

Weekly COVID-19 Epidemiological Update - Region of the Americas

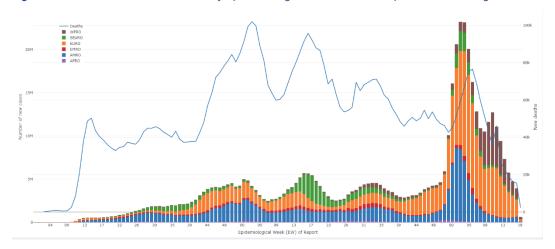
Issue 13, published May 03, 2022 Contents:

- Executive summary including global overview
- Regional and sub-regional trends
- Immunisation
- Genomic Surveillance

Executive Summary

- Since the onset of the pandemic in 2020 and up to May 03, 2022, a cumulative total of over 511 million COVID-19 cases including about 6.2 million deaths were reported from all six WHO regions. During epidemiological week (EW) 17, cases declined in all WHO regions except for the Region of the Americas. Similarly, weekly deaths declined in all but one WHO region the South-East Asia Region where a 68.9% increase was observed compared to EW 16 most likely due to reporting delays like in the previous week.
- **Globally,** approximately 3.8 million new COVID-19 cases were reported in EW 17 (April 24, 2022-April 30, 2022) a 17.4% decrease compared to EW 16 (April 17, 2022-April 23, 2022) (**Figure 1**). For the same period, 15,522 new COVID-19 deaths were reported globally a 4.1% relative decrease compared the previous week.
- In the region of the Americas, 616,348 cases and 4,200 deaths were reported in EW 17 a 12.7% increase in cases and 0.2% decrease in deaths compared to the previous week.
- At the subregional level, while South America reported a decline in **COVID-19 cases during EW17** (8% decrease), **the remaining three subregions reported an increase** (range: 15.4% 53.4% increase)). In the same period, two subregions reported an increase in deaths South America (8.7% increase) and Caribbean and Atlantic Ocean Islands (39.6% increase).
- The overall weekly case notification rate for the region of the Americas continued to increase with 60.3 cases per 100,000 population during EW 17 (53.5 the previous week). The 14-day COVID-19 death rate declined with 8.2 deaths per 1 million population reported during EW 16 and 17 (9 the previous two weeks).
- Among 32 countries/territories in the region with available data, **COVID-19 hospitalizations** increased in 11 countries/territories (range: 1.6% 166.7%) during EW 17 relative to the previous week. Among 26 countries/territories with available data, **COVID-19 ICU admissions** increased in 11 countries and territories (range: 0.6 100%).

Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. As of EW 17, 2022.

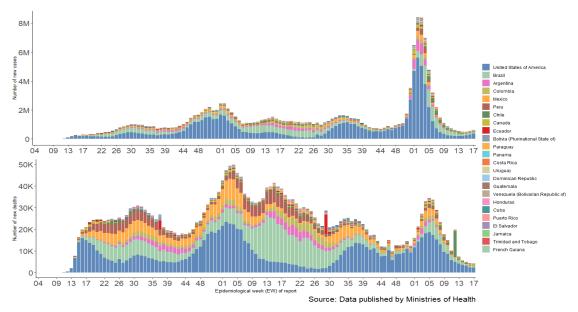






Region of the Americas - An overview

Figure 2: COVID-19 cases and deaths by epidemiological week (EW) of report and country/territory. Region of the Americas. As of EW 17, 2022.



During EW 17, 616,348 new **COVID-19 cases** were reported in the region of the Americas - a relative increase of 12.7% compared to previous week **(Figure 2)**. The biggest relative increase in cases were observed in Central America (14,030 cases, 53.4%), followed by North America (429,741 cases, 19.5% increase) compared to EW 16 **(Table 1)**. The highest proportion of weekly COVID-19 cases at the national level were reported by United States of America (372,167 new cases, 27.1% increase), Brazil (94,345 new cases, 3.2% increase), Canada (54,519 new cases, -13.8% decrease).

For the same period, 4,200 COVID-19 deaths were reported in the region of the Americas - a slight relative decrease of -0.2% compared to EW 16 (**Figure 2**). The subregion reporting the highest number of COVID-19 deaths in the last week was North America (2,698 deaths, -4.4% decrease). The countries/territories with the highest proportion of weekly deaths were United States of America (2,199 new deaths, -5.2% decrease), Brazil (853 new deaths, 31.2% increase), and Canada (477 new deaths, 5.5% increase).

