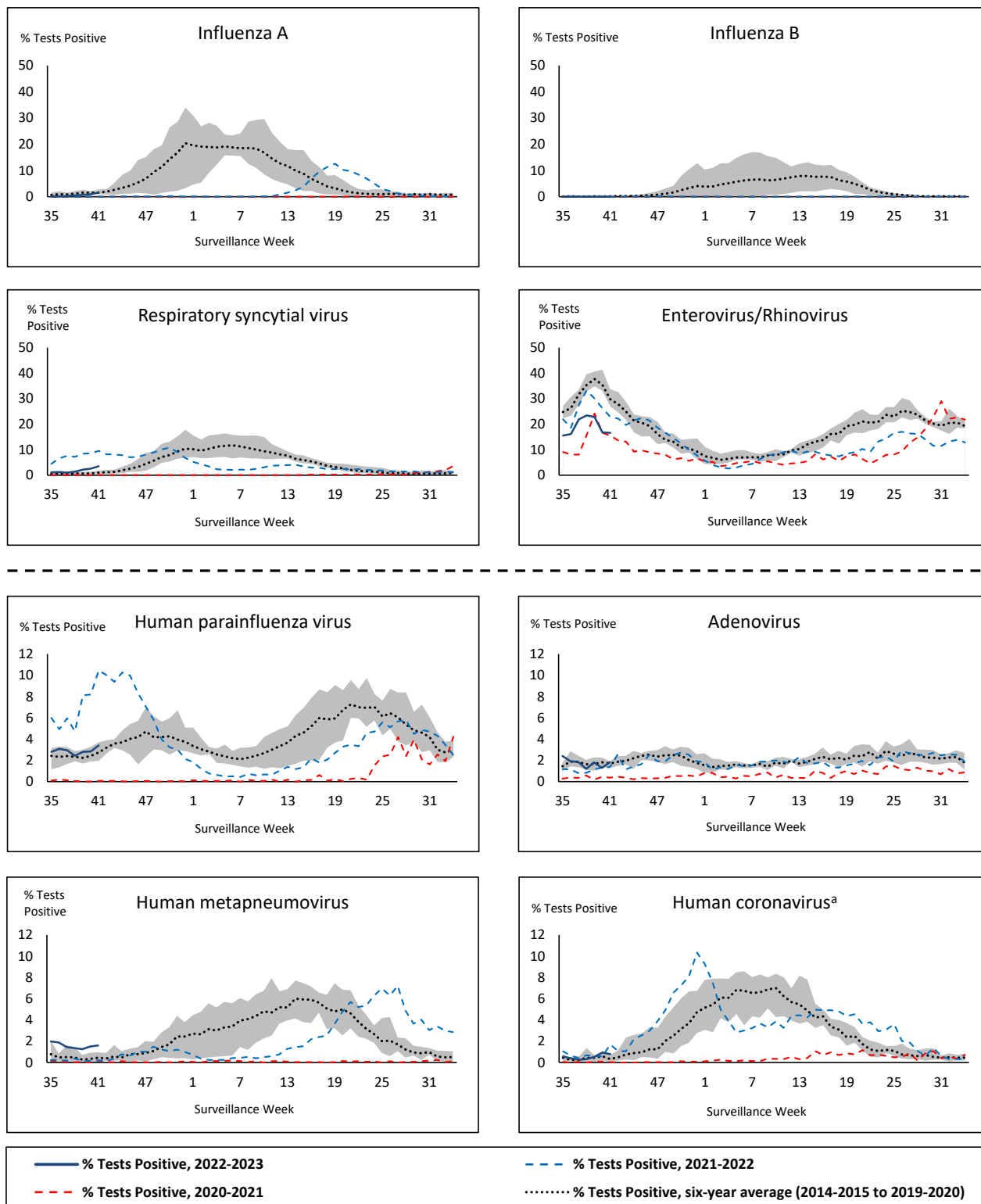
QC: Quebec

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 15, 2022 (surveillance week 2022-41)

