

RESPIRATORY VIRUS DETECTION REPORT

November 14 to November 20, 2021
(Surveillance Week 2021-46)



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 46 (November 14 to November 20, 2021):

- Respiratory syncytial virus (995 detections; 8.0% positive), enterovirus/rhinovirus (737 detections; 20.8% positive), and human parainfluenza virus (284 detections; 7.3% positive) are the most common seasonal respiratory viruses detected in Canada.
 - Activity of respiratory syncytial virus remains above expected levels. Activity has decreased in Quebec in recent weeks, while activity has been either stable or slowly increasing in other parts of Canada.
 - Activity of enterovirus/rhinovirus is within expected levels for this time of year.
 - Activity of human parainfluenza virus remains 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

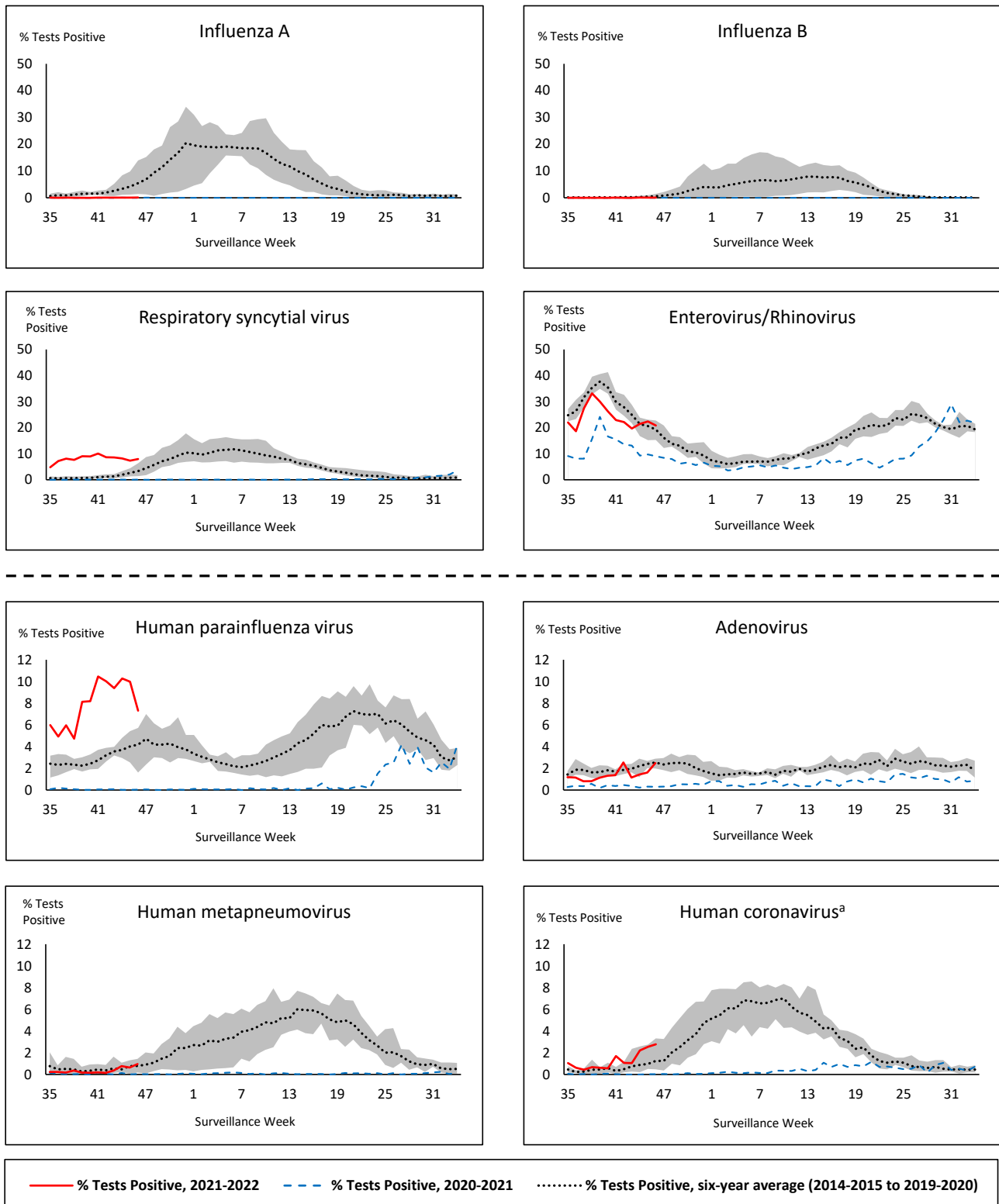
QC: Quebec

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 November 20, 2021 (surveillance week 2021-46)

