

Respiratory Virus Detections in Canada

Respiratory Virus Report, Week 51 - ending December 21, 2019

The Respiratory Virus Detection Surveillance System collects data from select laboratories across Canada on the number of tests performed and the number of tests positive for influenza and other respiratory viruses. Data are reported on a weekly basis year-round to the Centre for Immunization and Respiratory Infectious Diseases (CIRID), Public Health Agency of Canada. These data are also summarized in the weekly FluWatch report.

Table 1: Respiratory Virus Detections/Isolations for the week ending December 21, 2019 (Reporting Week 201951)

Reporting Laboratory	Flu Tested	A(H1N1)pdm09 Positive	A(H3) Positive	A(UnS) Positive	Total Flu A Positive	Total Flu B Positive	RSV Tested	RSV Positive	PIV Tested	PIV 1 Positive	PIV 2 Positive	PIV 3 Positive	PIV 4 Positive	Other PIV Positive	Adeno Tested	Adeno Positive	hMPV Tested	hMPV Positive	Entero/Rhino Tested	Entero/Rhino Positive	Coron Tested	Coron Positive
Newfoundland	113	0	1	3	4	3	113	16	113	10	0	0	0	0	113	11	113	0	113	7	N.A.	N.A.
Prince Edward Island	27	0	0	1	1	0	27	1	1	0	0	0	0	0	1	0	1	0	1	1	1	0
Nova Scotia	83	0	0	2	2	1	84	5	21	0	0	0	0	0	21	0	21	0	21	4	21	1
New Brunswick	304	14	3	10	27	9	304	53	67	0	0	0	0	0	67	2	67	1	67	10	67	4
Atlantic	527	14	4	16	34	13	528	75	202	10	0	0	0	0	202	13	202	1	202	22	89	5
Région Nord-Est	130	0	0	8	8	5	93	1	0	0	0	0	0	0	0	0	0	0	N.A.	N.A.	0	0
Québec-Chaudière-Appalaches	390	0	0	30	30	5	415	31	107	2	0	0	1	0	110	5	91	0	N.A.	N.A.	90	0
Centre-du-Québec	795	0	0	101	101	97	695	57	0	0	0	0	0	0	0	0	0	0	N.A.	N.A.	0	0
Montréal-Laval	1661	0	0	200	200	222	1580	163	680	7	0	1	2	0	680	24	674	7	N.A.	N.A.	674	22
Ouest du Québec	550	0	0	73	73	122	491	56	0	0	0	0	0	0	0	0	0	0	N.A.	N.A.	0	0
Montréal	386	0	0	60	60	32	386	43	0	0	0	0	0	0	0	0	0	0	N.A.	N.A.	0	0
Province of Québec	3912	0	0	472	472	483	3660	351	787	9	0	1	3	0	790	29	765	7	N.A.	N.A.	764	22
P.H.O.L. - Ottawa	61	1	4	0	5	4	61	1	61	0	0	0	0	0	61	1	60	5	61	2	60	0
CHEO - Ottawa	269	0	0	28	28	21	269	56	29	0	0	0	0	2	29	1	29	2	29	1	29	2
P.H.O.L. - Kingston	24	1	1	0	2	0	22	1	22	0	0	0	0	0	22	0	21	0	22	5	21	0
UHN / Mount Sinai Hospital	407	0	0	39	39	9	407	24	18	1	0	0	0	0	0	0	16	1	0	0	N.A.	N.A.
P.H.O.L. - Toronto	412	64	7	2	73	10	389	24	389	0	0	0	0	0	389	4	382	14	389	19	382	0
Sick Kids Hospital - Toronto	88	11	1	0	12	6	88	25	88	2	0	0	1	0	88	2	88	0	88	8	88	8
Sunnybrook & Women's College HSC	59	0	0	4	4	0	59	2	59	0	0	0	0	0	59	0	59	4	59	2	0	0
P.H.O.L. - Sault Ste. Marie	7	0	0	0	0	0	7	2	7	0	0	0	0	0	7	0	7	1	7	0	7	0
P.H.O.L. - Timmins	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	1	0	1	0
St. Joseph's - London	147	0	0	10	10	0	147	23	44	1	0	1	0	0	44	2	44	3	30	1	30	1
P.H.O.L. - London	101	11	1	0	12	2	100	8	100	0	0	0	0	0	100	1	100	2	100	15	100	0
P.H.O.L. - Orillia	31	0	1	0	1	2	31	4	31	0	0	0	0	0	31	0	31	1	31	4	31	0
P.H.O.L. - Thunder Bay	19	3	0	0	3	3	19	0	19	0	0	0	0	0	19	0	19	0	19	0	19	0
P.H.O.L. - Sudbury	23	0	0	0	0	0	23	0	23	0	0	0	0	0	23	1	23	0	23	2	23	0
P.H.O.L. - Hamilton	112	10	3	0	13	2	104	13	104	0	0	0	0	0	104	3	104	6	104	9	104	0
P.H.O.L. - Peterborough	20	0	0	0	0	0	20	1	20	0	0	0	0	0	20	1	20	2	20	2	20	0
St. Joseph's - Hamilton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Province of Ontario	1781	101	18	83	202	59	1747	184	1015	4	0	1	1	2	997	16	1004	41	983	70	915	11
Manitoba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Regina	233	0	0	55	55	22	233	2	157	20	2	0	0	0	157	4	157	5	157	19	157	2
Saskatoon	267	0	0	22	22	25	267	7	267	3	0	0	0	0	267	1	267	1	267	9	267	3
Saskatchewan	500	0	0	77	77	47	500	9	424	23	2	0	0	0	424	5	424	6	424	28	424	5
Alberta	1400	29	94	57	180	300	1031	0	1031	27	1	1	11	0	1031	19	1031	41	1031	85	1031	31
Prairies	1900	29	94	134	257	347	1531	9	1455	50	3	1	11	0	1455	24	1455	47	1455	113	1455	36
Province of British Columbia	1021	16	17	5	39	65	1021	103	318	10	5	0	3	1	318	7	318	30	305	56	254	8
Yukon	40	1	0	0	1	0	40	0	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Northwest Territories	25	0	0	0	0	0	24	0	24	4	0	1	0	0	24	1	24	2	24	4	24	2
Nunavut	4	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	0	4	1	4	0
Territories	69	1	0	0	1	0	68	0	28	4	0	0	1	0	28	1	28	2	28	5	28	2
CANADA	9210	161	133	710	1005	967	8555	722	3805	87	8	3	19	3	3790	90	3772	128	2973	266	3505	84

