

## Weekly COVID-19 Epidemiological Update - Region of the Americas

Issue 10, published April 12, 2022

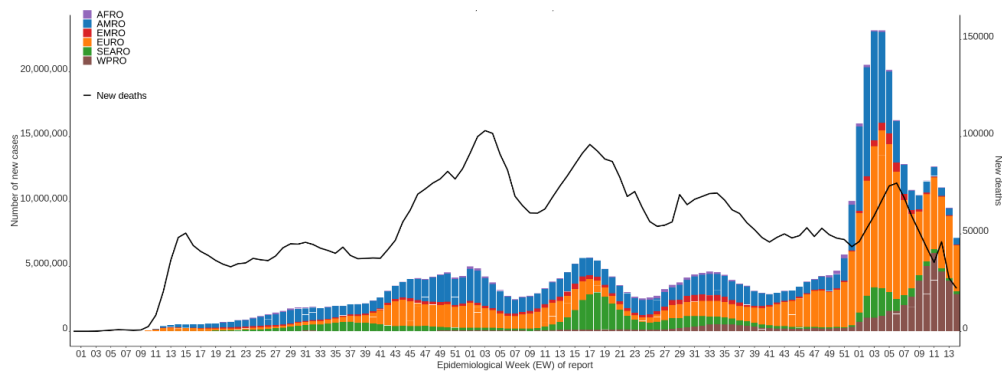
### Contents:

- 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 April 12, 2022, a cumulative total of over 497 million COVID-19 cases including close to 6.2 million deaths were reported from all six WHO regions. Cases and deaths declined across all WHO regions during EW 14.
- **Globally**, approximately 7.2 million COVID-19 cases were reported in epidemiological week (EW) 14 (April 03, 2022-April 09, 2022) - a 24.2% decrease compared to EW 13 (March 27, 2022-April 02, 2022) (**Figure 1**). For the same period, 22,387 new COVID-19 deaths were reported globally – a 17.9% relative decrease compared the previous week.
- **In the region of the Americas**, 503,848 cases and 5,734 deaths were reported in EW 14 - a -5.9% decrease in cases and -22.4% decrease in deaths compared to the previous week.
- At the subregional level, COVID-19 cases increased in 2 subregions which are North America (6.9% increase) and the Caribbean and Atlantic Ocean Islands (5.1% increase), while COVID-19 deaths decreased in all the subregions.
- The overall weekly case notification rate for the region of the Americas was 49.3 cases per 100,000 population during EW 14 (52.3 the previous week) and this rate has been declining consecutively for nearly three months since the beginning of 2022. Between EW 14 and 13, the 14-day COVID-19 death rate was 12.8 deaths per 1 million population (26.4 the previous two weeks).
- Among 36 countries/territories in the region with available data, **COVID-19 hospitalizations** increased in 11 countries and territories (range: 9.8% - 400%) during EW 14 compared to the previous week. Among 30 countries and territories with available data, COVID-19 **ICU admissions** increased in 6 countries and territories (range: 12.5% - 10 %).
- As of April 8, 2022, the cumulative vaccination rates with completed schedule per 100 people in the Region of the Americas ranged from 0.9 to 94.6%.

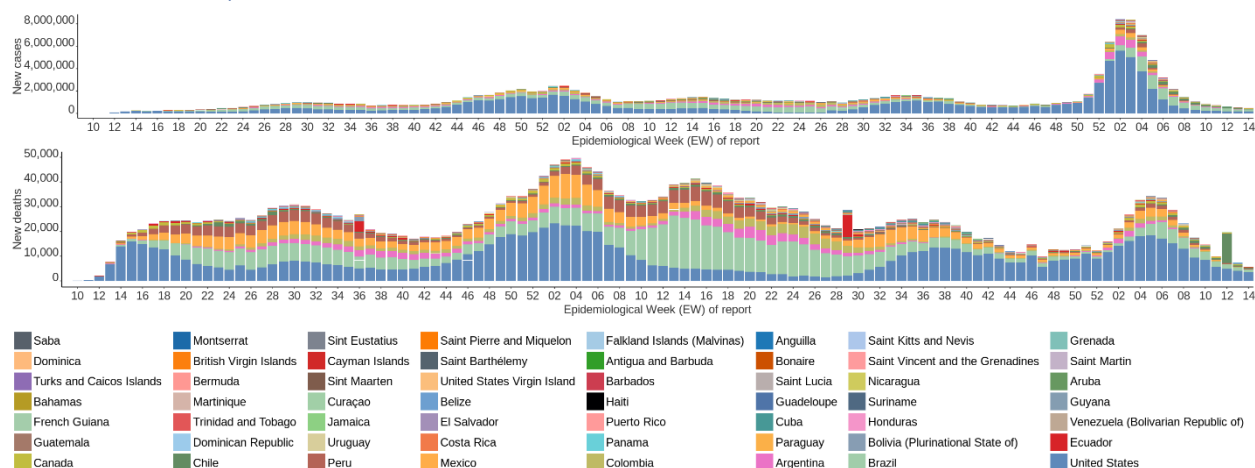
**Figure 1:** COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. As of EW 14, 2022.



