

RESPIRATORY VIRUS DETECTION REPORT

October 16 to October 22, 2022
(Surveillance Week 2022-42)



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 near expected levels for most viruses.

- Enterovirus/Rhinovirus remains the most common seasonal respiratory virus detected in Canada (790 detections; 12.9% positive). Activity continues to decrease and remains far below expected levels for this time of year.
- Overall activity of influenza A is below the seasonal threshold (420 detections; 2.5% positive) but has increased in recent weeks. Activity remains within expected levels for this time of year.
- Respiratory syncytial virus activity has increased in recent weeks (705 detections; 4.7% positive) and is above expected levels for this time of year.
- Activity of other respiratory viruses is stable and near expected levels for this time of year.
- 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

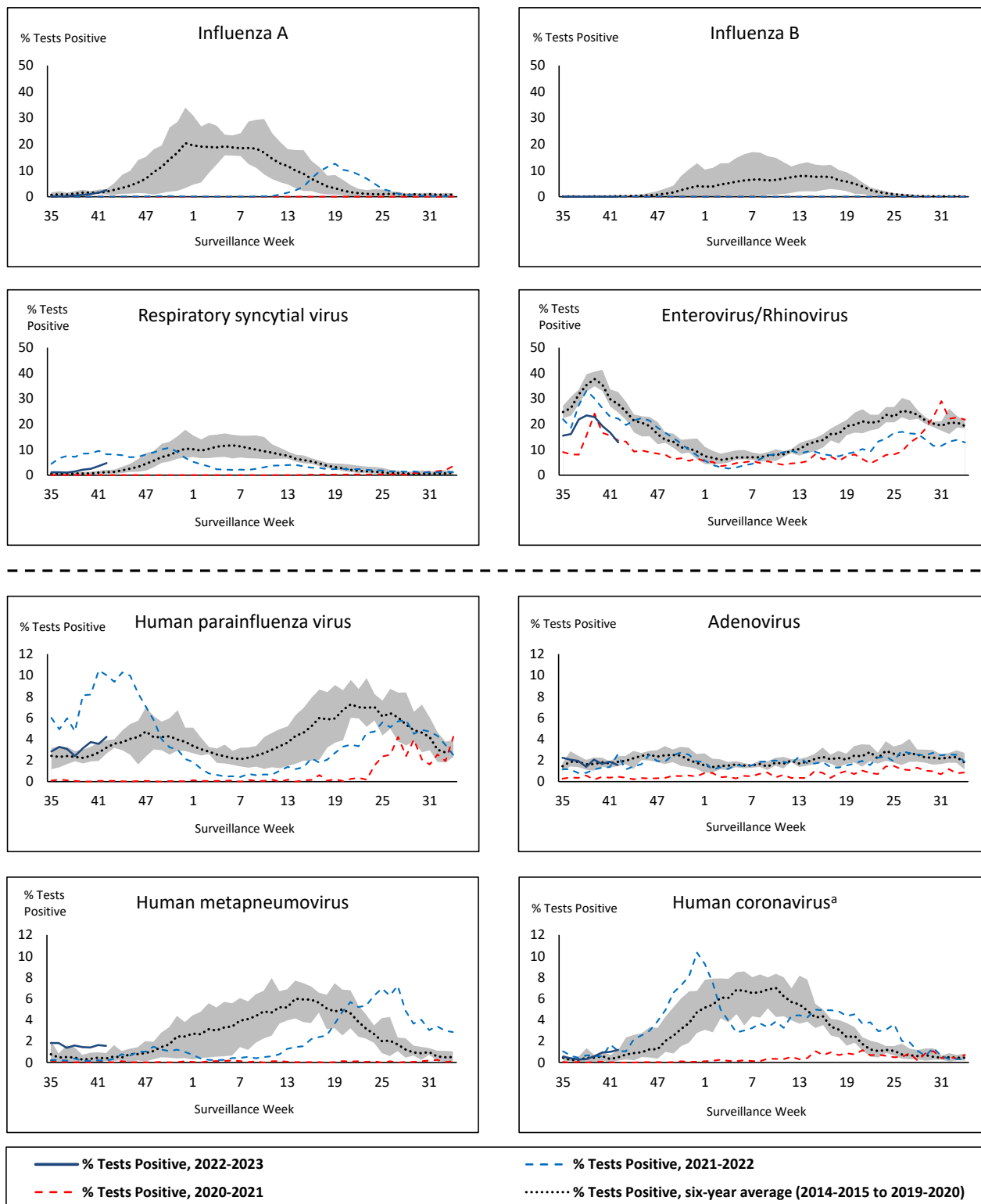
QC: Quebec

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 22, 2022 (surveillance week 2022-42)