Table 1: Weekly change (%) in cases and deaths between EW 16 and EW 17 by subregion. Region of the Americas.

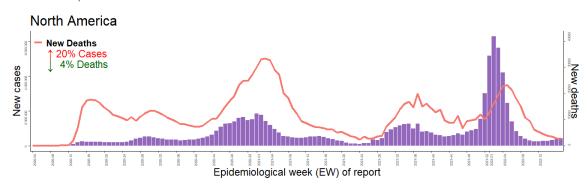
Subregion	Total Cases	Total Deaths	Cases EW 16	Deaths EW 16	Cases EW 17	Deaths EW 17	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	3,450,004	32,730	35,738	53	41,245	74	15.4%	39.6%
Central America	3,132,305	50,109	9,147	106	14,030	96	53.4%	-9.4%
North America	90,044,964	1,352,362	359,499	2,823	429,741	2,698	19.5%	-4.4%
South America	56,609,871	1,291,608	142,727	1,225	131,332	1,332	-8.0%	8.7%

A summary of the COVID-19 trends for EW 17 by subregion is presented below.

North America

The overall trends for **COVID-19 cases** have been increasing in North America as of EW 17 for the last five consecutive weeks, with 429,741 new cases reported during EW 17 – a 19.5% relative increase compared to the previous week. This increase was primarily driven by the surge in cases in the United States of America (372,167 cases, 27.1% increase), which also observed the largest proportion of reported cases in the subregion. According to the latest U.S. Centers for Disease Control and Prevention (CDC) Nowcast estimates, 36.5% of the weekly sequenced data in the country during EW 17 were the Omicron sub lineage BA2.12.1 — up from 26.6% reported during EW 16.¹ On the other hand, Canada (54,519 cases, -13.8% decrease) and Mexico (3,055 cases, -8.2% decrease) have been observing a declining trend in weekly cases for the last three and 14 consecutive weeks respectively. However, SARS-CoV-2 testing policies are more stringent (symptomatic and key groups) in Canada and Mexico compared to the United States of America (open public testing including asymptomatic).

Figure 3: COVID-19 cases and deaths by epidemiological week (EW). **North America.** Region of the Americas. EW 3, 2020 - EW 17, 2022.



Weekly COVID-19 deaths in North America decreased by -4.4% during EW 17 relative to the previous week. Canada is the only country reporting an increase (477 new deaths, 5.5% increase) in weekly deaths in the subregion, while the remaining two countries reported a decline — Mexico (22 new deaths, -57.7% decrease) and the United States of America (2,199 new deaths, -5.2% decrease).

Weekly data for COVID-19 hospitalizations and Intensive Care Unit (ICU) admissions are available in Canada and the United States of America. Both Canada and United States of America reported an increase in their weekly COVID-19 hospitalizations and ICU admissions — Canada (6,894 hospitalizations; 1.6% increase & 471 ICU admissions; 0.6% increase) and United States of America (17,394 hospitalizations; 9.7% increase & 1,990 ICU admissions; 2% increase).

Important increases in severity trends for the subregion this week were observed in Canada — where there is a continued increase in weekly deaths (5.5% increase) and hospitalizations (9.7% increase) — and the United States where an increase in hospitalizations (9.7%) and ICU admissions (2%) was observed. According to the COVID-19-Associated Hospitalization Surveillance Network of the U.S. CDC, while COVID-19-associated hospitalization rates in the age group of 65 years and older had been decreasing over several months, preliminary data showed that their rates have begun to increase again since the week ending April 9, 2022². These are the first increases in rates of COVID-19-associated hospitalizations observed in this age group since the week ending January 15, 2022.