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	141	0	0	0	0	0	141	9	141	0	1	1	0	0	141	0	141	3	141	21	141	0
Prince Edward Island	33	0	0	0	0	0	33	0	33	0	1	1	0	0	33	3	33	2	33	15	33	0
Nova Scotia	225	0	2	5	7	0	225	9	52	0	2	3	0	0	52	2	52	0	52	15	52	1
New Brunswick	377	0	0	6	6	0	296	6	39	0	2	3	0	0	39	5	39	0	39	15	39	0
Atlantic	776	0	2	11	13	0	695	24	265	0	6	8	0	0	265	10	265	5	265	66	265	1
Région Nord-Est	478	0	0	0	0	0	104	5	4	0	0	0	0	0	4	0	4	0	N.C.	N.C.	4	0
Québec-Chaudière-Appalaches	494	0	0	1	1	0	501	46	31	2	1	1	0	0	290	13	290	11	N.C.	N.C.	174	1
Centre-du-Québec	387	0	0	4	4	6	345	46	167	0	0	0	0	0	167	0	167	2	N.C.	N.C.	167	0
Montréal-Laval	979	0	0	9	9	0	894	93	412	11	0	8	0	0	412	21	412	38	N.C.	N.C.	484	0
Ouest du Québec	269	0	0	1	1	0	269	46	9	1	0	0	0	0	9	2	9	1	N.C.	N.C.	9	0
Montérégie	405	0	0	3	3	1	405	42	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	3012	0	0	18	18	7	2518	278	623	14	1	9	0	0	882	36	882	52	N.C.	N.C.	838	1
P.H.O.L. - Ottawa	47	0	1	0	1	0	47	1	47	0	0	0	0	2	47	0	47	0	47	10	47	0
EORLA	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. - Kingston	81	0	0	0	0	0	81	2	81	0	0	0	0	4	81	2	81	1	81	12	81	1
UHN / Mount Sinai Hospital	505	0	1	4	5	0	505	3	27	0	0	0	0	0	27	0	27	0	27	2	27	0
P.H.O.L. - Toronto	361	5	25	0	6	0	361	3	361	0	0	0	0	13	361	6	361	3	361	52	361	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.
Shared Hospital Laboratory	2852	1	8	34	43	0	2852	51	850	0	0	2	0	13	852	3	852	1	853	27	836	2
P.H.O.L. - Sault Ste. Marie	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. - Timmins	6	0	0	0	0	0	6	0	6	0	0	0	0	2	6	0	6	0	6	1	6	0
St. Joseph's - London	75	0	0	0	0	0	75	3	75	0	0	0	0	1	75	2	75	0	75	13	5	0
P.H.O.L. - London	176	0	1	0	1	0	176	8	176	0	0	0	0	6	176	0	176	0	176	25	176	1
P.H.O.L. - Orillia	70	0	3	0	3	0	70	2	70	0	0	0	0	6	70	1	70	1	70	13	70	2
P.H.O.L. - Thunder Bay	10	0	1	0	1	0	10	0	10	0	0	0	0	0	10	0	10	0	10	4	10	0
P.H.O.L. - Sudbury	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. - Hamilton	122	0	1	0	1	0	122	4	122	0	0	0	0	4	122	2	122	1	122	21	122	0
P.H.O.L. - Peterborough	36	0	3	0	3	0	36	0	36	0	0	0	0	2	36	0	36	0	36	9	36	2
St. Joseph's - Hamilton	987	0	0	53	53	0	987	35	987	0	0	33	0	0	987	1	987	2	987	128	0	0
Province of Ontario	5332	6	44	91	117	0	5332	112	2852	0	0	35	0	53	2854	17	2854	9	2855	317	1781	8
Manitoba	656	0	0	3	3	0	656	7	147	0	0	1	0	0	147	5	181	6	147	46	181	0
Saskatchewan	559	0	0	2	2	1	409	2	209	0	2	9	1	0	209	4	209	5	209	56	209	1
Alberta	2125	4	18	5	27	0	1863	29	901	8	4	17	0	0	901	18	898	6	887	153	901	24
Prairies	3340	4	18	10	32	1	2928	38	1257	8	6	27	1	0	1257	27	1288	17	1243	255	1291	25
British Columbia	2539	4	10	2	45	0	2283	32	470	3	7	7	1	0	470	14	470	10	450	144	450	2
Yukon	5	0	0	0	0	0	5	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	49	0	0	0	0	0	49	1	0	0	0	0	0	0	0	0	0	0	49	26	0	0
Nunavut	71	0	13	0	13	0	71	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.
Territories	125	0	13	0	13	0	125	2	0	0	0	0	0	0	0	0	0	0	49	26	0	0
CANADA	15124	14	87	132	238	8	13881	486	5467	25	20	86	2	53	5728	104	5759	93	4862	808	4625	37

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.

Specimens from Yukon (YT) are sent to reference laboratories in British Columbia and reported results reflect specimens identified as originating from YT.

Results from British Columbia comprise of specimens from the following sites: Children's and Women's Hospital Laboratory, Fraser Health Medical Microbiology Laboratory, Island Health, Providence Health Care, Vancouver Coastal Health sites, Victoria General Hospital, BCCDC Public Health Laboratory, Interior Health Authority sites and Northern Health Authority sites.

Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts. Total influenza A and B positive counts are used to calculate percentage of tests positive.

Delays in the reporting of data may cause data to change retrospectively.

Table 2: Cumulative respiratory virus detections from August 28, 2022 to October 15, 2022 (surveillance weeks 2022-35 to 2022-41)