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, Victoria Coastal Health, 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: Respiratory Virus Detections/Isolations for the period August 25, 2019 - December 21, 2019 (Reporting Weeks 201935-201951)

Reporting Laboratory	Flu Tested	A(H1N1)pdm09 Positive	A(H3) Positive	A(UnS) Positive	Total Flu A Positive	Total Flu B Positive	RSV Tested	RSV Positive	PIV Tested	PIV 1 Positive	PIV 2 Positive	PIV 3 Positive	PIV 4 Positive	Other PIV Positive	Adeno Tested	Adeno Positive	hMPV Tested	hMPV Positive	Entero/Rhino Tested	Entero/Rhino Positive	Coron Tested	Coron Positive
Newfoundland	1300	0	22	7	29	5	1300	40	1300	54	0	3	0	0	1300	53	1300	3	1300	251	N.A.	N.A.
Prince Edward Island	254	0	0	5	5	2	254	2	19	0	0	0	0	0	19	0	17	0	19	11	19	0
Nova Scotia	876	0	0	4	4	3	888	14	277	12	1	1	1	0	282	5	282	1	282	64	292	1
New Brunswick	2638	19	7	30	56	19	2579	138	969	32	3	0	6	0	969	37	969	2	969	199	969	4
Atlantic	5068	19	29	46	94	29	5021	194	2565	98	4	4	7	0	2570	95	2568	6	2570	525	1280	5
Région Nord-Est	1264	0	0	20	20	12	1021	18	0	0	0	0	0	0	0	0	0	0	N.A.	N.A.	0	0
Québec-Chaudière-Appalaches	2796	0	0	59	59	11	3091	81	1413	16	4	1	8	0	1445	56	1193	2	N.A.	N.A.	1197	6
Centre-du-Québec	3486	0	0	271	271	182	3073	140	0	0	0	0	0	0	0	0	0	0	N.A.	N.A.	0	0
Montréal-Laval	13729	0	0	575	575	445	13521	628	8273	101	4	7	10	0	8273	313	7854	29	N.A.	N.A.	8164	93
Ouest du Québec	3333	0	0	223	223	248	3146	173	0	0	0	0	0	0	0	0	0	0	N.A.	N.A.	0	0
Montérégie	2531	0	0	144	144	53	2529	146	0	0	0	0	0	0	0	0	0	0	N.A.	N.A.	0	0
Province of Québec	27139	0	0	1292	1292	951	26381	1186	9686	117	8	8	18	0	9718	369	9047	31	N.A.	N.A.	9361	99
P.H.O.L. - Ottawa	444	1	22	0	23	13	442	15	417	2	0	0	0	0	417	5	408	5	261	37	251	0
CHEO - Ottawa	2667	0	0	69	69	59	2667	203	418	1	0	3	6	3	418	10	418	2	421	112	409	4
P.H.O.L. - Kingston	307	3	2	0	5	0	304	5	300	1	0	0	0	0	300	7	295	3	131	27	122	0
UHN / Mount Sinai Hospital	4129	0	0	94	94	28	4129	85	285	4	0	9	2	0	0	0	283	8	0	0	N.A.	N.A.
P.H.O.L. - Toronto	5145	125	49	3	177	26	5096	126	5016	34	0	3	0	0	5016	57	4895	49	2472	208	2331	0
Sick Kids Hospital - Toronto	871	21	2	0	23	12	871	95	871	22	5	1	17	0	871	18	871	10	871	228	871	17
Sunnybrook & Women's College HSC	410	0	0	10	10	0	410	7	410	5	0	0	0	0	410	2	410	5	410	21	120	0
P.H.O.L. - Sault Ste. Marie	132	0	0	0	0	0	132	3	132	1	0	0	0	0	132	0	130	1	81	5	79	0
P.H.O.L. - Timmins	64	0	0	0	0	0	64	0	64	0	0	0	0	0	64	0	64	0	36	1	34	0
St. Joseph's - London	935	0	0	21	21	0	935	58	470	12	1	1	3	0	470	8	470	7	298	69	277	3
P.H.O.L. - London	1205	21	7	0	28	3	1196	65	1181	8	0	0	0	0	1181	15	1162	7	725	110	694	0
P.H.O.L. - Orillia	449	1	7	0	8	6	449	8	446	4	0	0	0	0	446	2	445	2	255	36	252	0
P.H.O.L. - Thunder Bay	122	3	0	0	3	5	120	0	120	0	0	1	0	0	120	1	111	1	72	10	62	0
P.H.O.L. - Sudbury	178	0	1	0	1	1	177	2	177	0	0	1	0	0	177	6	169	1	105	9	96	0
P.H.O.L. - Hamilton	1347	23	10	0	33	5	1327	45	1306	10	1	0	0	0	1306	20	1292	15	711	110	693	0
P.H.O.L. - Peterborough	430	2	1	0	3	2	427	9	426	3	0	0	0	0	425	5	425	5	171	26	168	0
St. Joseph's - Hamilton	1558	0	0	63	63	13	1558	216	1558	51	2	1	0	0	1558	45	1558	11	1558	210	0	0
Province of Ontario	20393	200	101	260	561	173	20304	942	13597	158	9	20	28	3	13311	201	13406	132	8578	1219	6459	24
Manitoba	3903	9	29	38	76	118	3799	101	2037	21	2	3	2	0	2037	41	1193	12	2037	383	1193	6
Regina	3350	0	0	174	174	48	3350	16	1943	76	3	1	6	0	1943	42	1866	8	1943	544	1943	8
Saskatoon	2360	0	0	75	75	57	2360	27	2360	81	5	4	2	0	2360	53	2363	2	2360	472	2360	10
Saskatchewan	5710	0	0	249	249	105	5710	43	4303	157	8	5	8	0	4303	95	4229	10	4303	1016	4303	18
Alberta	13288	133	390	235	758	960	10793	0	10793	277	25	18	79	0	10793	218	10793	147	10793	2351	10793	112
Prairies	22901	142	419	522	1083	1183	20302	144	17133	455	35	26	89	0	17133	354	16215	169	17133	3750	16289	136
Province of British Columbia	10330	57	127	68	326	157	10163	330	3923	125	35	18	21	12	3923	42	3897	144	3596	898	3318	35
Yukon	681	3	8	4	15	0	681	1	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Northwest Territories	271	6	1	1	8	0	264	0	264	5	0	1	1	0	264	7	264	13	264	94	264	10
Nunavut	66	0	0	0	0	0	64	0	64	1	3	0	3	0	64	5	64	1	64	29	41	0
Territories	1018	9	9	5	23	0	1009	1	328	6	3	1	4	0	328	12	328	14	328	123	305	10
CANADA	86849	427	685	2193	3379	2493	83180	2797	47232	959	94	77	167	15	46983	1073	45461	496	32205	6515	37012	309