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	208	0	0	0	0	0	208	8	208	0	1	0	0	0	208	0	208	3	208	30	208	0
Prince Edward Island	41	0	1	0	1	0	41	1	41	0	1	4	0	0	41	1	41	0	41	17	41	0
Nova Scotia	240	0	1	4	5	0	240	18	50	1	1	0	0	0	50	1	50	0	50	11	50	0
New Brunswick	512	0	4	16	20	0	310	0	55	0	1	3	0	0	55	5	55	0	55	18	55	0
Atlantic	1001	0	6	20	26	0	799	27	354	1	4	7	0	0	354	7	354	3	354	76	354	0
Région Nord-Est	963	0	0	0	0	0	176	10	28	1	0	1	0	0	28	1	28	1	N.C.	N.C.	28	0
Québec-Chaudière-Appalaches	336	0	0	1	1	0	337	50	183	2	0	0	0	0	194	6	183	11	N.C.	N.C.	183	1
Centre-du-Québec	288	0	0	1	1	0	286	32	24	3	0	3	0	0	24	1	24	6	N.C.	N.C.	24	0
Montréal-Laval	1291	0	0	15	15	0	1158	154	607	7	1	9	1	0	607	21	614	41	N.C.	N.C.	587	7
Ouest du Québec	232	0	0	4	4	0	198	43	45	2	0	5	0	0	45	8	45	2	N.C.	N.C.	45	1
Montérégie	482	0	0	10	10	1	474	55	4	0	0	1	0	0	4	0	4	0	N.C.	N.C.	4	0
Province of Québec	3592	0	0	31	31	1	2629	344	891	15	1	19	1	0	902	37	898	61	N.C.	N.C.	871	9
P.H.O.L. - Ottawa	107	0	0	0	0	0	107	3	107	0	0	0	0	1	107	0	107	0	107	10	107	0
EORLA	372	0	0	3	3	1	372	38	39	0	0	1	0	0	39	1	39	0	39	6	39	0
P.H.O.L. - Kingston	77	0	0	0	0	0	77	5	77	0	0	0	0	2	77	1	77	1	77	17	77	0
UHN / Mount Sinai Hospital	537	0	0	6	6	2	537	4	22	0	0	0	0	0	22	0	22	0	22	2	22	4
P.H.O.L. - Toronto	363	0	38	0	14	0	363	6	363	0	0	0	0	22	363	6	363	6	363	32	363	9
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	2709	3	29	55	87	2	2709	62	1451	0	0	0	0	30	1451	8	1457	4	1455	50	1453	1
P.H.O.L. - Sault Ste. Marie	7	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	0	7	0	7	0
P.H.O.L. - Timmins	18	0	1	0	1	0	18	0	18	0	0	0	0	1	18	0	18	0	18	2	18	1
St. Joseph's - London	118	0	0	3	3	0	118	16	64	0	0	0	0	3	64	1	64	0	64	17	29	2
P.H.O.L. - London	192	0	7	0	6	0	192	6	192	0	0	0	0	11	192	2	192	0	192	21	192	1
P.H.O.L. - Orillia	75	0	6	0	6	0	75	5	75	0	0	0	0	8	75	2	75	1	75	14	75	1
P.H.O.L. - Thunder Bay	12	0	3	0	3	0	12	0	12	0	0	0	0	0	12	0	12	0	12	2	12	0
P.H.O.L. - Sudbury	5	0	0	0	0	0	5	1	5	0	0	0	0	0	5	0	5	0	5	0	5	0
P.H.O.L. - Hamilton	106	0	3	0	3	0	106	9	106	0	0	0	0	8	106	2	106	0	106	7	106	1
P.H.O.L. - Peterborough	78	0	3	0	3	0	78	6	78	0	0	0	0	2	78	0	78	1	78	11	78	1
St. Joseph's - Hamilton	1155	0	90	90	0	0	1155	61	1155	0	0	46	0	0	1155	0	1155	4	1155	95	0	0
Province of Ontario	5931	3	90	157	225	5	5931	222	3771	0	0	47	0	88	3771	23	3777	17	3775	286	2583	21
Manitoba	693	0	2	1	3	0	693	8	149	0	0	7	0	0	149	5	174	8	149	43	174	1
Saskatchewan	610	0	0	15	15	0	473	5	237	2	3	16	0	0	237	8	237	11	237	61	236	7
Alberta	2321	2	33	19	54	1	2034	53	945	16	3	17	1	0	945	11	945	2	923	135	945	27
Prairies	3624	2	35	35	72	1	3200	66	1331	18	6	40	1	0	1331	24	1356	21	1309	239	1355	35
British Columbia	2518	4	18	8	65	2	2295	43	684	7	10	30	1	0	684	19	684	8	655	176	655	4
Yukon	2	0	0	0	0	0	6	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	48	0	1	0	1	0	48	2	0	0	0	0	0	0	0	0	0	0	48	13	0	0
Nunavut	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	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	50	0	1	0	1	0	54	3	0	0	0	0	0	0	0	0	0	0	48	13	0	0
CANADA	16716	9	150	251	420	9	14908	705	7031	41	21	143	3	88	7042	110	7069	110	6141	790	5818	69

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 22, 2022 (surveillance weeks 2022-35 to 2022-42)