¹ United States Centers for Disease Control and Prevention (CDC). COVID Data Tracker Variant Proportions. Accessed 3 May 2022. Available at: https://bit.ly/3w2UhhP

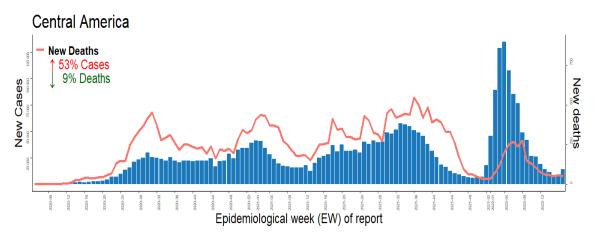
² United States Centers for Disease Control and Prevention (CDC). COVID Data Tracker Weekly Review. Interpretive Summary for April 29, 2022. Accessed 3 May 2022. Available at: https://bit.ly/3s2MKi3

Central America

In Central America, the **overall COVID-19 incidence** for the subregion continued to increase for the second consecutive week with 14,030 new cases reported during EW 17 - a 53.4% increase compared to the previous week (**Figure 4**).

Out of the seven countries and territories in the subregion, three countries reported an increase in weekly new COVID-19 cases. The biggest relative increase was observed in Costa Rica (4,290 new cases, 161.3% increase), followed by Panama (4,483 new cases, 76.8% increase) and Guatemala (4,527 new cases, 14.2% increase). However, the increase observed in Costa Rica during EW 17 is the result of a data artifact generated when the country switched over from daily to weekly reporting in EW 16. El Salvador reported no change in new cases, and the remaining three countries in the subregion reported a decrease in new cases (range: -28.4% - -18.2% decrease).

Figure 4: COVID-19 cases and deaths by epidemiological week (EW). **Central America. Region of the Americas.** EW 6, 2020 - EW 17, 2022.



During EW 17, **weekly deaths** decreased by approximately -9.4% relative to the previous week (**Figure 4**) in the Central American subregion. Six out of the seven countries/territories either did not have a change in their weekly deaths (Nicaragua) or reported a decline (range: -100% - -5.4%). Similar to the cases, Costa Rica's increase in weekly deaths (22 new deaths, 22.2% increase) is the result of a data artifact generated when switching over from daily to weekly reporting in EW 16.

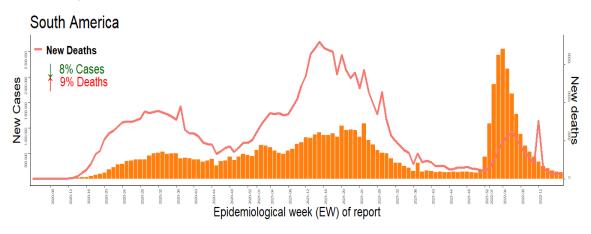
Among four countries and territories with available data for **weekly COVID-19 hospitalizations** and ICU admissions in the Central American Subregion, two countries reported an increase in their weekly COVID-19 hospitalizations — Belize (7 hospitalizations, 40% increase) and Panama (95 hospitalizations, 15.9% increase) — and the remaining two countries showed a decline in hospitalizations — Costa Rica (368 hospitalizations, -11.1% decrease) and Honduras (49 hospitalizations, -9.3% decrease). In terms of **weekly COVID-19 ICU admissions**, Costa Rica reported an increase (45 ICU admissions, 2.3% increase) as compared to the previous week, while the remaining three countries showed either a decline (Panama and Belize) or no change (Honduras).

Important increases in severity trends for the subregion were observed in Panama – where in addition to a large increase in cases (76.8%), there was also an increase in weekly hospitalizations (15.9%) – and Belize where COVID-19 hospitalizations have been increasing for the past four consecutive weeks with a reported 40% increase during EW 17 (7 hospitalizations).

South America

In South America, a total of 131,332 new COVID-19 cases were reported during EW 17 - a 8.0% decrease compared to the previous week (**Figure 5**).

Figure 5: COVID-19 cases and deaths by epidemiological week (EW). **South America. Region of the Americas.** EW 3, 2020 - EW 17, 2022.