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	1154	0	1	0	1	0	1154	36	1154	2	3	8	3	0	1154	12	1154	32	1154	162	1154	0
Prince Edward Island	263	0	0	0	0	0	263	5	263	0	3	12	0	0	263	20	263	3	263	147	263	1
Nova Scotia	1726	0	2	9	11	1	1725	33	306	0	3	4	1	0	306	11	306	0	306	81	306	1
New Brunswick	2619	0	1	7	8	1	1831	19	335	0	4	21	1	0	335	33	335	1	335	111	335	7
Atlantic	5762	0	4	16	20	2	4973	93	2058	2	13	45	5	0	2058	76	2058	36	2058	501	2058	9
Région Nord-Est	4093	0	0	2	2	1	942	24	37	1	1	0	0	0	36	2	36	0	N.C.	N.C.	27	1
Québec-Chaudière-Appalaches	2860	0	0	5	5	1	2790	137	224	5	3	7	1	0	1776	36	1764	46	N.C.	N.C.	985	6
Centre-du-Québec	1929	0	0	6	6	8	1729	116	623	4	0	2	0	0	623	8	623	15	N.C.	N.C.	623	1
Montréal-Laval	5892	0	0	21	21	4	5526	344	2684	34	5	30	1	0	2684	91	2684	147	N.C.	N.C.	2722	6
Ouest du Québec	1755	0	0	5	5	0	1679	141	111	3	0	2	1	0	120	13	111	4	N.C.	N.C.	111	3
Montérégie	2743	0	0	7	7	2	2526	156	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	19272	0	0	46	46	16	15192	918	3679	47	9	41	3	0	5239	150	5218	212	N.C.	N.C.	4468	17
P.H.O.L. - Ottawa	257	0	1	0	1	0	257	2	257	0	0	0	0	3	257	0	257	3	257	27	257	0
EORLA	1149	0	0	5	5	0	1149	30	198	3	0	3	1	0	198	5	198	4	198	74	198	1
P.H.O.L. - Kingston	321	0	0	0	0	0	321	11	321	0	0	0	0	10	321	8	321	2	321	64	321	1
UHN / Mount Sinai Hospital	3016	0	1	16	17	1	3016	13	108	0	0	0	0	0	108	1	108	0	108	3	108	5
P.H.O.L. - Toronto	2048	18	82	1	21	0	2047	22	2047	0	0	0	0	93	2048	30	2045	15	2047	321	2045	8
Sick Kids Hospital - Toronto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shared Hospital Laboratory	20425	1	8	108	117	0	20425	164	1674	3	0	13	0	18	1685	10	1686	1	1660	88	1542	3
P.H.O.L. - Sault Ste. Marie	36	0	0	0	0	0	36	0	36	0	0	0	0	0	36	0	36	0	36	6	36	0
P.H.O.L. - Timmins	62	0	0	0	0	0	62	0	62	0	0	0	0	2	62	0	62	0	62	19	62	1
St. Joseph's - London	406	0	0	0	0	0	406	13	372	0	0	0	0	7	406	7	406	0	406	85	30	0
P.H.O.L. - London	714	1	6	0	7	0	714	18	714	0	0	0	0	25	714	11	714	2	714	144	714	3
P.H.O.L. - Orillia	240	0	4	1	5	0	240	5	240	0	0	0	0	16	240	4	240	5	240	69	240	2
P.H.O.L. - Thunder Bay	59	0	1	0	1	0	59	0	59	0	0	0	0	1	59	1	59	0	59	29	59	1
P.H.O.L. - Sudbury	45	0	0	0	0	0	45	0	45	0	0	0	0	2	45	1	45	0	45	8	45	0
P.H.O.L. - Hamilton	518	0	3	0	3	2	518	17	518	0	0	0	0	21	518	6	518	2	518	97	518	1
P.H.O.L. - Peterborough	153	0	3	0	3	0	153	7	153	0	0	0	0	10	153	3	153	1	153	54	153	2
St. Joseph's - Hamilton	5188	0	0	76	76	3	5188	127	5188	0	0	149	0	0	5188	1	5188	26	5188	785	0	0
Province of Ontario	34637	20	109	207	256	6	34636	429	11992	6	0	165	1	208	12038	88	12036	61	12012	1873	6328	28
Manitoba	3641	0	0	5	5	0	3641	24	1492	0	2	10	0	0	1492	32	1063	31	1492	247	1063	2
Saskatchewan	3362	0	0	5	5	1	3106	8	1366	1	7	45	6	0	1368	43	1370	48	1368	254	1366	6
Alberta	13488	21	62	16	99	5	11953	96	6073	24	19	92	7	0	6072	81	6068	35	5956	1154	6073	64
Prairies	20491	21	62	26	109	6	18700	128	8931	25	28	147	13	0	8932	156	8501	114	8816	1655	8502	72
British Columbia	15914	34	66	6	162	3	14901	107	3477	8	31	57	18	6	3477	72	3477	62	3389	906	3389	17
Yukon	42	0	0	0	0	0	42	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	249	0	0	0	0	0	249	8	0	0	0	0	0	0	0	0	0	0	249	117	0	0
Nunavut	545	3	23	0	26	0	545	17	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.
Territories	836	3	23	0	26	0	836	25	0	0	0	0	0	0	0	0	0	0	249	117	0	0
CANADA	96912	78	264	301	619	33	89238	1700	30137	88	81	455	40	214	31744	542	31290	485	26524	5052	24745	143

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Due to different testing protocols of laboratories across Canada, influenza A subtype detection counts may not be included in total influenza A detection counts. Total influenza A and B positive counts are used to calculate percentage of tests positive.

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.