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	288	0	0	0	0	0	287	1	287	0	0	5	0	14	288	0	287	1	287	39	N.C.	N.C.
Prince Edward Island	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.
Nova Scotia	545	0	0	0	0	0	545	13	84	0	0	0	0	0	84	0	84	0	84	10	84	1
New Brunswick	905	0	0	0	0	0	339	16	138	0	0	0	0	0	138	0	138	0	138	2	138	0
Atlantic	1738	0	0	0	0	0	1171	30	509	0	0	5	0	14	510	0	509	1	509	51	222	1
Région Nord-Est	450	0	0	0	0	0	240	32	4	0	0	0	0	0	4	0	4	0	N.C.	N.C.	4	0
Québec-Chaudière-Appalaches	342	0	0	0	0	0	372	53	49	0	0	0	1	0	56	1	49	0	N.C.	N.C.	49	1
Centre-du-Québec	336	0	0	0	0	1	319	71	29	0	0	0	0	0	29	0	29	3	N.C.	N.C.	29	1
Montréal-Laval	763	0	0	0	0	0	763	49	267	0	0	1	0	0	267	25	267	25	N.C.	N.C.	267	1
Ouest du Québec	231	0	0	0	0	0	231	51	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Montérégie	139	0	0	0	0	0	139	7	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	2261	0	0	0	0	1	2064	263	349	0	0	1	1	0	356	26	349	28	N.C.	N.C.	349	3
P.H.O.L. - Ottawa	365	0	0	0	0	0	365	111	365	0	0	0	0	46	365	21	365	0	365	110	365	20
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	74	0	0	0	0	0	74	9	74	0	0	0	0	4	74	2	74	0	74	18	74	3
UHN / Mount Sinai Hospital	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. - Toronto	243	0	3	0	3	0	243	9	243	0	0	0	0	16	243	3	243	0	243	40	243	4
Sick Kids Hospital - Toronto	62	0	0	0	0	0	0	0	62	0	0	7	0	0	62	2	62	0	62	19	62	0
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	13	0	0	0	0	0	13	0	13	0	0	0	0	1	13	0	13	0	13	3	13	0
P.H.O.L. - Timmins	8	0	0	0	0	0	8	0	8	0	0	0	0	1	8	1	8	0	8	3	8	0
St. Joseph's - London	344	0	0	0	0	0	343	24	41	0	0	0	0	4	41	1	41	0	41	14	41	1
P.H.O.L. - London	111	0	0	0	0	0	111	16	111	0	0	0	0	8	111	1	111	0	111	31	111	0
P.H.O.L. - Orillia	38	0	0	0	0	0	38	5	38	0	0	0	0	1	38	0	38	0	38	15	38	0
P.H.O.L. - Thunder Bay	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. - Sudbury	14	0	0	0	0	0	14	2	14	0	0	0	0	0	14	0	14	1	14	1	14	1
P.H.O.L. - Hamilton	40	0	0	0	0	0	40	2	40	0	0	0	0	0	40	0	40	0	40	16	40	0
P.H.O.L. - Peterborough	20	0	0	0	0	0	20	1	20	0	0	0	0	1	20	0	20	0	20	2	20	0
St. Joseph's - Hamilton	657	0	0	1	1	0	657	107	657	1	0	28	0	0	657	7	657	5	657	127	0	0
Province of Ontario	1991	0	3	1	4	0	1928	286	1688	1	0	35	0	82	1688	38	1688	6	1688	399	1031	29
Province of Manitoba	1933	0	0	1	1	0	1933	22	25	0	0	9	0	0	25	0	78	1	25	18	78	0
Province of Saskatchewan	948	0	0	0	0	0	948	2	126	0	0	9	1	0	126	6	126	1	126	31	126	2
Province of Alberta	1919	0	0	1	1	0	772	56	772	0	1	46	9	0	772	13	772	1	772	149	772	42
Prairies	4800	0	0	2	2	0	3653	80	923	0	1	64	10	0	923	19	976	3	923	198	976	44
British Columbia	3286	0	2	0	9	6	3259	336	417	0	0	65	5	0	417	14	417	0	404	84	404	6
Yukon	171	0	1	0	1	0	171	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	17	0	0	0	0	0	17	0	1	0	0	0	0	0	1	0	1	0	17	5	1	0
Nunavut	233	0	0	0	0	0	232	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Territories	421	0	1	0	1	0	420	0	1	0	0	0	0	0	1	0	1	0	17	5	1	0
CANADA	14497	0	6	3	16	7	12495	995	3887	1	1	170	16	96	3895	97	3940	38	3541	737	2983	83

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.

Note: 10 reported influenza detections this week were known to be associated with recent live attenuated influenza vaccine (LAIV) receipt and were excluded from the data as they do not represent community transmission of seasonal influenza viruses.

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.

For British Columbia, 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 November 20, 2021 (surveillance week 2021-35 to 2021-46)