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	1362	0	1	0	1	0	1362	44	1362	2	4	8	3	0	1362	12	1362	35	1362	192	1362	0
Prince Edward Island	304	0	1	0	1	0	304	6	304	0	4	16	0	0	304	21	304	3	304	164	304	1
Nova Scotia	1966	0	3	13	16	1	1965	51	1965	1	4	4	1	0	356	12	356	0	356	92	356	1
New Brunswick	3131	0	5	23	28	1	2141	19	390	0	5	24	1	0	390	38	390	1	390	129	390	7
Atlantic	6763	0	10	36	46	2	5772	120	2412	3	17	52	5	0	2412	83	2412	39	2412	577	2412	9
Région Nord-Est	6660	0	0	4	4	0	1155	28	189	3	2	11	0	0	189	8	189	1	N.C.	N.C.	189	0
Québec-Chaudière-Appalaches	2024	0	0	3	3	0	2026	176	1062	11	4	11	0	0	1160	57	1062	41	N.C.	N.C.	1062	6
Centre-du-Québec	1459	0	0	3	3	1	1446	101	202	9	0	7	0	0	202	9	202	25	N.C.	N.C.	202	1
Montréal-Laval	7637	0	0	40	40	4	7013	539	3905	56	7	76	4	0	3905	102	3935	198	N.C.	N.C.	3819	24
Ouest du Québec	1522	0	0	8	8	0	1341	141	313	9	0	20	0	0	313	47	313	10	N.C.	N.C.	313	6
Montérégie	3030	0	0	18	18	2	2964	207	21	0	0	1	0	0	21	0	21	0	N.C.	N.C.	21	0
Province of Québec	22332	0	0	76	76	7	15945	1192	5692	88	13	126	4	0	5790	223	5722	275	N.C.	N.C.	5606	37
P.H.O.L. - Ottawa	364	0	1	0	1	0	364	5	364	0	0	0	0	4	364	0	364	3	364	37	364	0
EORLA	2086	0	0	11	11	1	2086	115	318	4	0	5	2	0	318	7	318	5	318	102	318	2
P.H.O.L. - Kingston	398	0	0	0	0	0	398	16	398	0	0	0	0	12	398	9	398	3	398	81	398	1
UHN / Mount Sinai Hospital	3553	0	1	22	23	3	3553	17	130	0	0	0	0	0	130	1	130	0	130	5	130	9
P.H.O.L. - Toronto	2411	18	120	1	35	0	2409	28	2409	0	0	0	0	115	2411	36	2408	21	2409	353	2408	17
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	23134	4	37	163	204	2	23134	226	3125	3	0	13	0	48	3136	18	3143	5	3115	138	2995	4
P.H.O.L. - Sault Ste. Marie	43	0	0	0	0	0	43	0	43	0	0	0	0	0	43	0	43	0	43	6	43	0
P.H.O.L. - Timmins	80	0	1	0	1	0	80	0	80	0	0	0	0	3	80	0	80	0	80	21	80	2
St. Joseph's - London	524	0	0	3	3	0	524	29	436	0	0	0	0	10	470	8	470	0	470	102	59	2
P.H.O.L. - London	906	1	13	0	13	0	906	24	906	0	0	0	0	36	906	13	906	2	906	165	906	4
P.H.O.L. - Orillia	315	0	10	1	11	0	315	10	315	0	0	0	0	24	315	6	315	6	315	83	315	3
P.H.O.L. - Thunder Bay	71	0	4	0	4	0	71	0	71	0	0	0	0	1	71	1	71	0	71	31	71	1
P.H.O.L. - Sudbury	50	0	0	0	0	0	50	1	50	0	0	0	0	2	50	1	50	0	50	8	50	0
P.H.O.L. - Hamilton	624	0	6	0	6	2	624	26	624	0	0	0	0	29	624	8	624	2	624	104	624	2
P.H.O.L. - Peterborough	231	0	6	0	6	0	231	13	231	0	0	0	0	12	231	3	231	2	231	65	231	3
St. Joseph's - Hamilton	6343	0	0	166	166	3	6343	188	6343	0	0	195	0	0	6343	1	6343	30	6343	880	0	0
Province of Ontario	41133	23	199	367	484	11	41131	698	15843	7	0	213	2	296	15890	112	15894	79	15867	2181	8992	50
Manitoba	4373	0	2	6	8	0	4373	35	1057	0	2	17	0	0	1057	37	1237	39	1057	299	1237	3
Saskatchewan	4063	0	0	20	20	1	3635	14	1603	3	10	61	6	0	1605	51	1607	59	1605	315	1602	13
Alberta	15889	24	100	33	157	6	14042	151	7073	41	23	110	8	0	7072	93	7068	37	6930	1296	7073	93
Prairies	24325	24	102	59	185	7	22050	200	9733	44	35	188	14	0	9734	181	9912	135	9592	1910	9912	109
British Columbia	18433	43	101	15	229	5	17197	153	4290	16	41	90	19	6	4290	93	4290	74	4173	1104	4173	21
Yukon	45	0	0	0	0	0	49	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	297	0	1	0	1	0	297	10	0	0	0	0	0	0	0	0	0	0	297	130	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	887	3	24	0	27	0	891	28	0	0	0	0	0	0	0	0	0	0	297	130	0	0
CANADA	113873	93	436	553	1047	32	102986	2391	37970	158	106	669	44	302	38116	692	38230	602	32341	5902	31095	226

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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