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

For BC, 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 1: Number positive laboratory tests for other respiratory viruses by report week, Canada, 2019-2020

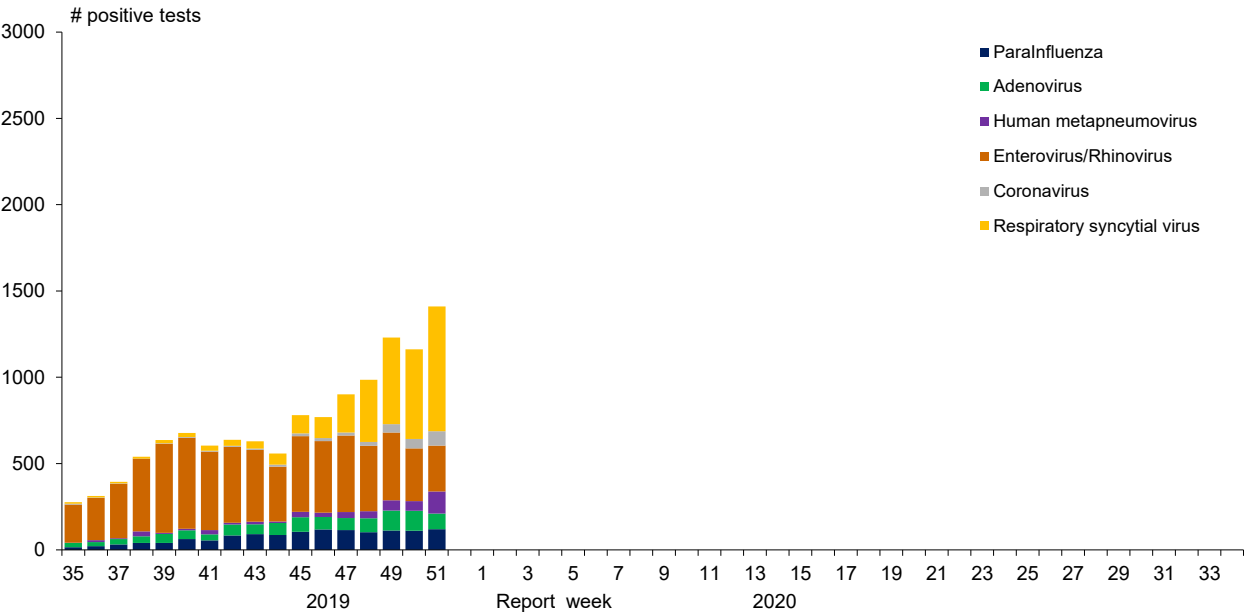


Figure 2: Positive Influenza Tests (%) in Canada by Region by Week of Report

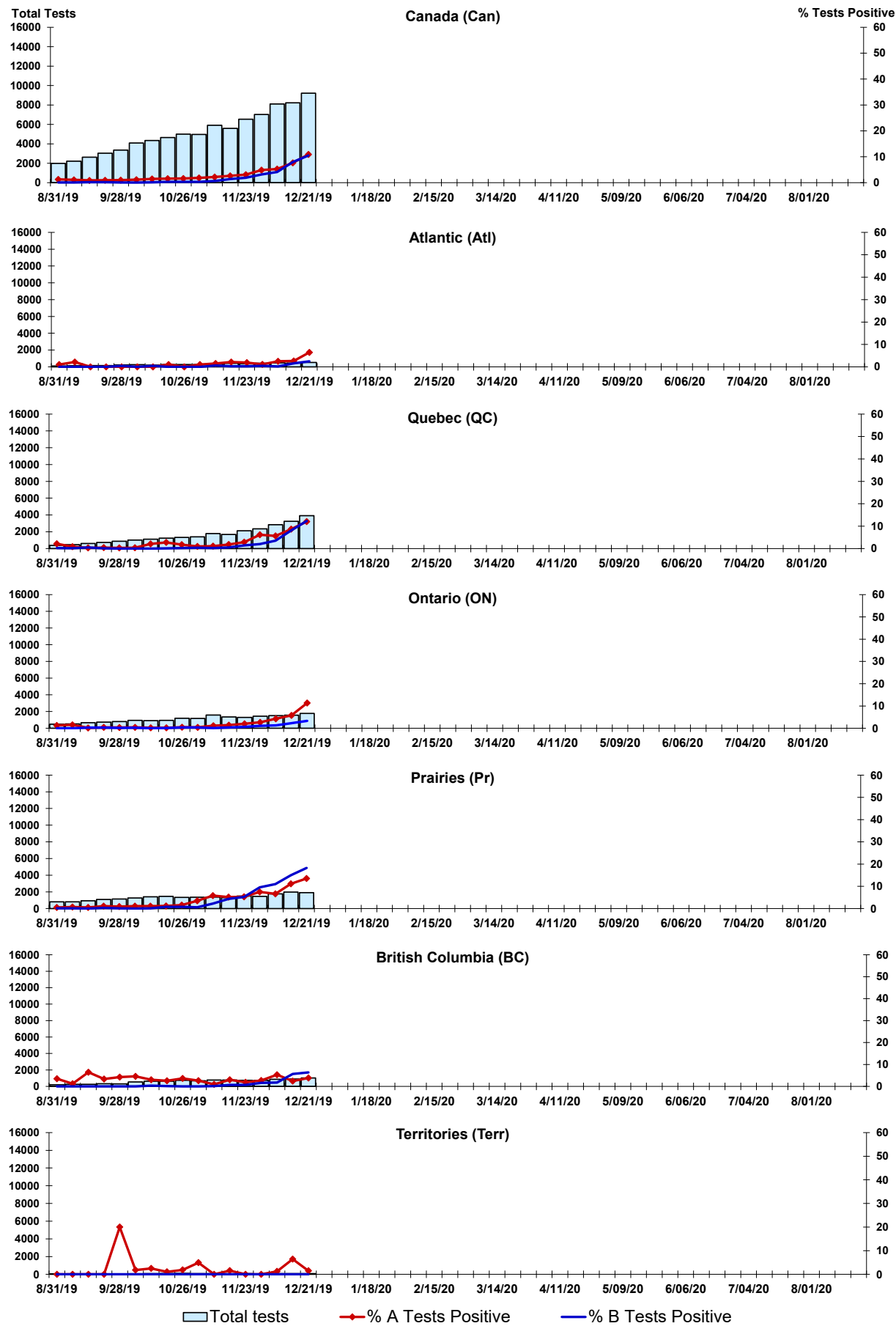


Figure 3: Positive Respiratory syncytial virus (RSV) Tests (%) in Canada by Region by Week of Report