Figure 2: Number of positive respiratory virus tests reported by participating laboratories in Canada by surveillance week

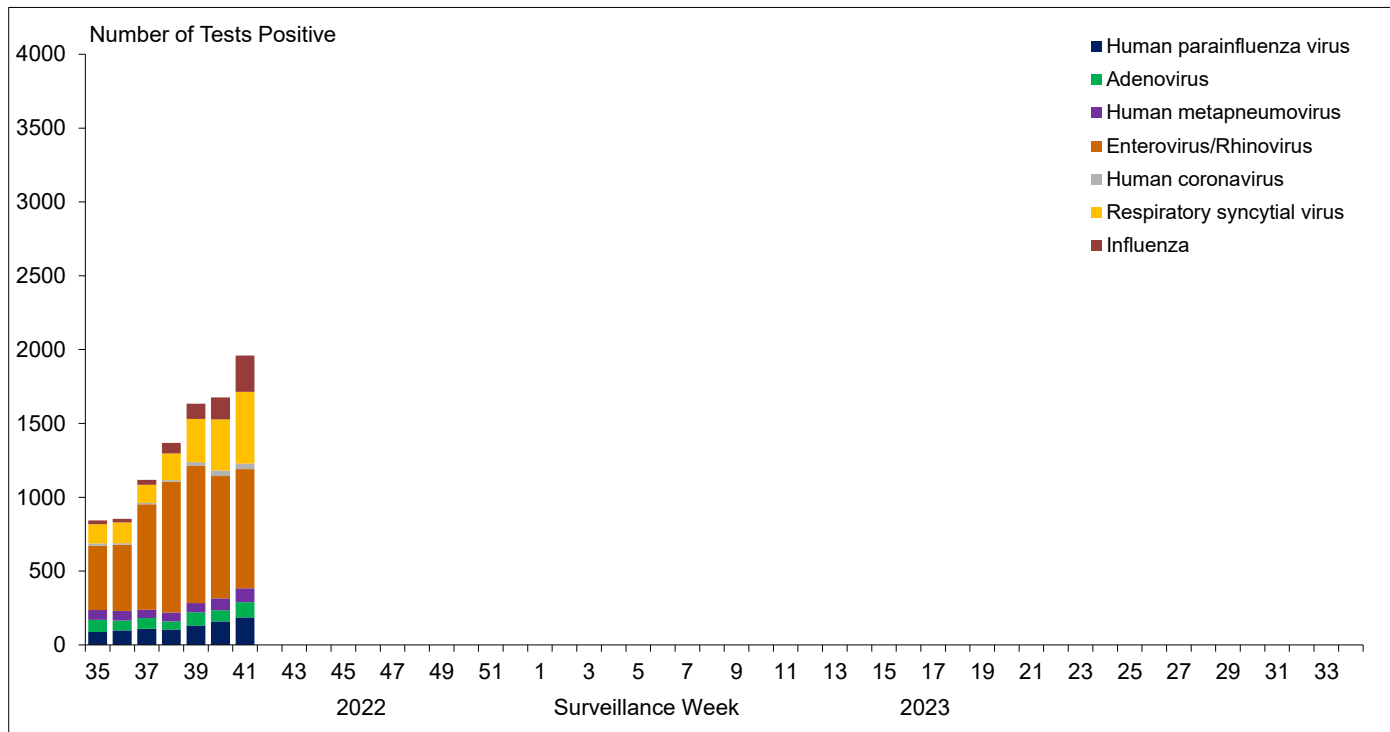