Although **the overall weekly COVID-19 cases** declined in the subregion, at the national level, seven out of the 10 countries/territories experienced an increase in cases during EW 17 (range: 3.2% - 107.1% increase). The biggest relative increase in cases was observed in Bolivia (the Plurinational State of) (671 new cases, 107.1% increase), followed by Venezuela (Bolivarian Republic of) (217 cases, 52.8% increase) and Paraguay (421 cases, 19.6% increase) relative to the previous week. Please note that there is a one-week reporting lag for Paraguay, and the reported 421 new cases for EW 17 include 222 retrospective cases, which could result in a data artifact in weekly changes in cases. Among three countries reporting a decline in cases, the largest decline was observed in Argentina (11,443 new cases, -53.9% decrease), followed by Uruguay (1,856 new cases, -23.2% decrease), and Chile (14,168 new cases, -10.5% decrease) in EW 17. However, data should be interpreted with caution since all three countries- like many other around the world - have changed their COVID-19 testing strategies, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

In the same period, there was a total of 1,332 **COVID-19 deaths** reported in South America, representing an 8.7% increase compared to the previous week. The largest proportion of reported deaths were reported by Brazil (853 new deaths, 31.2% increase), followed by Chile (152 new deaths, 5.6% increase), and Argentina (111 new deaths, -43.9% decrease). In Paraguay, out of the 75 deaths reported in EW 17, only three deaths were attributed to the reporting week – the rest were historical deaths included in the weekly reporting.

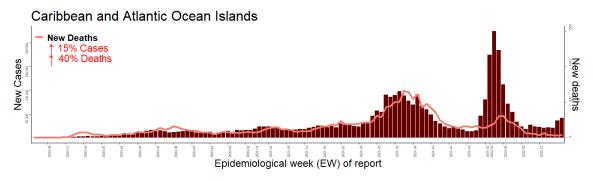
Among five countries and territories with available data for **COVID-19 hospitalizations**, all showed a decrease in weekly COVID-19 hospitalizations (range: -33.3% - 2.6% decrease) during EW 17. Similarly, among seven countries/territories with available data for **COVID-19 ICU admissions**, Uruguay is the only country that reported an increase in their ICU admissions (20 ICU admissions, 5.3% increase), while the remaining six countries/territories reported a decline (range: -100% - -5.4% decrease).

Important increases in severity trends for the subregion were observed in Bolivia (the Plurinational State of) where and a 33.3% increase in deaths (4 deaths) and a 107.1% increase in cases (671 cases) were reported.

Caribbean and Atlantic Ocean Islands

In the Caribbean and Atlantic Ocean Islands sub-region, **COVID-19 weekly cases** increased by 15.4% and **weekly deaths** increased by 39.6% compared to the previous week (**Figure 6**). At the national level, cases increased in 24 out of the 34 countries and territories in the subregion (range: 4.5% - 3800%), while they declined in the remaining 10 countries and territories (range: -80% - -1.3%).

Figure 6: COVID-19 cases and deaths by epidemiological week (EW). **Caribbean and Atlantic Ocean Islands.** Region of the Americas. EW 6, 2020 - EW 17, 2022.



During EW 17, seven countries/territories observed a relative increase in **their weekly deaths** for an overall sub-regional increase of 39.6% (74 new deaths) compared to the previous week. Weekly deaths either remained the same (Trinidad and Tobago and Cuba) or declined in the remaining countries and territories of the subregion (range: -100% — -42.9%). Data for some countries in the subregion should be interpreted with caution due to reporting delays and other biases. For instance, eight out of the nine deaths reported during EW 17 in Bahamas were historical deaths under investigation that are now being classified as COVID-19 deaths, leading to an artificial increase in their weekly deaths. Similarly, Jamacia also continues to report historical/reclassified deaths in its daily tallies, leading to a data artifact in the weekly percent changes.

Among the countries and territories with available data, seven countries and territories out of 21 reported an increase in their **weekly COVID-19 hospitalizations** (range: 10% - 166.7% increase), four reported a decline (range: -50% - -20% decrease), and ten remained the same. Similarly, among 13 countries and territories with available data for **COVID-19 ICU admissions**, seven reported an increase in their weekly COVID-19 ICU admissions (range: 28.6% - 100% increase). The remaining four countries/territories reported a decline (range: -100% - -17.6% decrease), and two (Trinidad and Tobago and French Guiana) reported no change in EW 17 compared to the previous week.