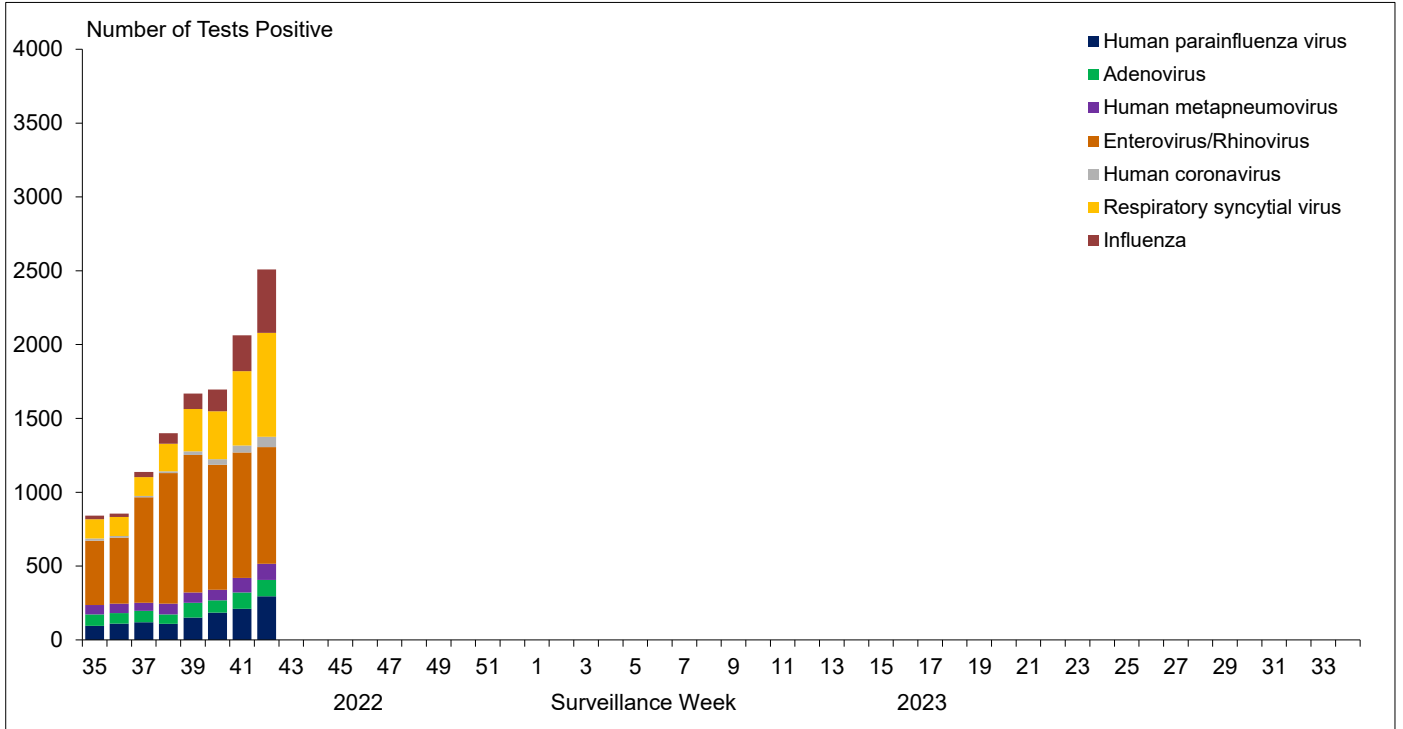


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

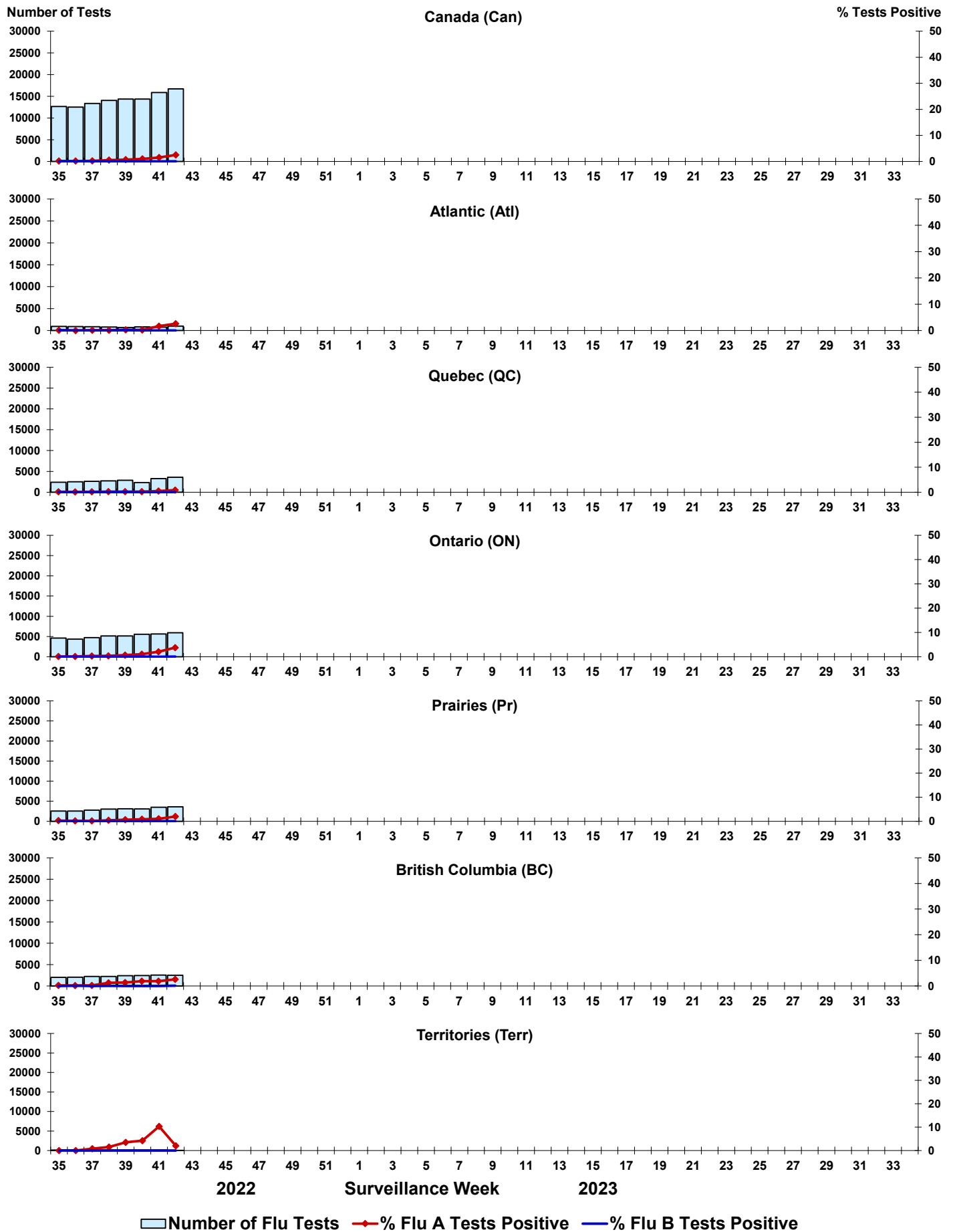