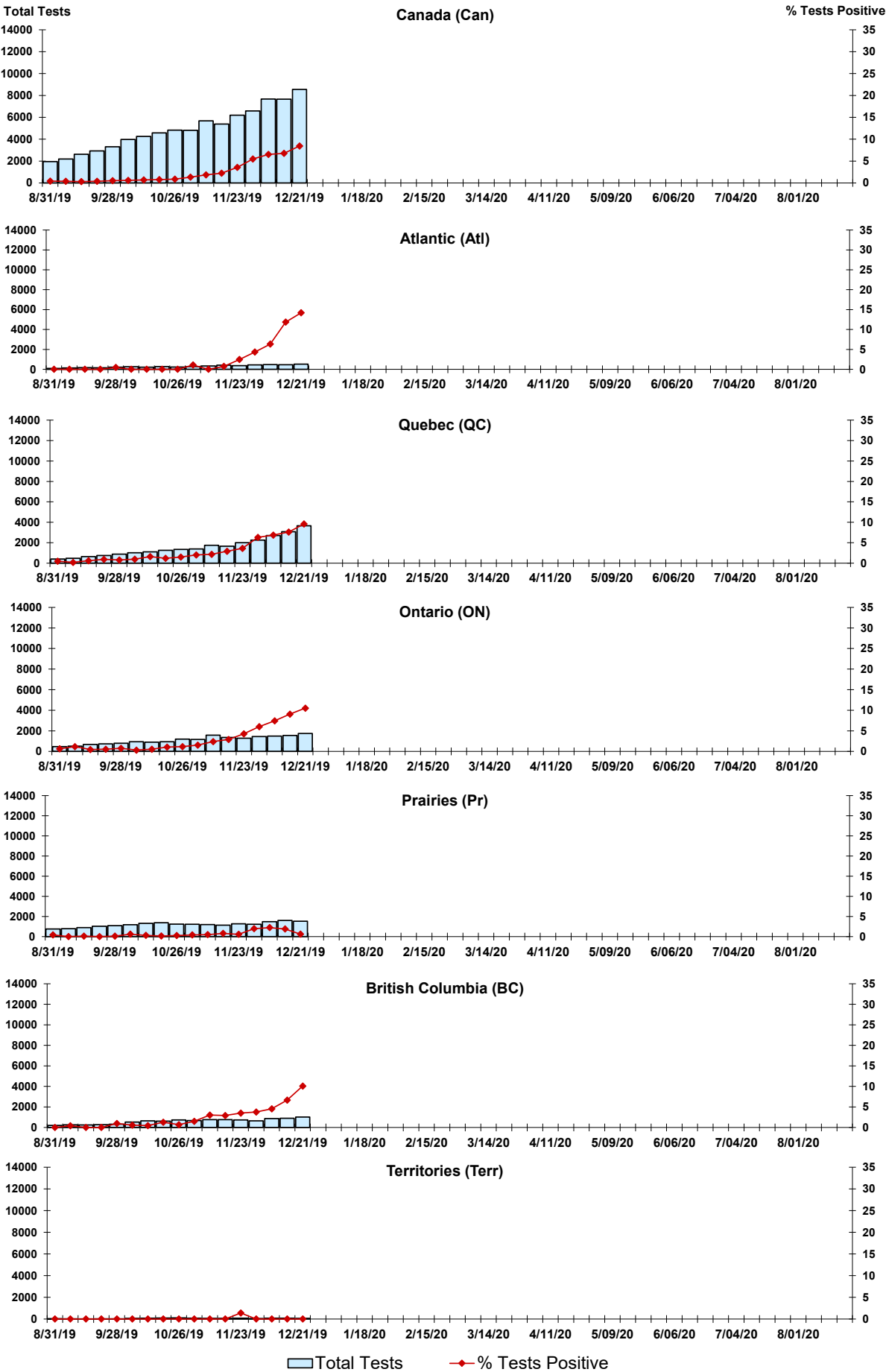


Figure 4: Positive Parainfluenza (PIV) Tests (%) in Canada by Region by Week of Report

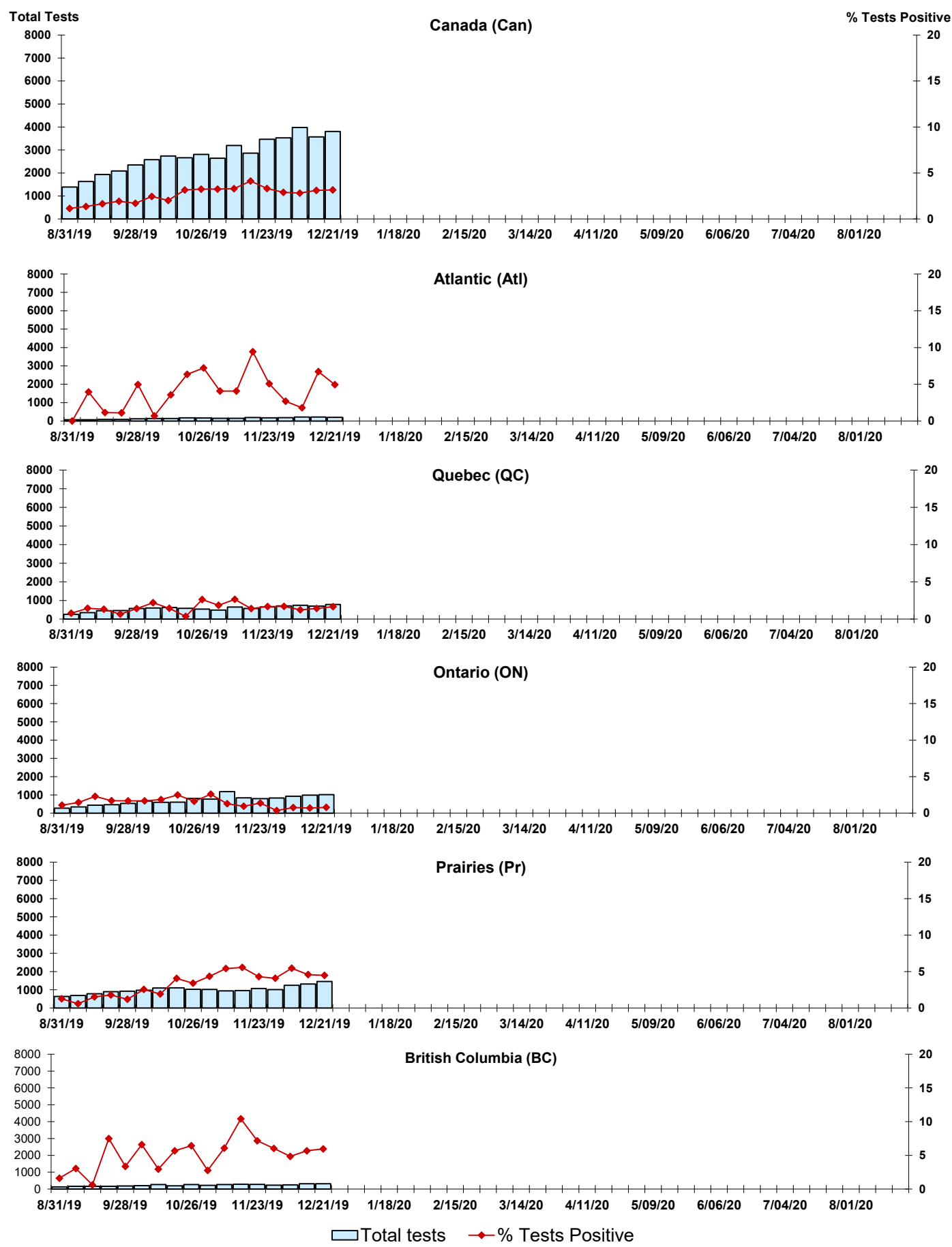


Figure 5: Positive Adenovirus (adeno) Tests (%) in Canada by Region by Week of Report