During EW17, **significant increases in new cases this week for the subregion** were observed in Montserrat (39 new cases, 3800% increase), Turks and Caicos Islands (22 new cases, 340% increase), Haiti (42 new cases, 180% increase), and Dominica (110 new cases, 144.4% increase). These four countries have vaccination rates ranging from 1.1% to 51.7% with a completed schedule of the COVID-19 vaccines.³

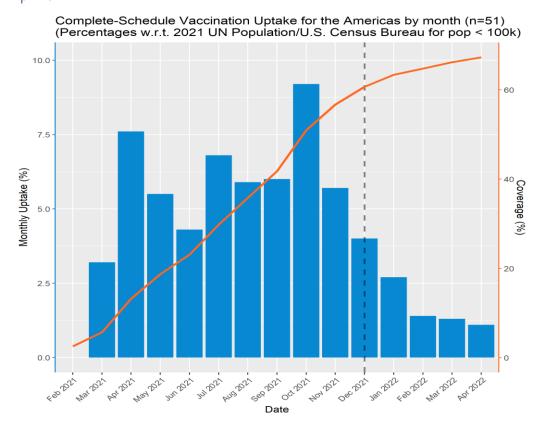
Significant increases in severity trends for EW 17 in this subregion were observed in the Puerto Rico (17 new deaths; 183.3% increase, 231 hospitalizations; 16.7% increase & 20 ICU admissions; 33.3% increase), United States Virgin Island (8 hospitalizations, 166.7% increase & 3 ICU admissions; 50% increase), and Grenada (7 hospitalizations, 40% increase & 2 ICU admissions, 100% increase).

³ Fully vaccinated: % of people who received the last recommended dose of any vaccine or completed their schedule. This includes the second dose if the schedule is a two-dose schedule and the single dose in a single dose schedule.

Immunization

Figure 7 shows the monthly complete-schedule vaccination uptake for COVID-19 vaccinations as well as the vaccine coverage in the region of the Americas.

Figure 7. The COVID-19 vaccination uptake and vaccination rates by month. Region of the Americas. February 2021 – April 2022



The monthly COVID-19 vaccination rate for the Americas has been decreasing since November 2021. As a result, the region is reporting an overall stagnation of coverage - currently at 67.3%*. The monthly uptake peaked at 9.2% in October 2021 and is currently at an all-time low of 1.1%. It is encouraged that countries continue promoting COVID-19 vaccination operations (i.e., primary series + booster dose for eligible persons) and expand the vaccination program to all persons who have not yet received the first dose of vaccine. These strategies will maximize the protection of the population against the SARS-CoV-2 virus and lower the national hospitalization and mortality rates.

Genomic Surveillance

Through PAHO's Genomic Surveillance Regional Network and the work from the Member States, 324,888 full genome sequences of SARS-CoV-2 from Latin America and the Caribbean have been uploaded to the Global Initiative on Sharing All Influenza Data (GISAID) platform up to 23 March 2022.

After the introduction of the Omicron VOC in the Americas at the end of 2021, it has rapidly increased in prevalence and has been officially reported by 53 countries or territories. Omicron now represents the vast majority of sequences detected in the PAHO Region and has outcompeted Delta and other lineages. In fact, the last documented detection of Delta in the Region was on 9 April 2022 in the Caribbean.

^{*} Coverage based on 2021 UN Population and U.S. Census Bureau for countries/territories with populations below 100,000 inhabitants.

Spotlight: Sequencing and genomic surveillance in the Andean subregion

During the last sixteen months (January 2021 to April 2022), 40,782 whole genome sequences from the Andean countries have been generated as part of the genomic surveillance systems (**Figure 8**). The "previously circulating" VOCs (**Alpha** - last detected 3 October 2021; **Beta** - last detected 15 Oct 2021; **Gamma** - last detected 23 December 2021) and the "currently circulating" VOCs (**Delta** - last detected 26 March 2022; and **Omicron**) have been detected in the subregion, in addition to "previously circulating" VOIs (**Lambda** - last detected 12 January 2022 and **Mu** - last detected 17 December 2021) and other lineages/variants (**Figure 9**).