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	5596	0	0	0	0	0	5595	9	5598	1	3	107	0	105	5599	14	5595	3	5599	1578	N.C.	N.C.
Prince Edward Island	875	0	0	0	0	0	875	2	875	0	0	140	0	0	875	14	875	0	875	262	875	19
Nova Scotia	1288	0	0	0	0	0	1288	27	640	0	2	31	0	0	654	5	654	0	654	67	654	2
New Brunswick	3386	0	0	0	0	0	2228	21	1597	0	0	19	0	0	1590	2	1597	0	1597	20	1506	0
Atlantic	11145	0	0	0	0	0	9986	59	8710	1	5	297	0	105	8718	35	8721	3	8725	1927	3035	21
Région Nord-Est	6170	0	0	0	0	0	3349	1132	482	0	0	6	0	0	482	11	15	0	N.C.	N.C.	298	2
Québec-Chaudière-Appalaches	2130	0	0	0	0	2	2702	848	384	0	0	5	1	0	392	12	304	0	N.C.	N.C.	306	3
Centre-du-Québec	1762	0	0	0	0	1	2082	923	241	0	0	9	0	0	241	4	249	4	N.C.	N.C.	234	3
Montréal-Laval	7821	0	0	3	3	3	7825	2203	2240	2	1	14	0	0	2240	139	2240	82	N.C.	N.C.	2240	8
Ouest du Québec	1986	0	0	0	0	0	1954	779	9	0	0	0	0	0	5	0	8	0	N.C.	N.C.	8	0
Montérégie	1196	0	0	0	0	0	1196	336	0	0	0	0	0	0	0	0	0	0	N.C.	N.C.	0	0
Province of Québec	21065	0	0	3	3	6	19108	6221	3356	2	1	34	1	0	3360	166	2816	86	N.C.	N.C.	3086	16
P.H.O.L. - Ottawa	4634	1	1	0	2	0	4634	1085	4634	0	0	0	0	601	4634	173	4633	17	4634	1757	4633	106
EORLA	1677	0	0	0	0	0	1652	207	289	0	0	13	0	0	289	1	1	0	289	63	25	1
P.H.O.L. - Kingston	571	0	0	0	0	0	571	29	570	0	0	0	0	120	570	9	569	2	570	216	569	12
UHN / Mount Sinai Hospital	4585	0	0	1	1	0	4585	13	152	0	0	0	0	0	152	0	152	0	152	8	152	0
P.H.O.L. - Toronto	3016	0	4	0	4	0	3014	79	3014	0	0	0	0	196	3015	21	3014	2	3014	575	3015	30
Sick Kids Hospital - Toronto	567	0	0	0	0	0	0	0	567	0	0	61	0	0	567	7	567	1	567	170	567	1
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	70	0	0	0	0	0	70	0	70	0	0	0	0	5	70	0	70	0	70	23	70	0
P.H.O.L. - Timmins	76	0	0	0	0	0	76	2	76	0	0	0	0	6	76	1	76	0	76	14	76	0
St. Joseph's - London	1332	0	0	0	0	0	1331	60	433	0	0	7	0	55	433	10	433	1	415	106	414	1
P.H.O.L. - London	847	0	0	0	0	0	847	37	847	0	0	0	0	110	847	14	847	1	847	250	847	5
P.H.O.L. - Orillia	251	0	1	0	1	0	251	18	251	0	0	0	0	32	251	5	249	2	251	102	249	2
P.H.O.L. - Thunder Bay	74	0	0	0	0	0	74	0	74	0	0	0	0	0	74	0	74	0	74	31	74	1
P.H.O.L. - Sudbury	146	0	0	0	0	0	146	2	146	0	0	0	0	2	146	0	146	2	146	25	146	1
P.H.O.L. - Hamilton	431	0	2	0	2	0	427	17	427	0	0	0	0	32	427	4	427	4	427	121	427	1
P.H.O.L. - Peterborough	237	0	0	0	0	0	237	8	236	0	0	0	0	8	236	1	235	0	236	43	235	2
St. Joseph's - Hamilton	4878	0	1	1	2	0	4872	360	4872	2	0	562	0	0	4872	28	4872	9	4872	993	0	0
Province of Ontario	23392	1	9	2	12	0	22787	1917	16658	2	0	643	0	1167	16659	274	16365	41	16640	4497	11499	163
Manitoba	20521	1	3	3	7	0	20521	128	303	1	1	32	0	0	303	6	1004	3	303	139	810	2
Province of Saskatchewan	6199	0	0	1	1	0	6170	21	1010	0	0	40	5	0	1010	18	1010	1	1010	227	1009	5
Province of Alberta	21869	0	2	4	6	0	8472	211	8472	0	4	433	51	0	8472	75	8472	9	8472	1671	8472	224
Prairies	48589	1	5	8	14	0	35163	360	9785	1	5	505	56	0	9785	99	10486	13	9785	2037	10291	231
British Columbia	27795	0	8	3	34	31	27725	1295	6160	0	0	700	46	60	6160	66	6156	28	5988	1438	6038	23
Yukon	2888	0	1	0	4	6	2953	4	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	200	0	0	0	0	0	186	0	33	0	0	0	0	0	33	2	33	0	185	30	33	0
Nunavut	3455	0	0	0	0	0	3451	4	8	0	0	0	0	0	8	1	8	0	8	5	8	0
Territories	6543	0	1	0	4	6	6590	8	41	0	0	0	0	0	41	3	41	0	193	35	41	0
CANADA	138529	2	23	16	67	43	121359	9860	44710	6	11	2179	103	1332	44723	643	44585	171	41331	9934	33990	454

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.

Note: 32 influenza detections reported to date this season are known to be associated with recent live attenuated influenza vaccine (LAIV) receipt and were excluded from the data as they do not represent community transmission of seasonal influenza viruses.

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. Due to these delays, the sum of weekly report totals do not add up to cumulative totals.