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

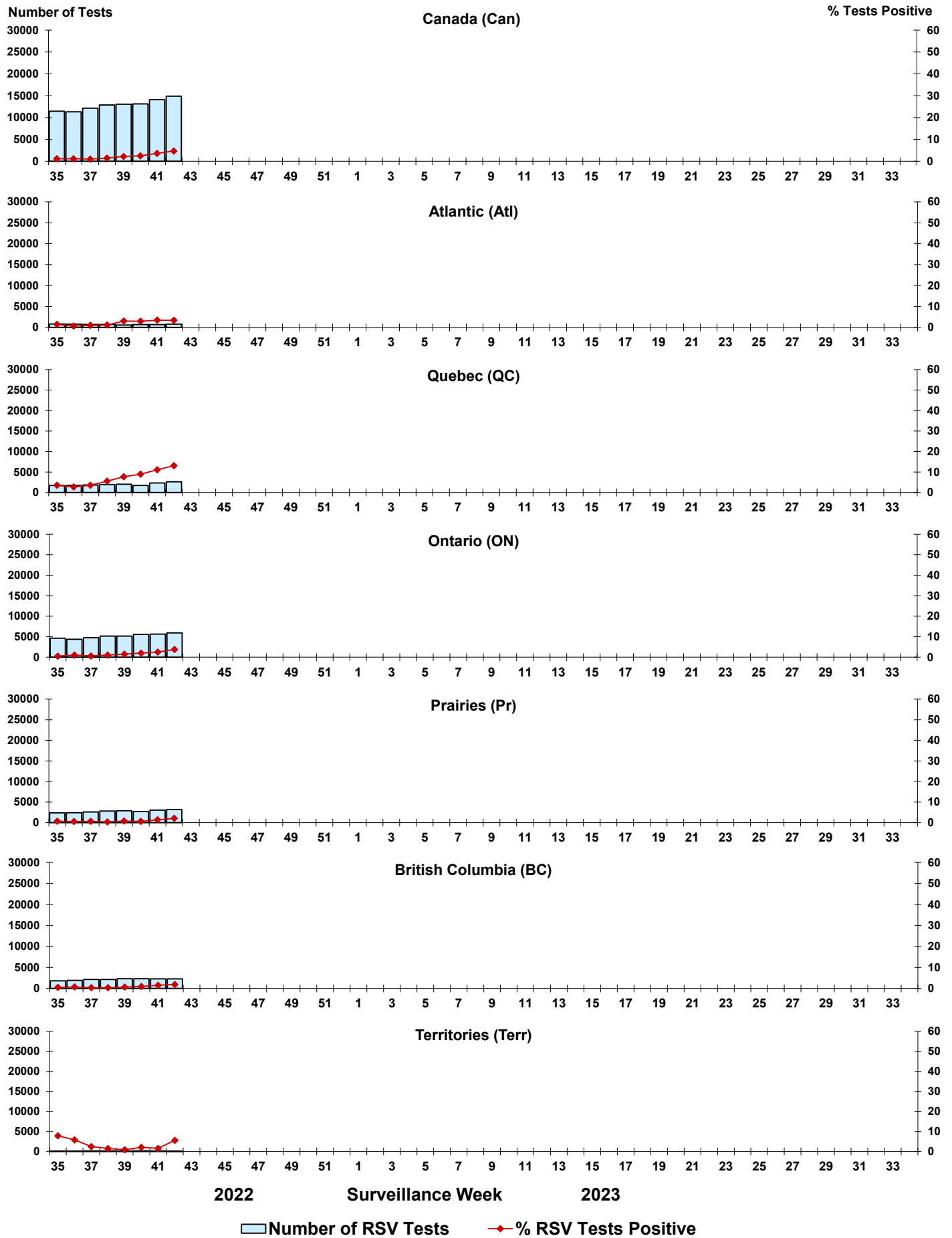


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