Source: Data published by WHO COVID-19 dashboard

## 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 14, 2022.



Source: Data published by Ministries of Health. Region of the Americas.

During EW 14, 503,848 new **COVID-19 cases** were reported in the region of the Americas – a 5.9% relative decrease compared to previous week (**Figure 2**). Among the four subregions in the Americas, COVID-19 cases increased in North America (6.9% increase) and the Caribbean and Atlantic Ocean Islands (5.1% increase) subregions (**Table 1**), while it decreased in the remaining two subregions.

During EW 14, the highest proportion of weekly COVID-19 cases in the Region were reported by the United States of America (203,335 new cases, 3.9% increase), Brazil (148,798 new cases, -13.9% decrease), Canada (68,656 new cases, 21.7% increase).

**Table 1:** Weekly change (%) in cases and deaths between EW 13 and EW 14 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 13	Deaths EW 13	Cases EW 14	Deaths EW 14	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	3,350,853	32,540	20,128	120	21,145	54	5.1%	-55.0%
Central America	3,098,673	49,790	13,838	114	8,947	86	-35.3%	-24.6%
North America	88,938,601	1,342,306	257,762	4,429	275,561	3,856	6.9%	-12.9%
South America	56,204,232	1,287,762	243,642	2,727	198,195	1,738	-18.7%	-36.3%

For the same period, 5,734 **COVID-19 deaths** were reported in the region of the Americas - a relative decrease of 22.4% compared to previous week (**Figure 2**). The declining trend was observed across all four subregions and the highest proportions of deaths was reported in the North American subregion (3,856 deaths; 12% decrease) (**Table 1**).

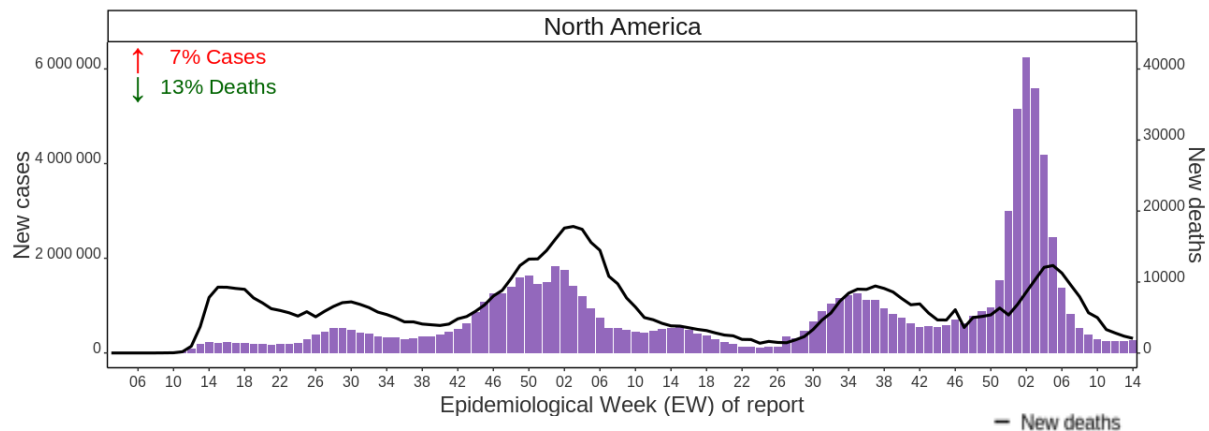
The countries and territories with the highest proportion of weekly COVID-19 deaths in the Region of the Americas during EW 14 were the United States of America (3,487 new deaths, 13.8% decrease), Brazil (1,120 new deaths, 22% decrease), Chile (308 new deaths, 21.2% decrease).