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

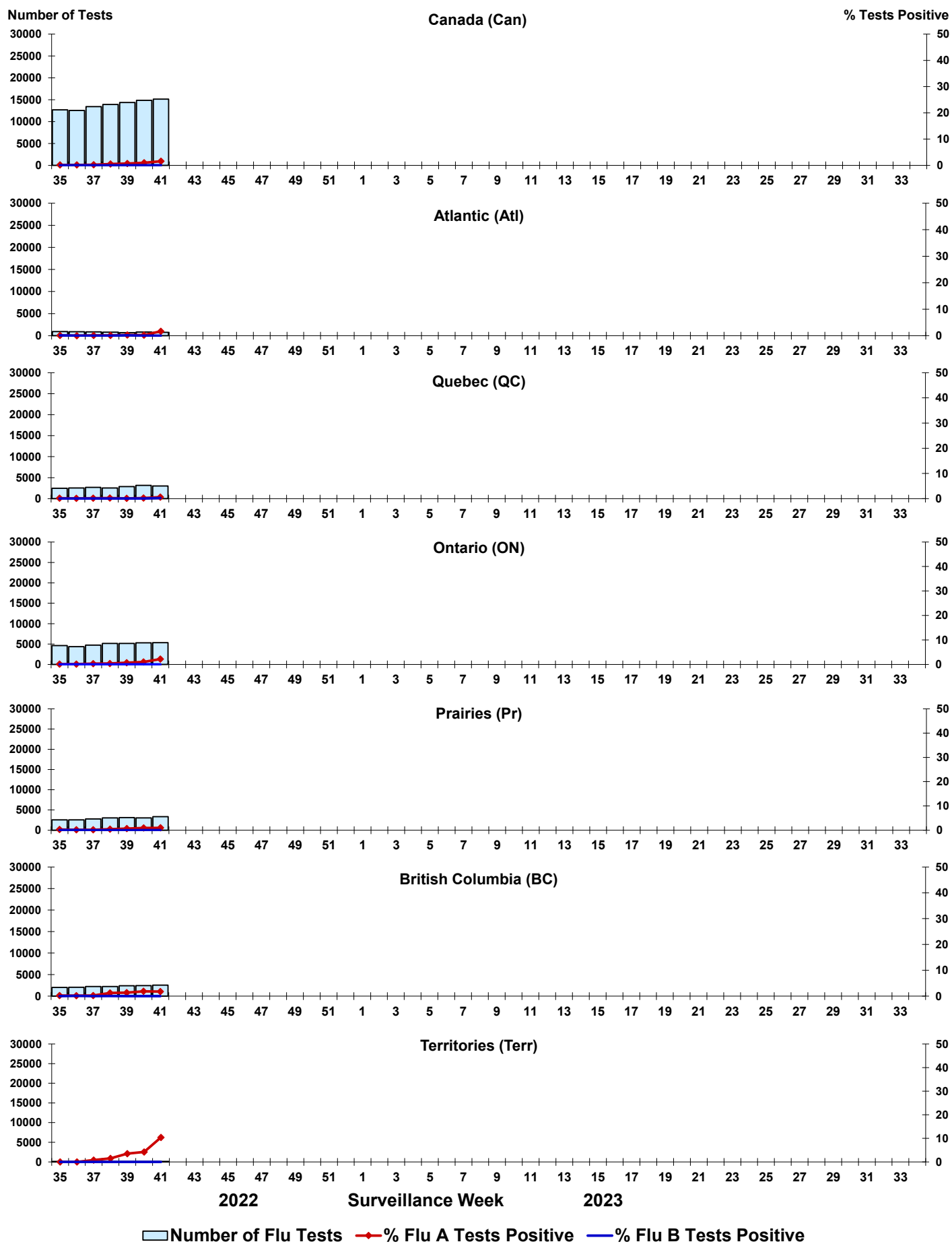


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