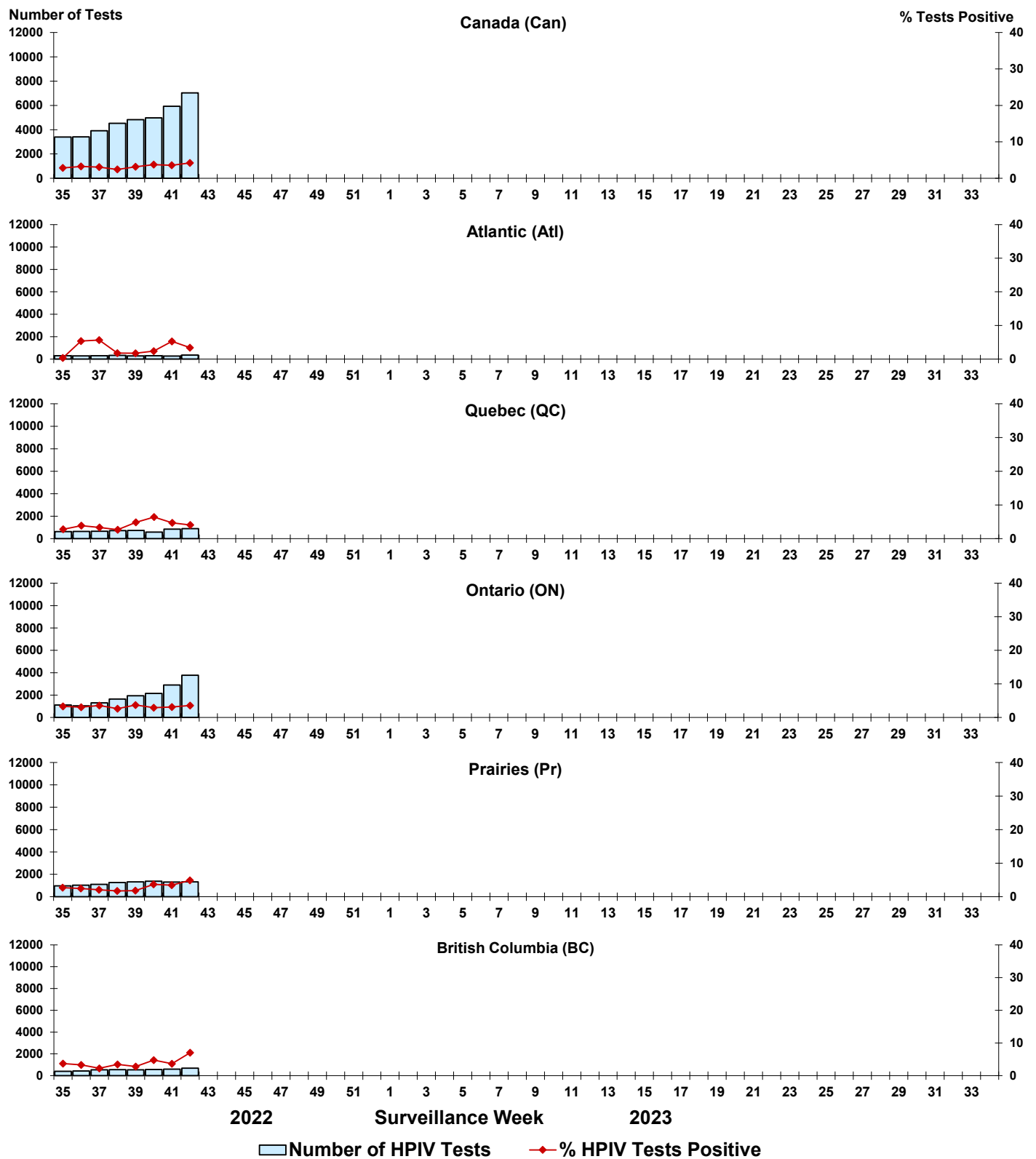


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