For British Columbia, 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

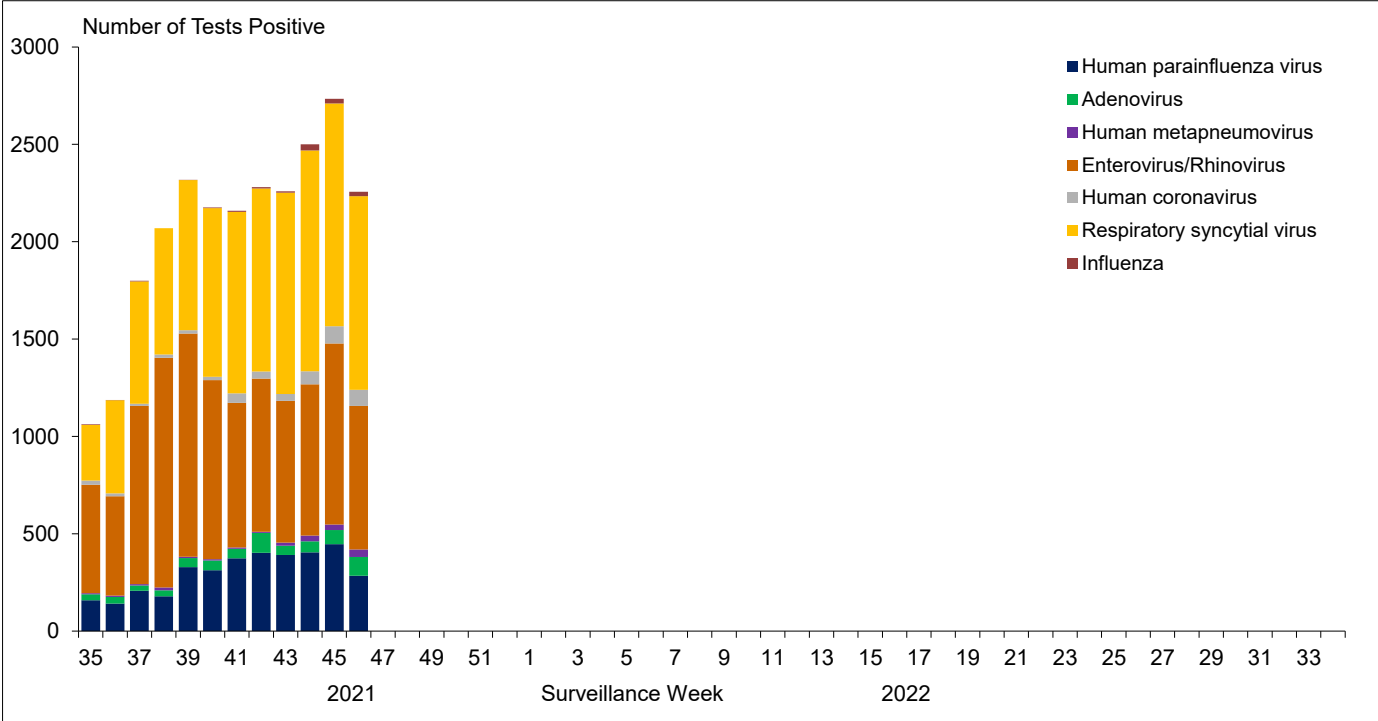


Figure 3: Positive Influenza (Flu) tests (%) in Canada by region by surveillance week