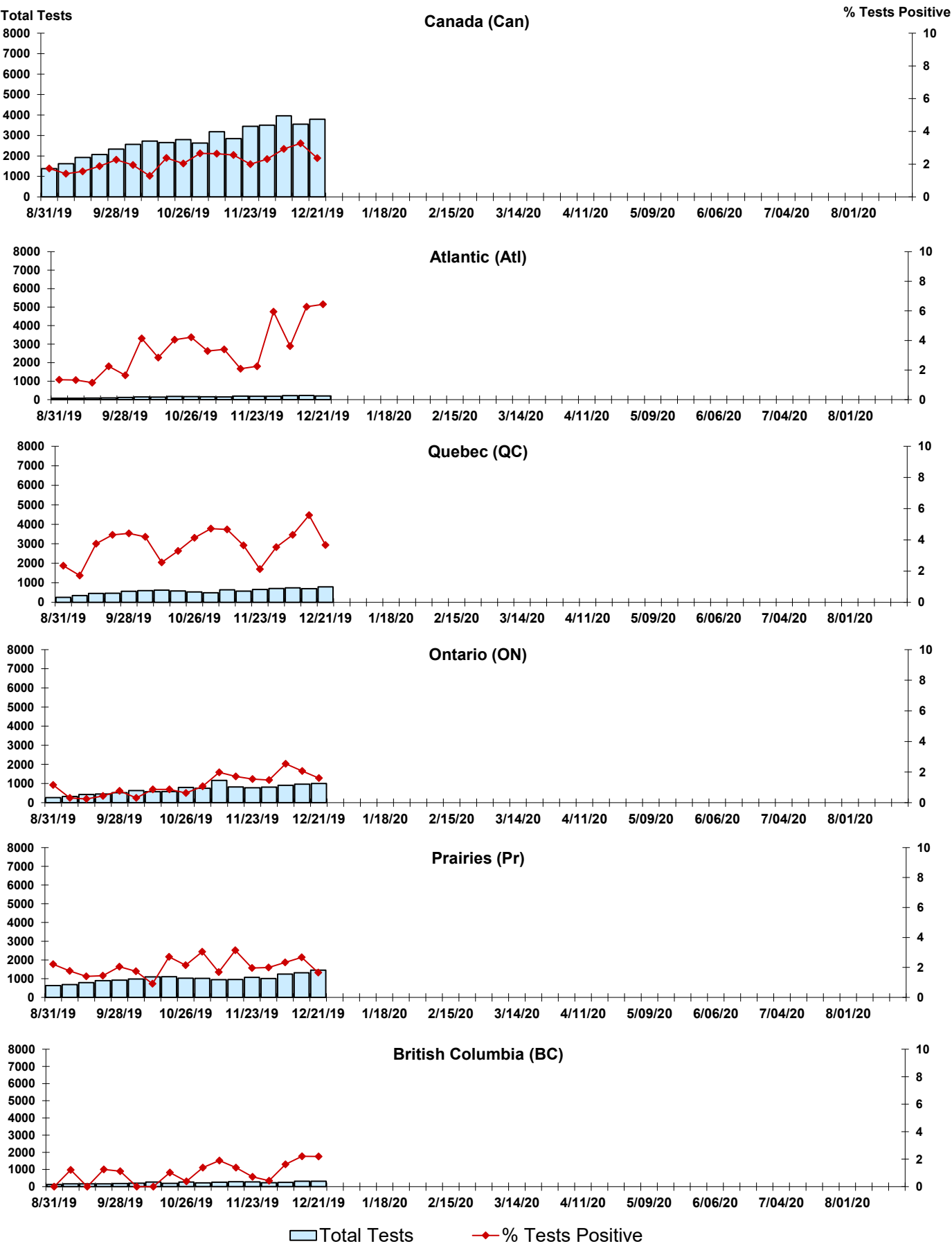


Figure 6: Positive human metapneumovirus (hMPV) Tests (%) in Canada by Region by Week of Report