**A summary of the COVID-19 trends for EW 14 by subregion is presented below.**

## North America

The overall trends for **COVID-19 cases** continued to increase for the second consecutive week in North America with 275,561 new cases reported during EW 14 – a 6.9% increase compared to the previous week (**Figure 3**). The main contributor to the increase in new COVID-19 cases were due to Canada where a 21.7% increase in weekly cases was observed (68,656 new cases), followed by United States of America with 203,335 new cases – 3.9% increase compared to EW 13. In Canada, the proportion of BA.2 sub-lineage of Omicron is increasing within the country, and the provinces of Quebec and Ontario are experiencing a surge in COVID-19 cases.<sup>1</sup> In Mexico, there were a substantial decline in new cases (3570 cases, -36.2 % decrease) in EW 14.

**Figure 3:** COVID-19 cases and deaths by epidemiological week (EW). **North America.** Region of the Americas. EW 3, 2020 - EW 14, 2022.



Source: Data published by Ministries of Health. Region of the Americas.

**Weekly COVID-19 deaths** decreased by 12.9% in North America during EW 14 relative to the previous week (**Figure 3**). While deaths continued to decline in Mexico (63 new deaths, 49.6% decrease), and the United States of America (3,487 new deaths, 13.8% decrease), it increased in Canada during EW 14 (306 new deaths, 17.7% increase) – mainly driven by the increases in Quebec and Ontario provinces.<sup>1</sup>

**Weekly data for COVID-19 hospitalizations and Intensive Care Unit (ICU) admissions** are available for Canada and the United States of America. During EW 14, COVID-19 hospitalizations increased in Canada (4,957 hospitalizations; 17.3% increase) but ICU admissions declined by about 1.5% for the same period. In the United States, severity trends continue to decline during EW 14 with a reported 10.9% decline in weekly COVID-19 hospitalizations and 15.9% decline in weekly ICU admissions. According to the COVID-19 weekly report by the Public Health Agency of Canada (PHAC), the hospitalization rates among unvaccinated individuals continued to be higher than those among fully vaccinated since early-January 2022.<sup>2</sup> In the same period, the incidence rate among fully vaccinated individuals has decreased to a lower rate than that of unvaccinated people.

**Important increases in severity trends this week for the subregion was observed in** Canada where concurrent increases in weekly cases (21.7% increase), hospitalizations (17.3% increase), and deaths (17.7% increase) were reported.

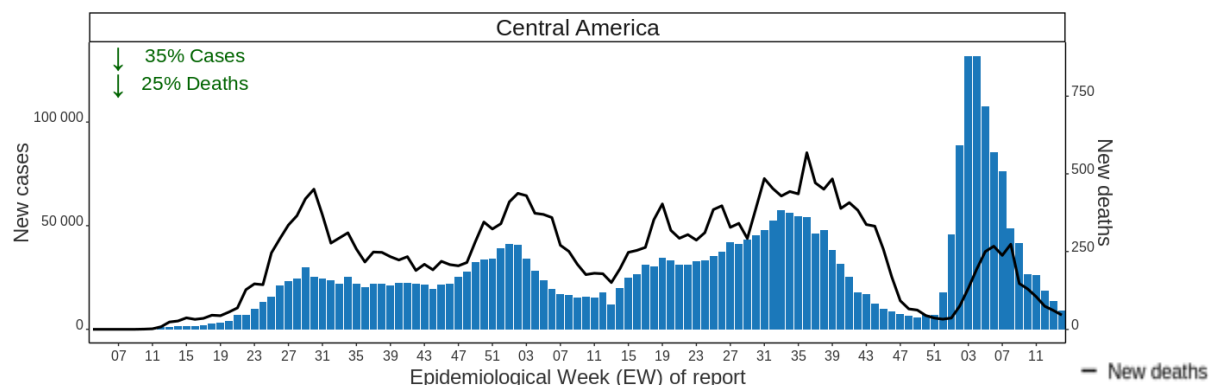
<sup>1</sup> Public Health Agency of Canada (PHAC) COVID-19 daily epidemiology update. Accessed 12 April 2022. Available at: <https://bit.ly/3rmS4MJ>

<sup>2</sup> The Public Health Agency of Canada (PHAC). COVID-19 in Canada. Canada COVID-19 Weekly Report – 22 March to 2 April 2022 (Week 13). Available at: <https://bit.ly/3uzba4p>

## Central America

In Central America, the overall COVID-19 incidence for the sub-region continues on a downward trend with 8,947 new cases reported during EW 14 – a -35.3% decrease compared to the previous week (**Figure 4**).

**Figure 4:** COVID-19 cases and deaths by epidemiological week (EW). **Central America. Region of the Americas.** EW 6, 2020 - EW 14, 2022.