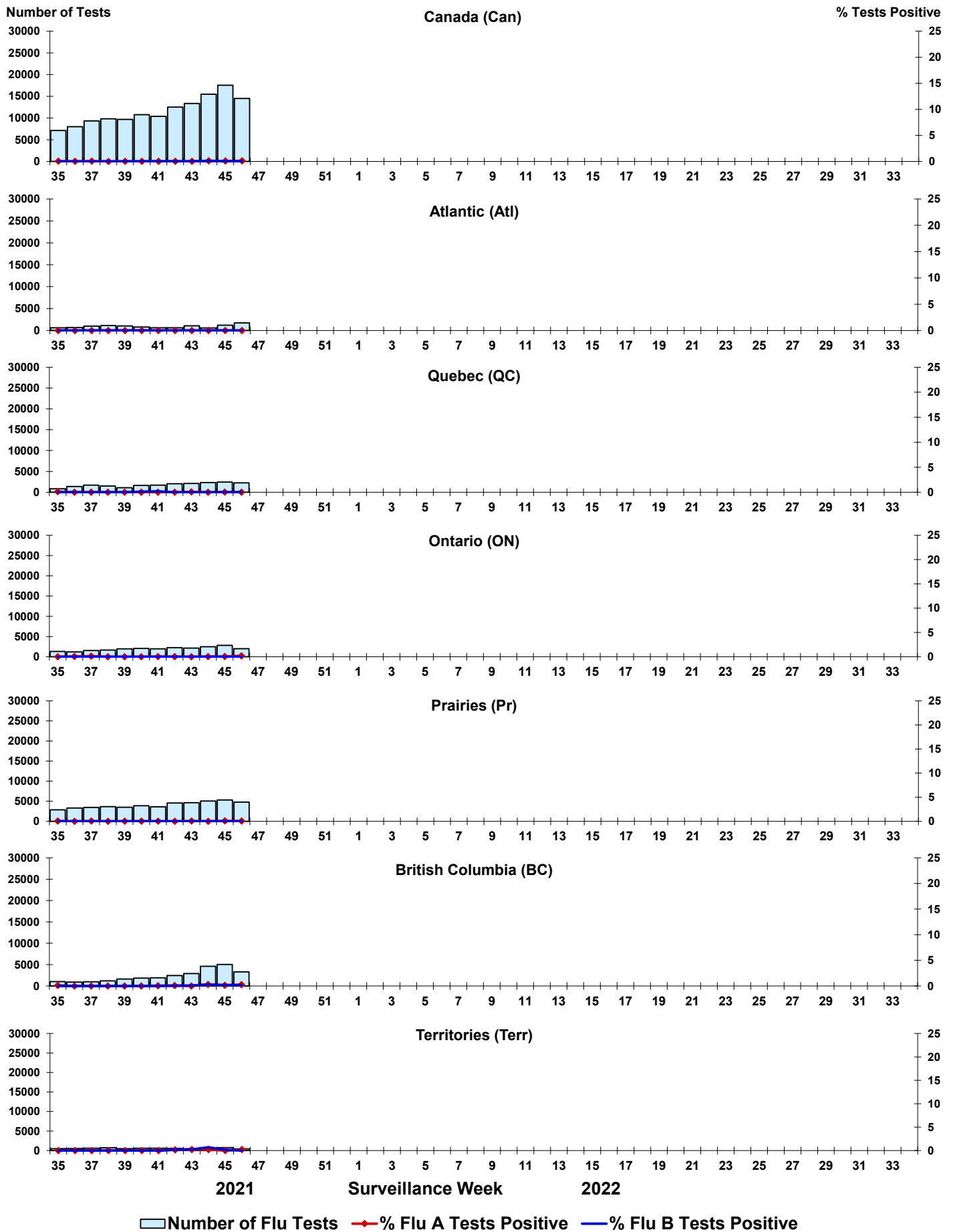


Figure 4: Positive Respiratory syncytial virus (RSV) tests (%) in Canada by region by surveillance week

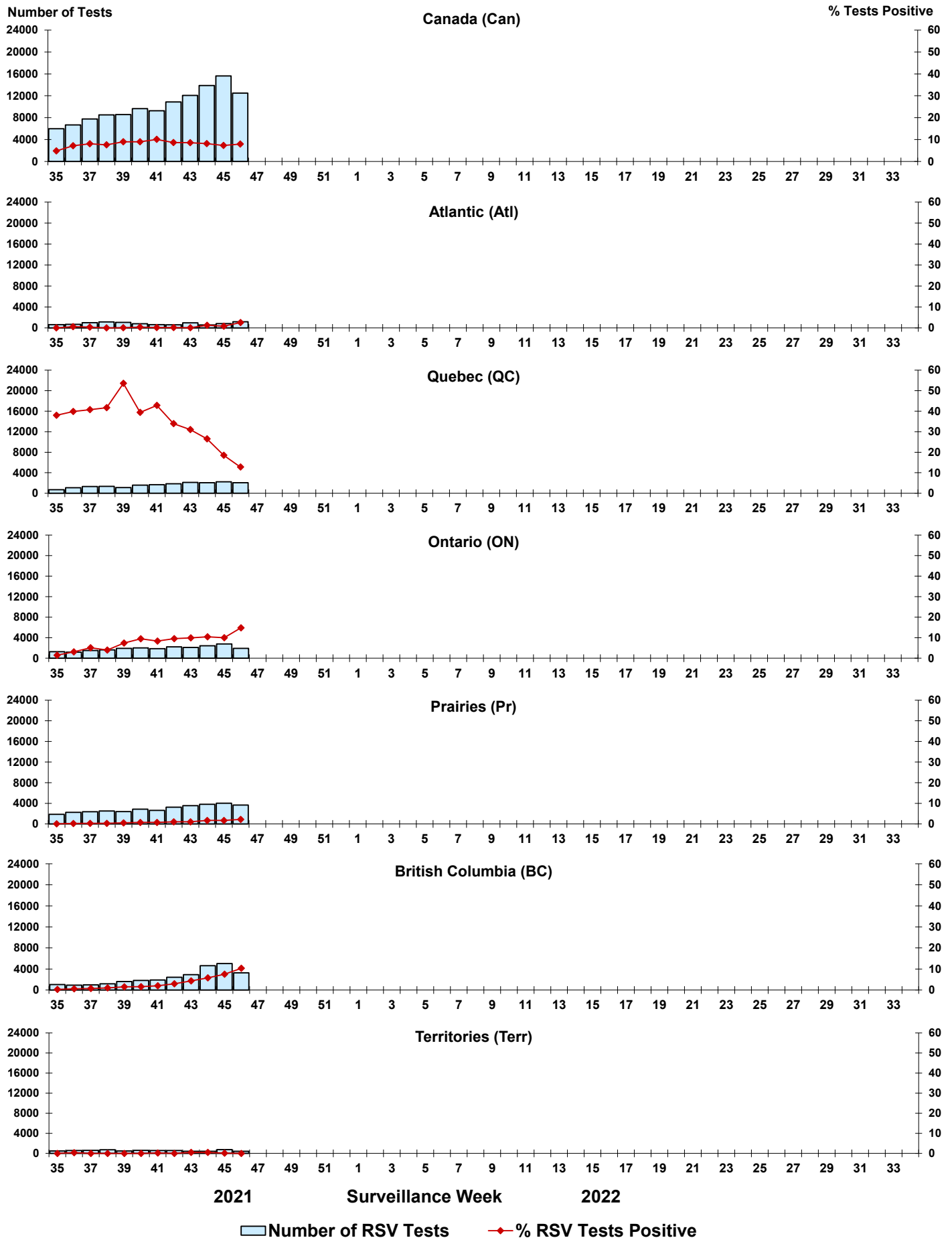


Figure 5: Positive Human parainfluenza virus (HPIV) tests (%) in Canada by region by surveillance week