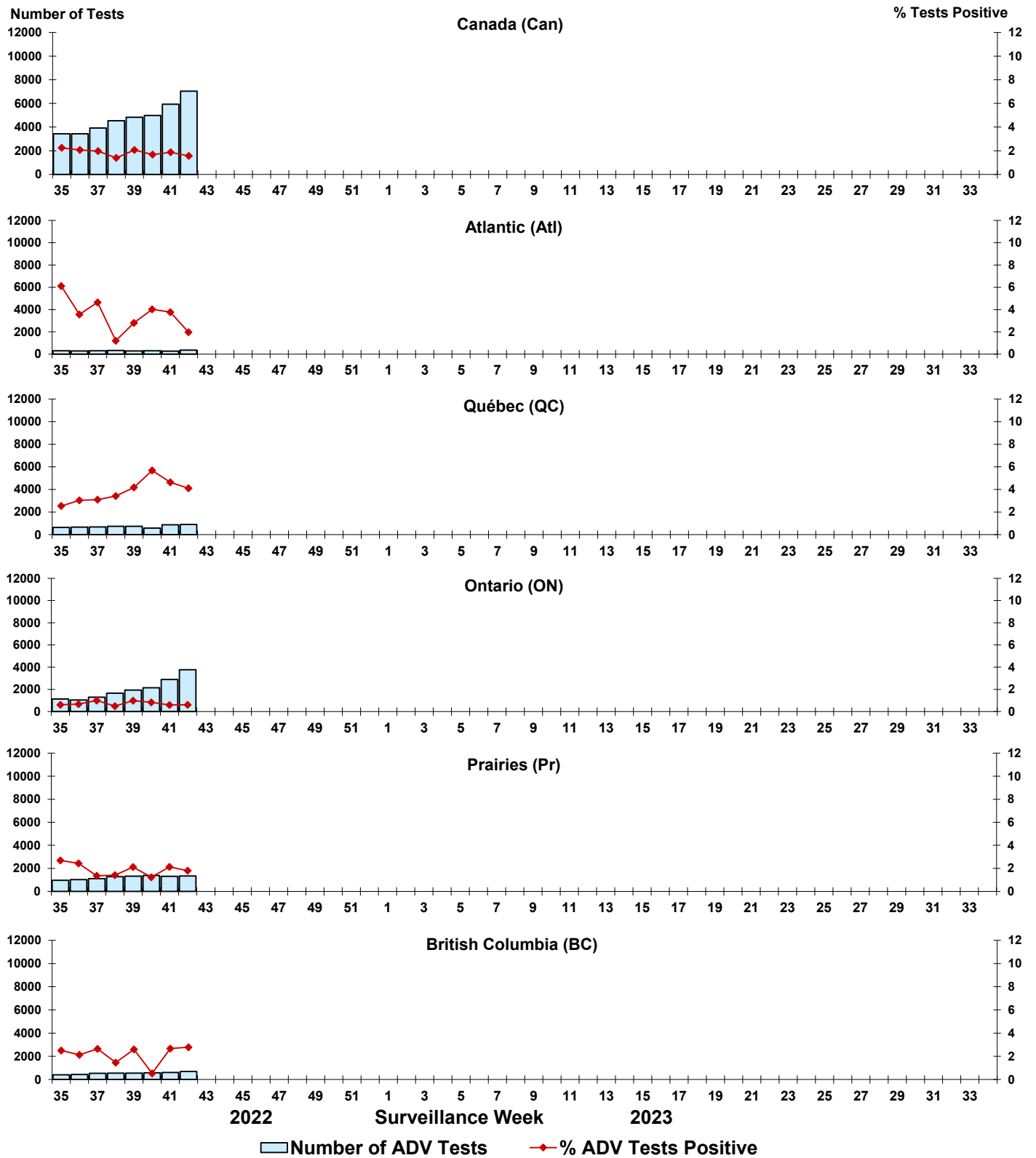


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

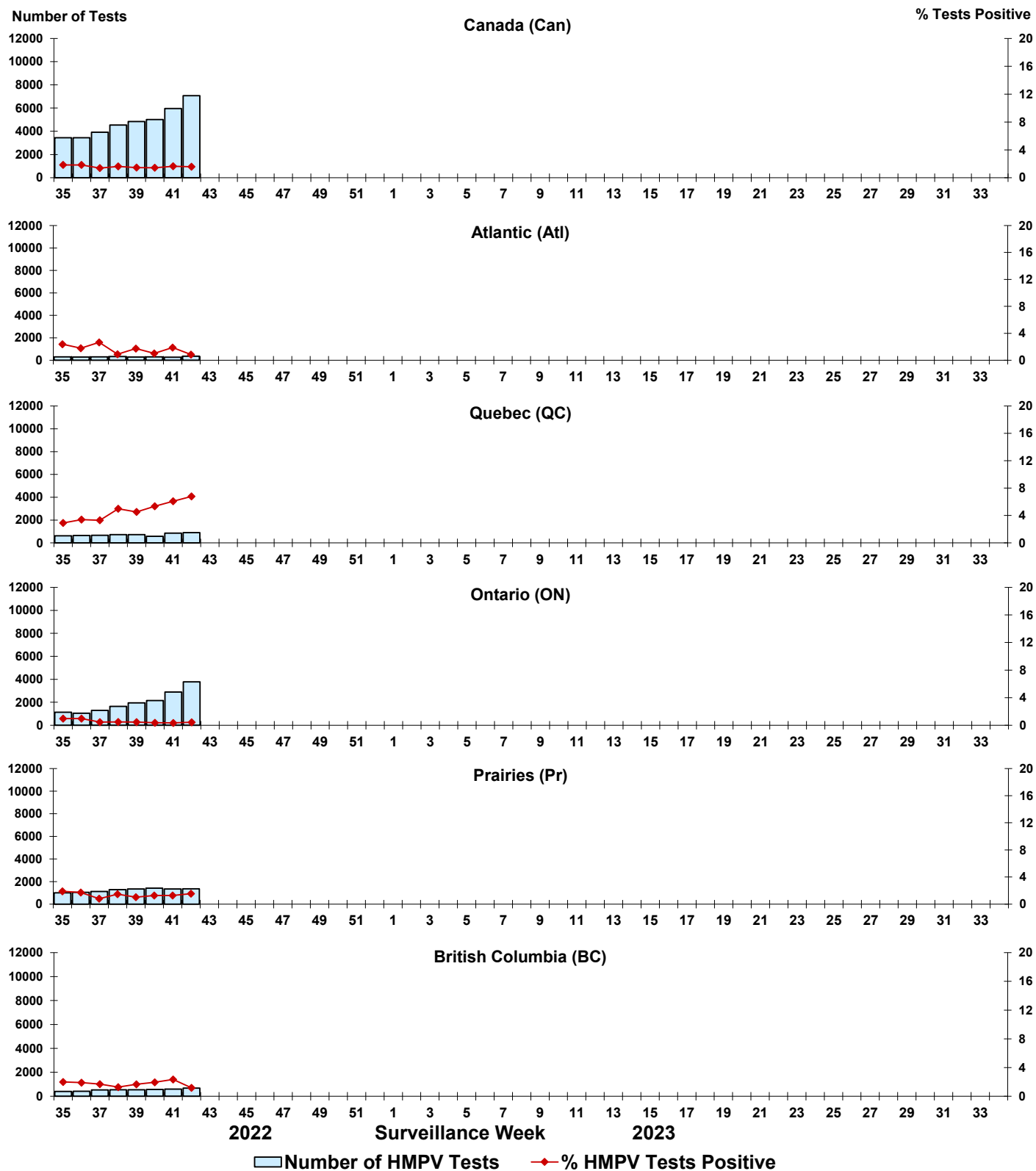