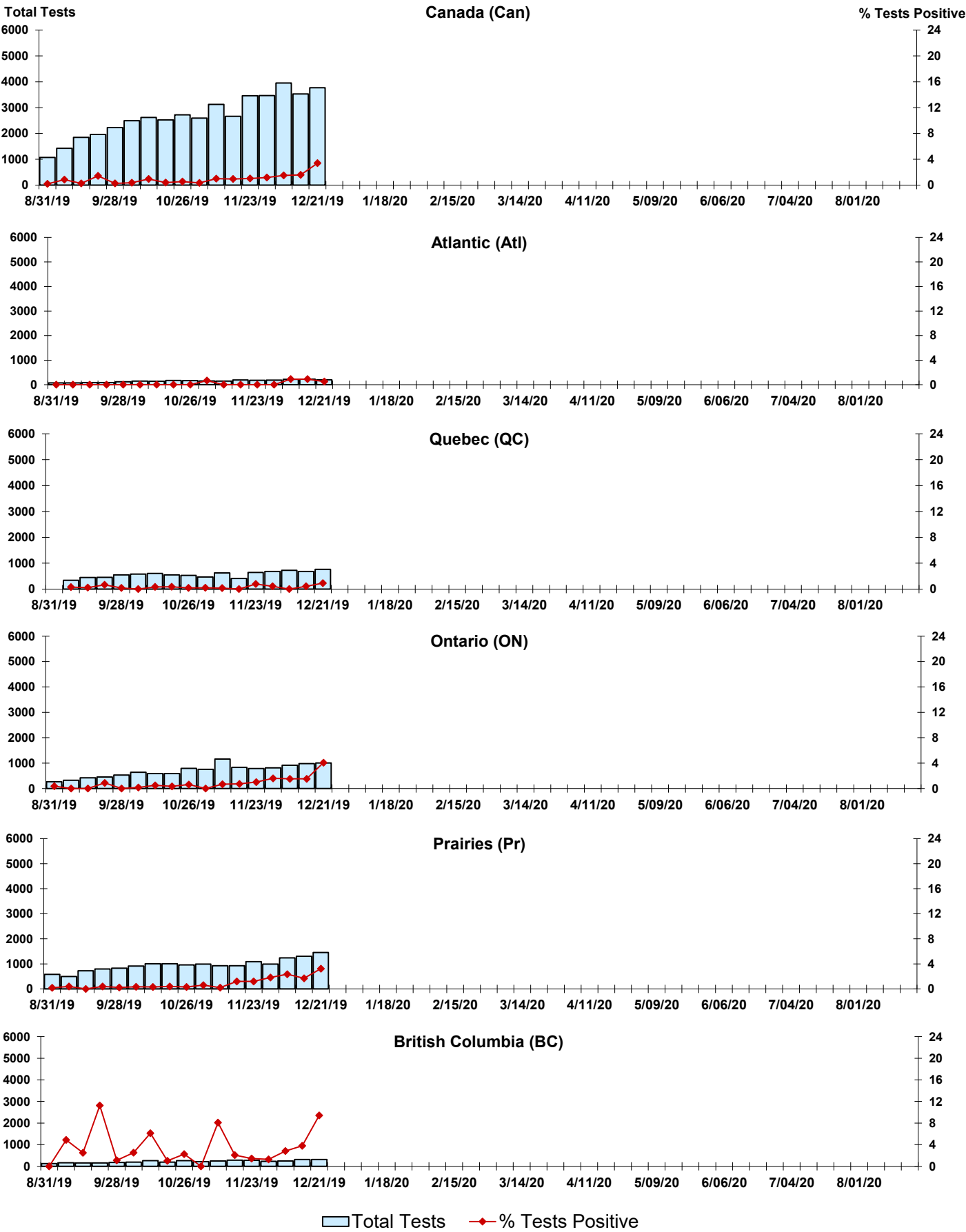


Figure 7: Positive Enterovirus/Rhinovirus (entero/rhino) Tests (%) in Canada by Region by Week of Report