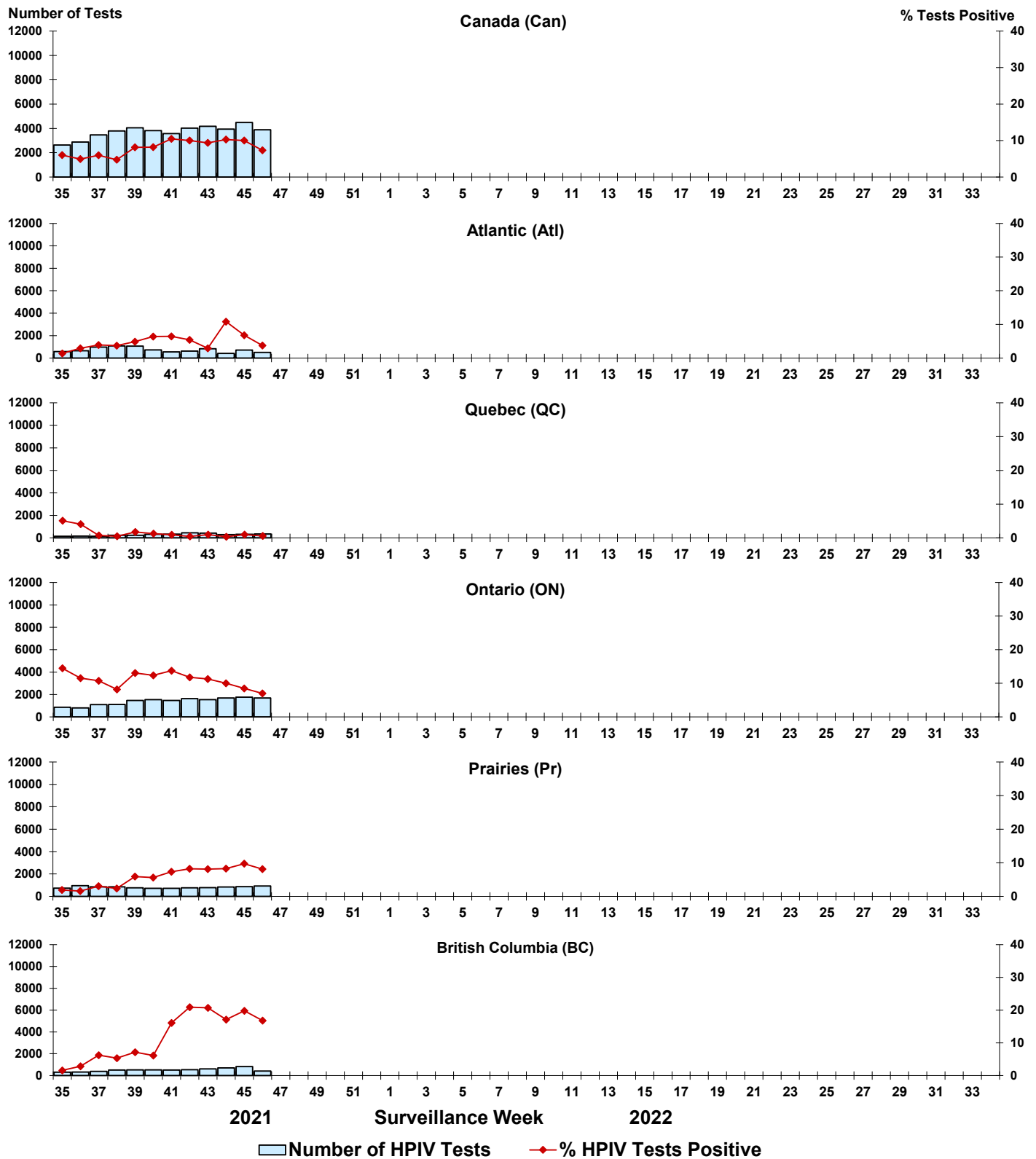


Figure 6: Positive Adenovirus (ADV) tests (%) in Canada by region by surveillance week