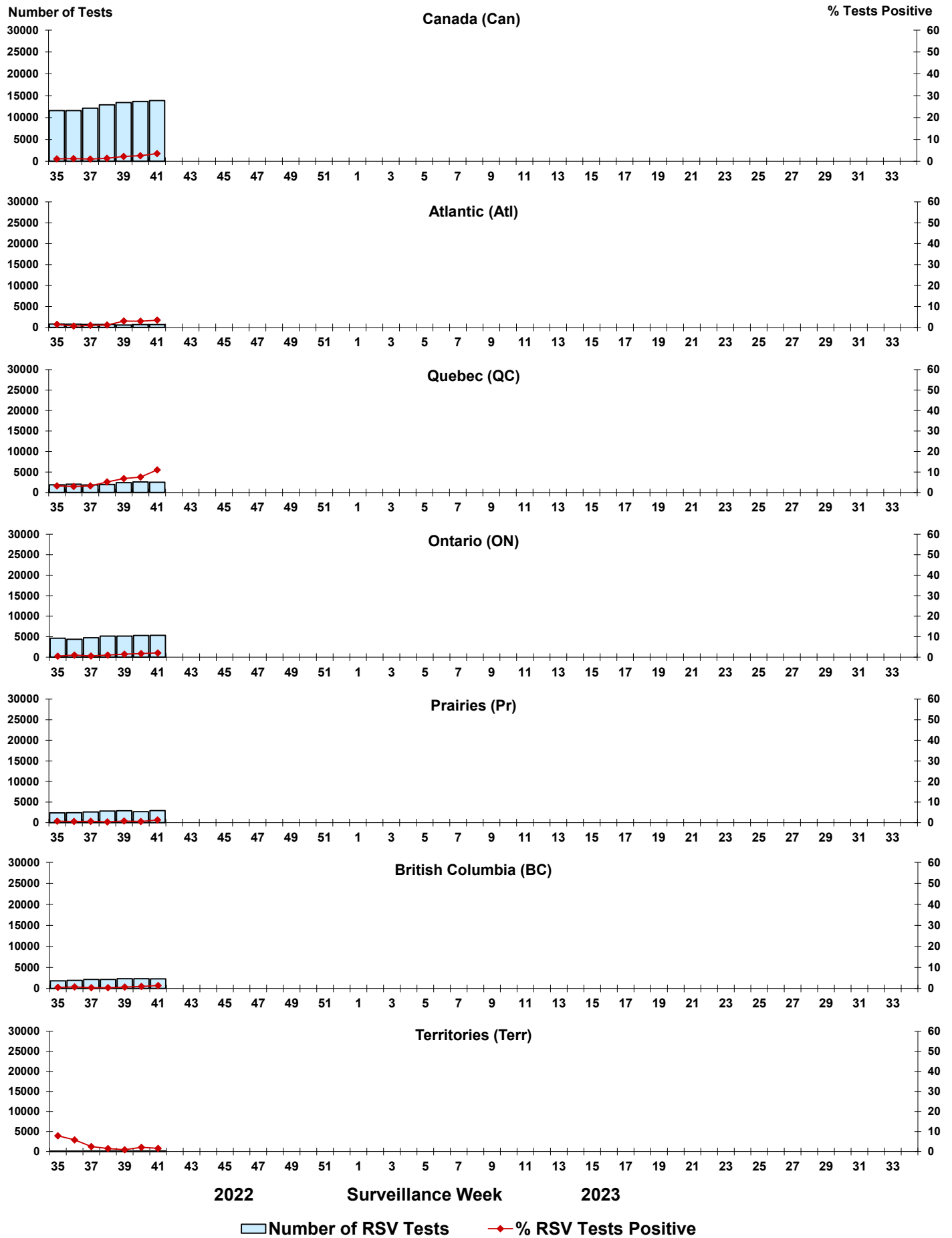


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

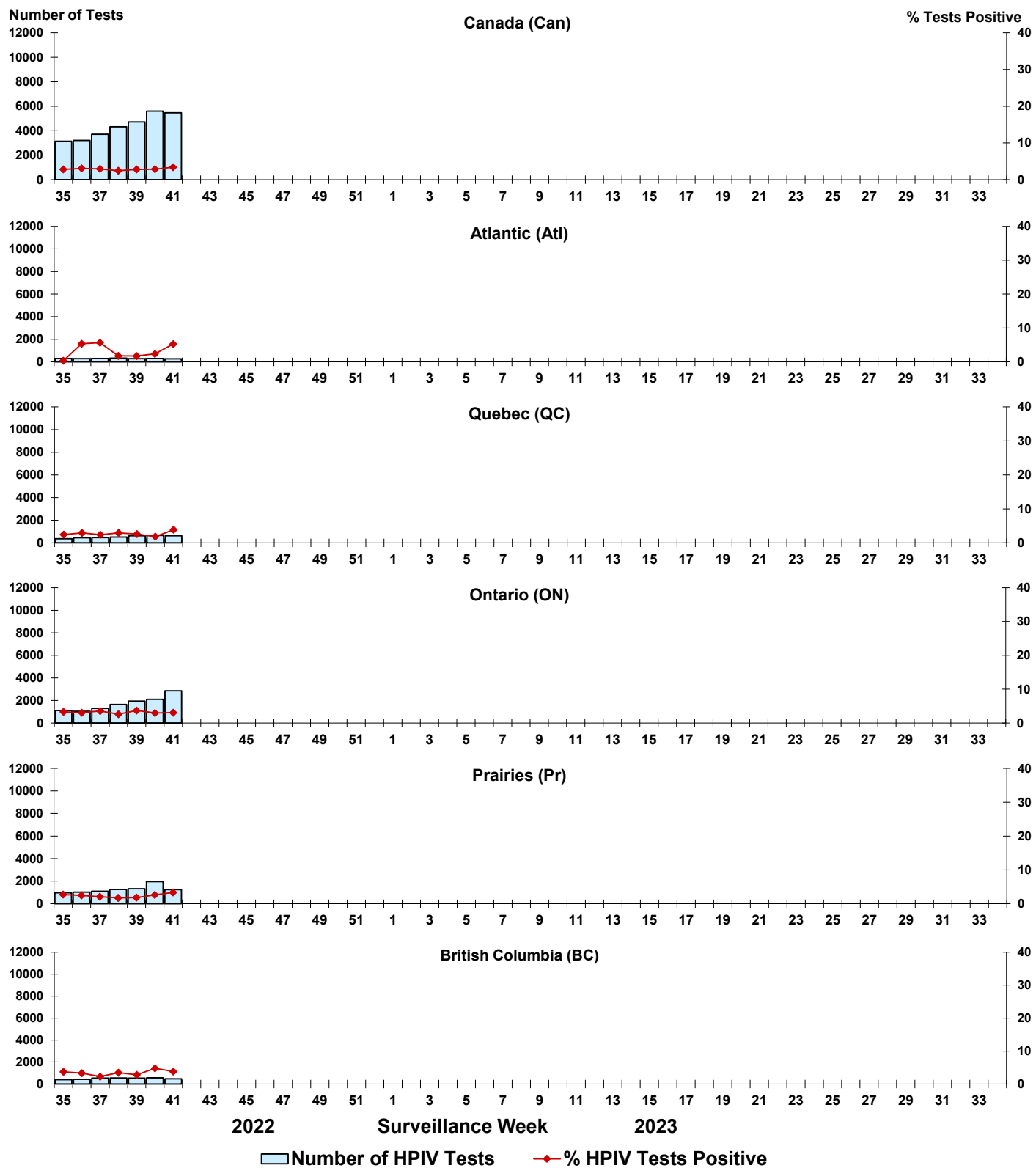