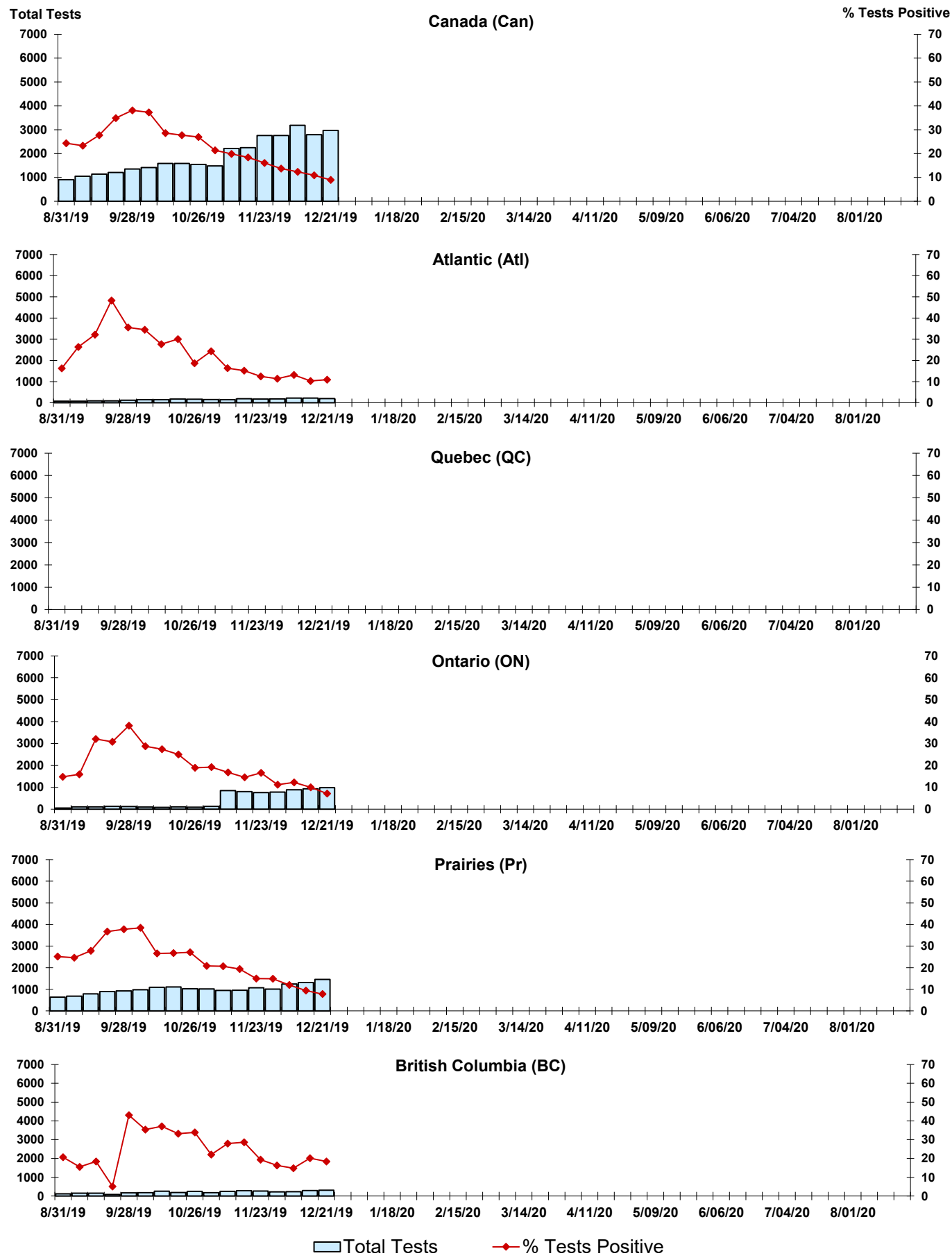
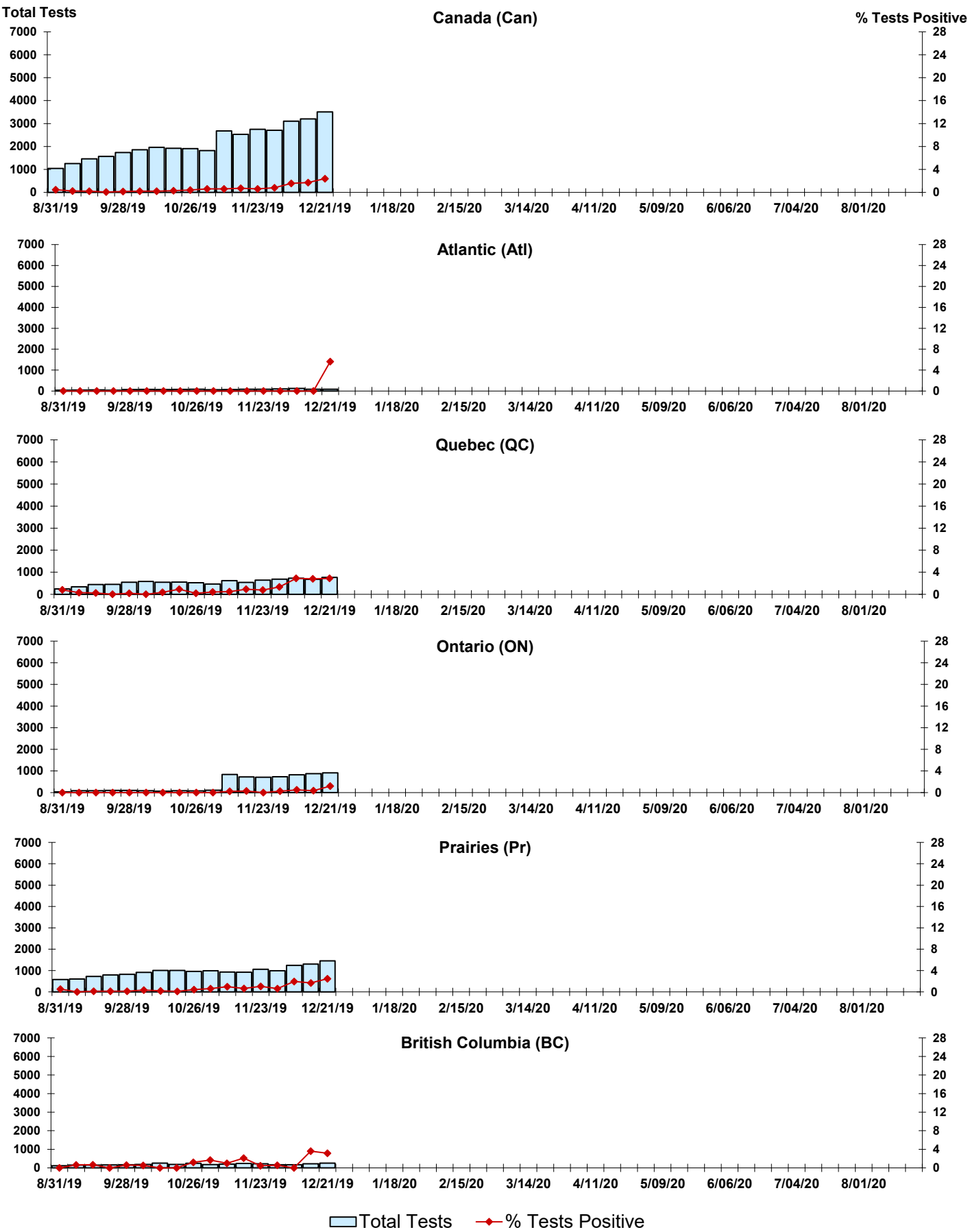


Figure 8: Positive Coronavirus (coron) Tests (%) in Canada by Region by Week of Report



Abbreviations:

A(H1N1)pdm09: Influenza A(H1N1)pdm09

A(H3): Influenza A(H3N2)

A (UnS): Influenza A (Unsubtyped)

Adeno: Adenovirus

CHEO: Children's Hospital of Eastern Ontario

Coron: Coronavirus

Entero: Enterovirus

hMPV: human metapneumovirus

HSC: Health Sciences Centre

N.A.: Not Applicable

P.H.O.L.: Public Health Ontario Laboratory

PIV: Parainfluenza

Rhino: Rhinovirus

RSV: Respiratory syncytial virus

UHN: University Health Network

Notes:

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