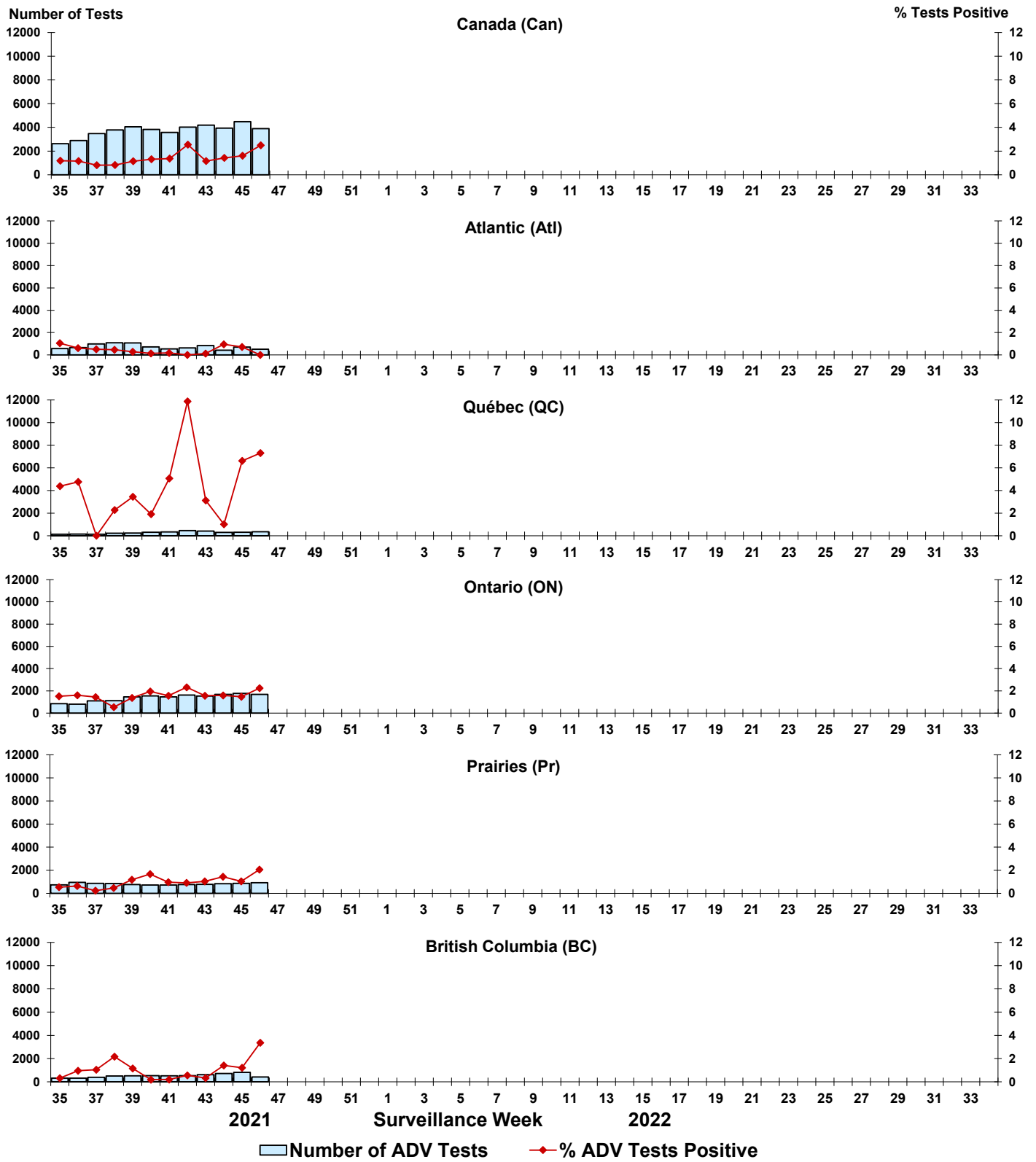


Figure 7: Positive Human metapneumovirus (HMPV) tests (%) in Canada by region by surveillance week