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

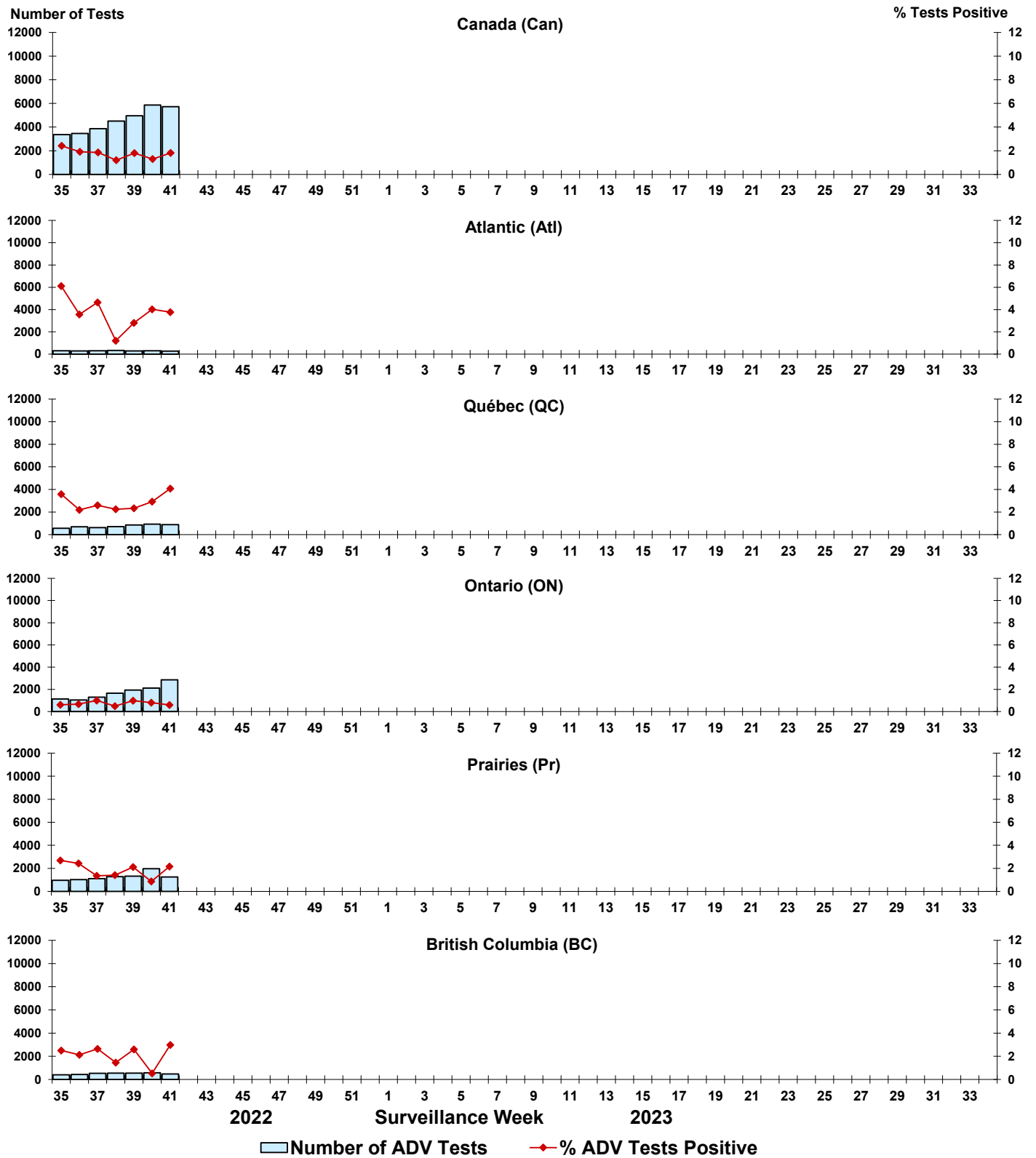


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

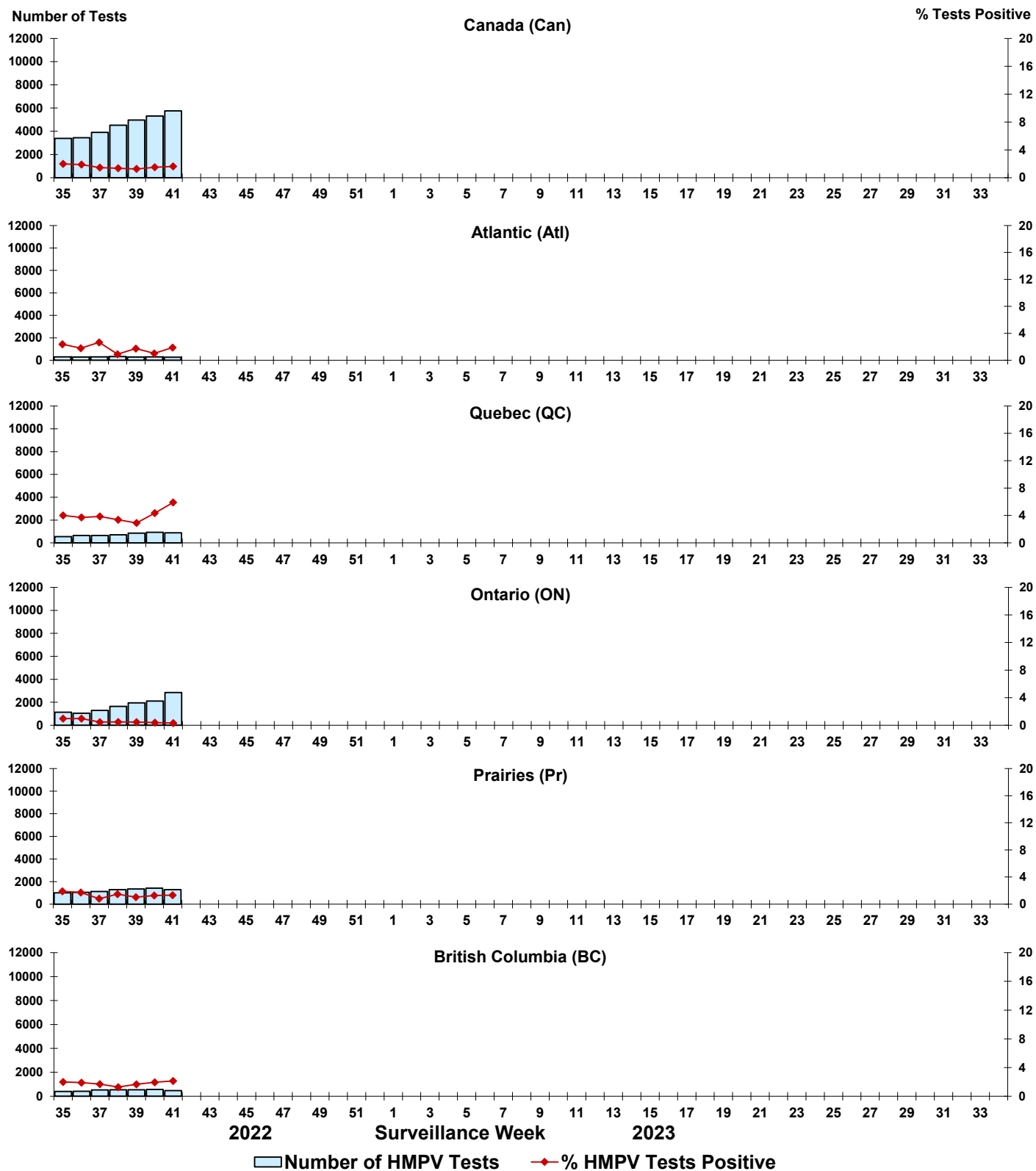