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

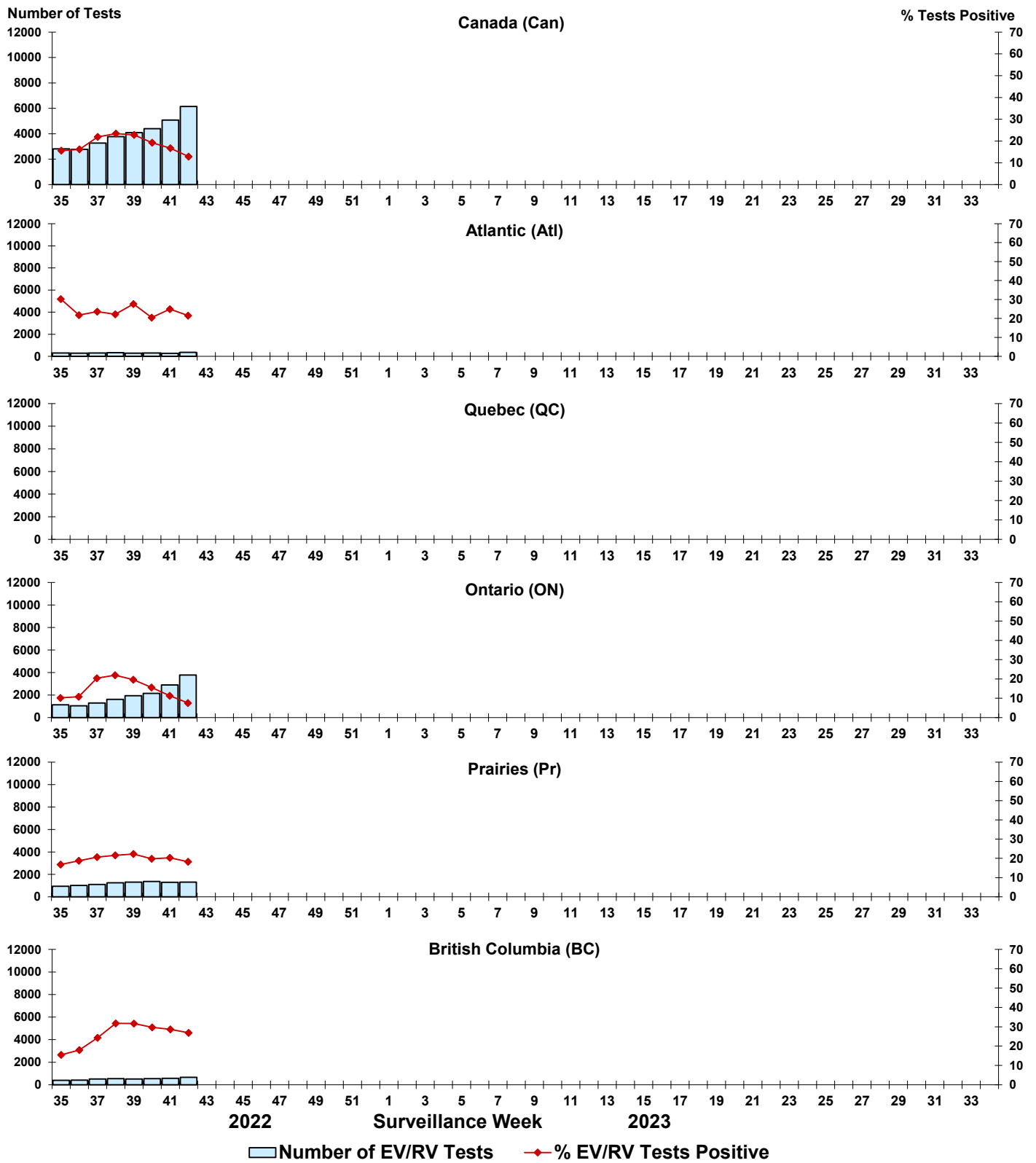


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