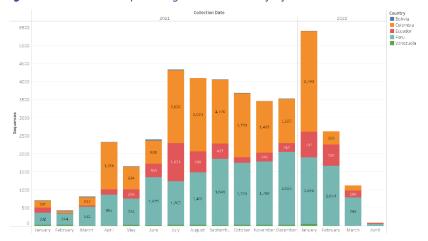


Figure 8. Number of sequences generated monthly by countries in the Andean subregion (January 2021-April 2022)

Source: GISAID

In the Andean subregion, Delta VOC was first detected by Peru in May 2021, and rapidly expanded to become predominant by mid-July in all countries (Figure 10). VOC Omicron was first detected in the subregion on 22 November 2021 in Colombia. After replacing Delta, Omicron has been predominant in the subregion, being detected in 1,904 samples (99%) sequenced and reported to GISAID during the last 8 weeks of available data (20 February to 16 April). Since Omicron's first detection, BA.1 and BA.1 sublineages represent the majority (98.6%) of sequences, while BA.2 and BA.2 sublineages represent 1.3% of the sequences, with 10 BA.3 samples detected while BA.4 and BA.5 have not been detected. However, the proportion of sequences identified as BA.1 (and BA.1 sublineages) has been decreasing for the past 8 weeks where data is available (weeks starting 20 February to 16 April) while BA.2 (and BA.2 sublineages) has been increasing during the same time period.

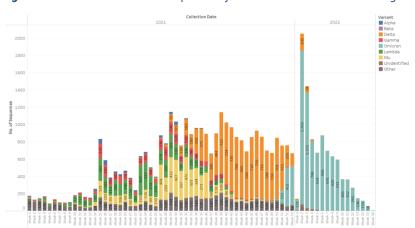


Figure 9. Variants detected and reported by countries in the Andean subregion (January 2021-April 2022)

Source: GISAID. Country-specific data is available at: https://ais.paho.org/phip/viz/SARS CoV2 variants regional.asp

Other

Brazil

Figure 10. Distribution of VOC and VOI identified by countries in the Andean subregion (January 2021-April 2022)

Source: GISAID

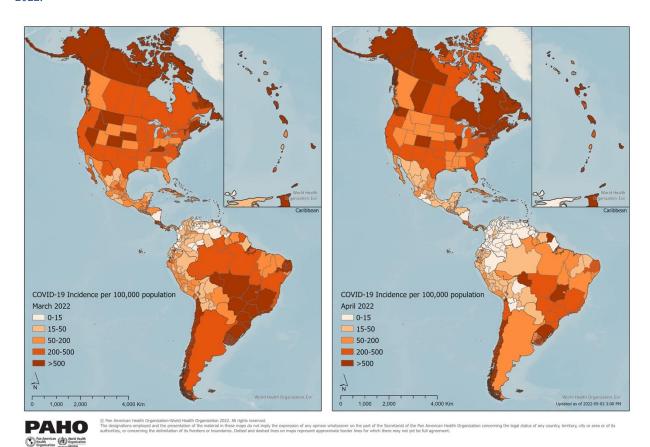
© 2022 Mapbox © OpenStreetMap

				Variant			
Country	Alpha	Beta	Delta	Gamma	Omicron	Lambda	Mu
Bolivia			+	+	+	+	+
Colombia	+	+	+	+	+	+	+
Ecuador	+		+	+	+	+	+
Peru	+		+	+	+	+	+
Venezuela	+		+	+	+	+	+

Source: GISAID



Annex 1: Maps of COVID-19 case incidence rates per 100,000 population. The region of the Americas. March vs April 2022.



The maps (**Annex1**) compare COVID-19 case incidence rates per 100,000 population in the region of the Americas for the months of March 2022 (left) and April 2022 (right). Overall, at the regional level, incidence rates were slightly higher in March than in April, with more territories reporting over 200 cases per 100,000 population. However, these trends should be interpreted with caution as many countries have changed their COVID-19 testing strategies recently, resulting in lower overall numbers of tests performed and consequently lower numbers of cases detected.

Over the month of March 2022, countries reporting the highest incidence were Brazil, Chile, Uruguay, Canada, the United States, Costa Rica, and several Caribbean territories including Trinidad and Tobago, Guadeloupe, Dominica, Martinique, Anguilla, and Barbados. These countries still reported high incidence in April 2022, but relative decreases in incidence rates were observed at the sub-national level in the United States, Brazil, and Costa Rica. Incidence rates remained high in small islands in the Caribbean subregion (over 500 cases per 100,000 population in the territories listed above), while a slight decrease in incidence was noted in Cuba. Canada reported increases in incidence in April, with additional provinces reporting over 500 cases per 100,000: Alberta, Quebec, Ontario, as well as east coast provinces Nova Scotia, New Brunswick, and Prince Edward Island.