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

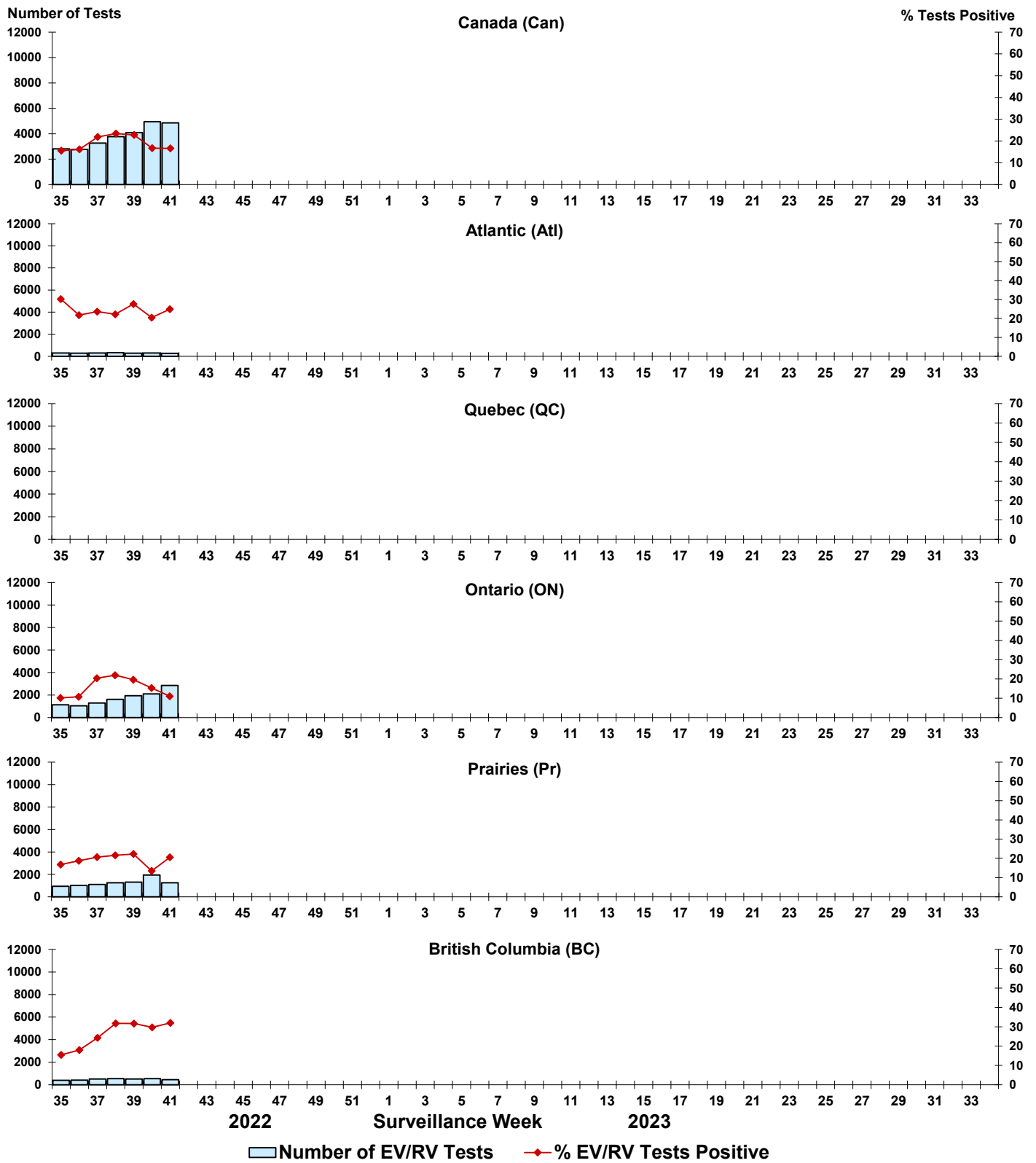


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