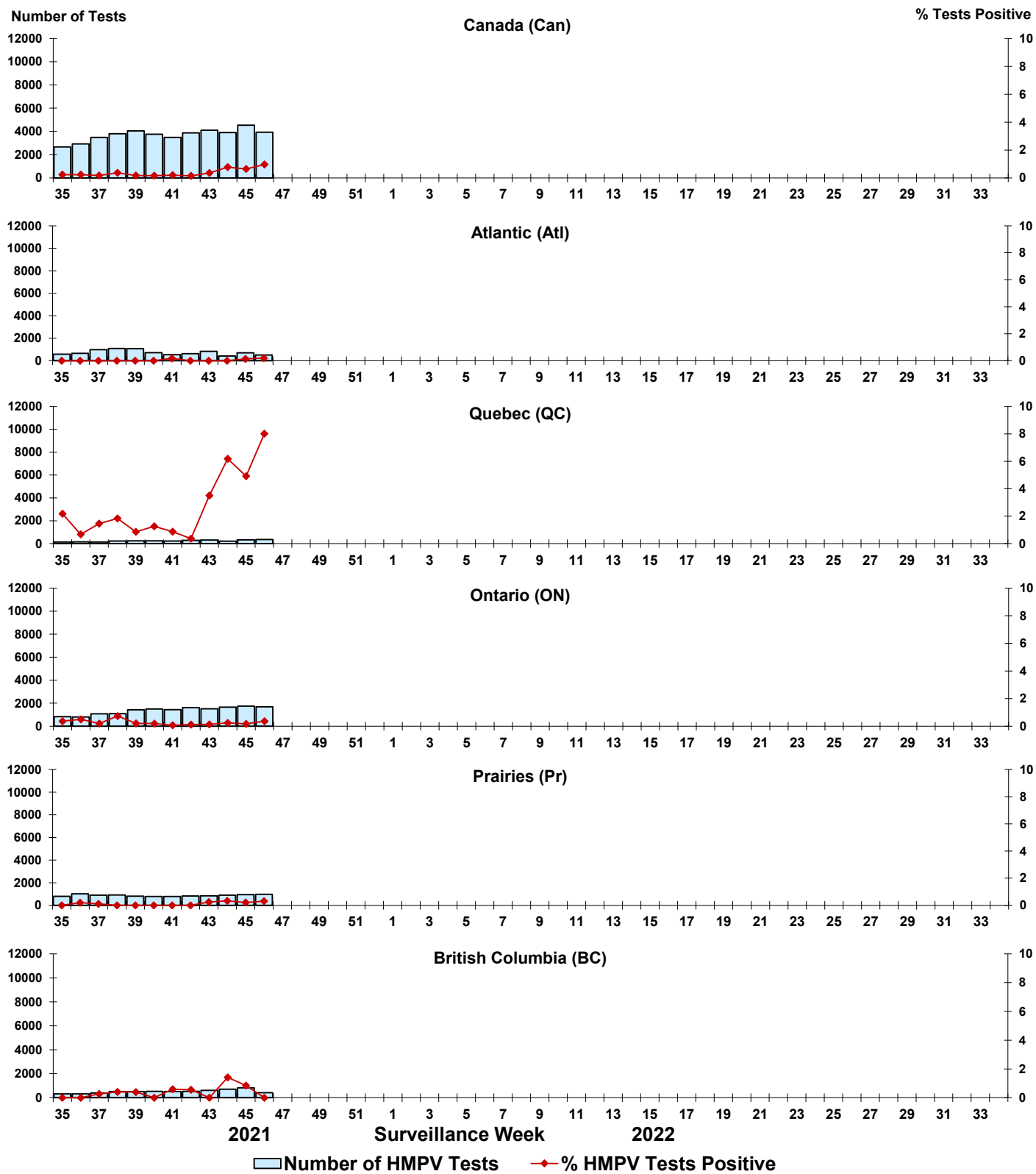


Figure 8: Positive Enterovirus/Rhinovirus (EV/RV) tests (%) in Canada by region by surveillance week

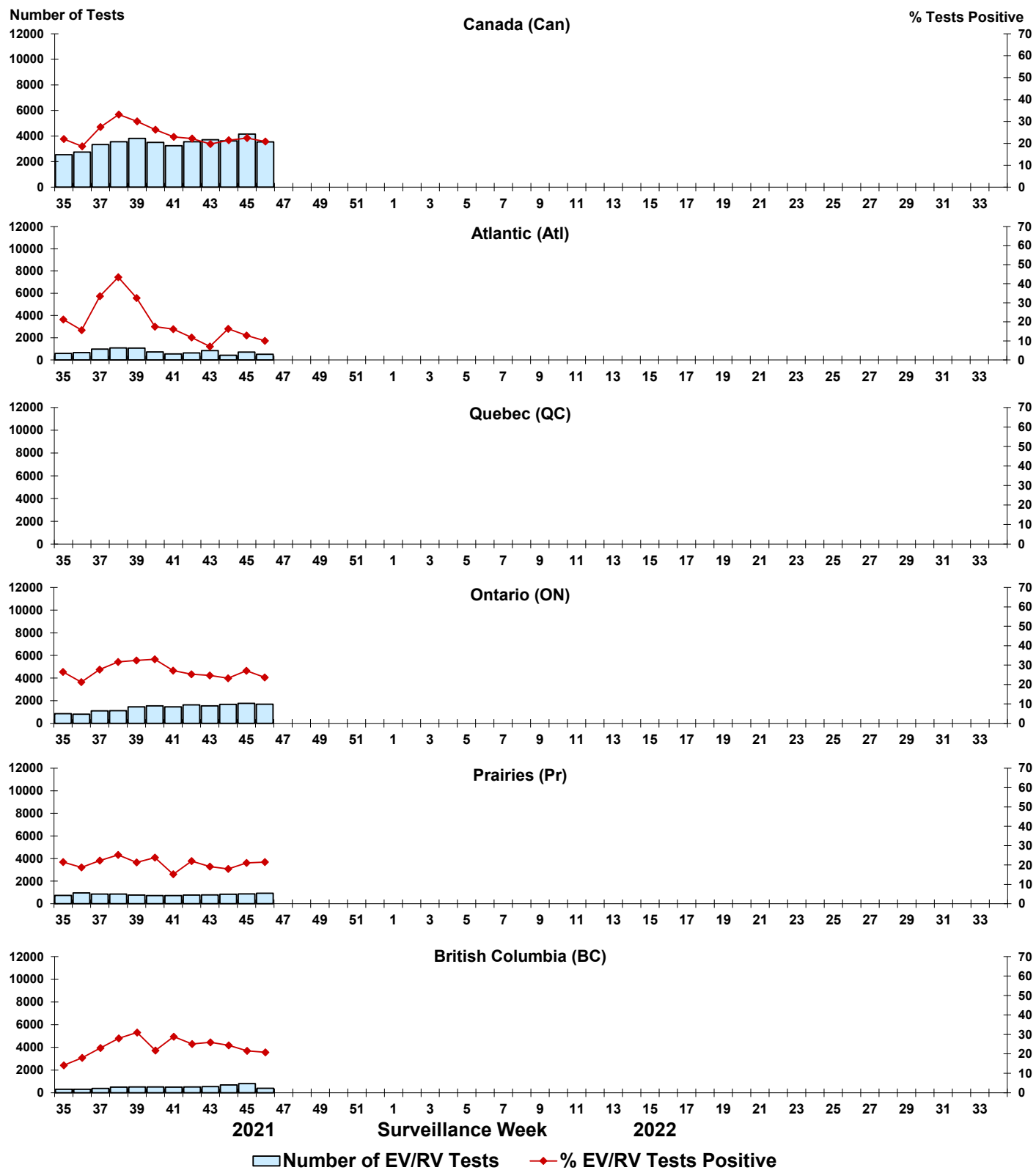


Figure 9: Positive Human coronavirus (HCoV) tests (%) in Canada by region by surveillance week