Source: Data published by Ministries of Health. Region of the Americas.

Out of the seven countries and territories in the subregion, **COVID-19 cases** increased in one country – El Salvador (518 new cases, 100% increase) – and declined in the remaining six (range: 82.1% - 7.4%). However, the data for El Salvador is preliminary and subject to change. The countries and territories with the largest decline in cases this week included Honduras (98 new cases, 82.1% decrease), Costa Rica (1,975 new cases, 57.5% decrease), and Guatemala (4,600 new cases, 31.7% decrease).

For the same period, **weekly deaths** in Central America decreased by approximately 24.6% relative to the previous week (**Figure 4**). Two out of the seven countries and territories reported an increase in their weekly deaths – Belize (8 new deaths, 300% increase) and Guatemala (49 new deaths, 11.4% increase). The remaining five either did not have a substantial change in their weekly deaths (Nicaragua, 0%) or reported a decline (range: 78.6% – 33.3%).

Among the four countries and territories with available data for **weekly COVID-19 hospitalizations and Intensive Care Unit (ICU) admissions**, only Belize reported an increase in weekly hospitalizations during EW 14 (2 hospitalizations, 100% increase). The trends either remained the same or declined in the remaining three countries and territories (Honduras, Costa Rica, and Panama).

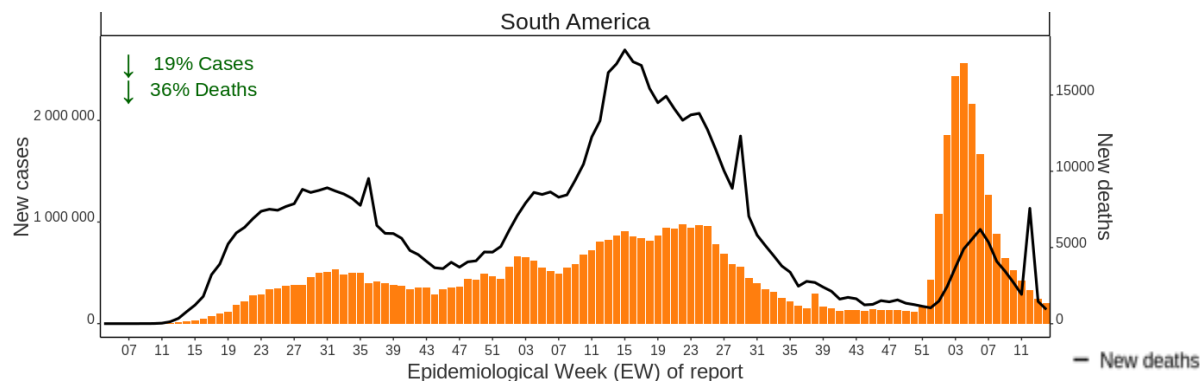
**Important increases in severity trends this week for the subregion was observed in Belize** where hospitalizations increased by 100% (2 new hospitalizations) and deaths increased by 300% (8 new deaths) compared to the previous week.

## South America

In South America, a total of 198,195 **new COVID-19 cases** were reported during EW 14 – a -18.7% decrease compared to the previous week (**Figure 5**). Out of the 10 countries and territories the sub-region, only one experienced an increase in cases during EW 14 – Venezuela (698 new cases, 18.5% increase). Weekly cases declined in the rest of the countries and territories with the largest decline reported by Paraguay (93 new cases, -84.3% decrease), followed by Ecuador (2324 new cases, -47.8% decrease), and Chile (26381 new cases, -32.6% decrease).

For the same period, a total of 1,738 **new COVID-19 deaths** was reported in South America – a 36.3% decrease compared to the previous week. (**Figure 5**). While weekly deaths increased in Uruguay by 66.7% compared to the previous week (20 new deaths), the trend declined in the remaining nine countries (range: 11.5% - 99.3%).

**Figure 5: COVID-19 cases and deaths by epidemiological week (EW). South America. Region of the Americas. EW 3, 2020 - EW 14, 2022.**



Source: Data published by Ministries of Health. Region of the Americas.

The largest decline in deaths was reported by Bolivia (Plurinational State Of) (3 new deaths, -99.3% decrease), followed by Paraguay (3 new deaths, -97.5% decrease), and Argentina (4 new deaths, -84.6% decrease). However, please note that data is preliminary and subject to change – particularly among the countries with the largest declines in cases and deaths this week since majority are known to carry out retroactive adjustments on a daily/weekly basis.

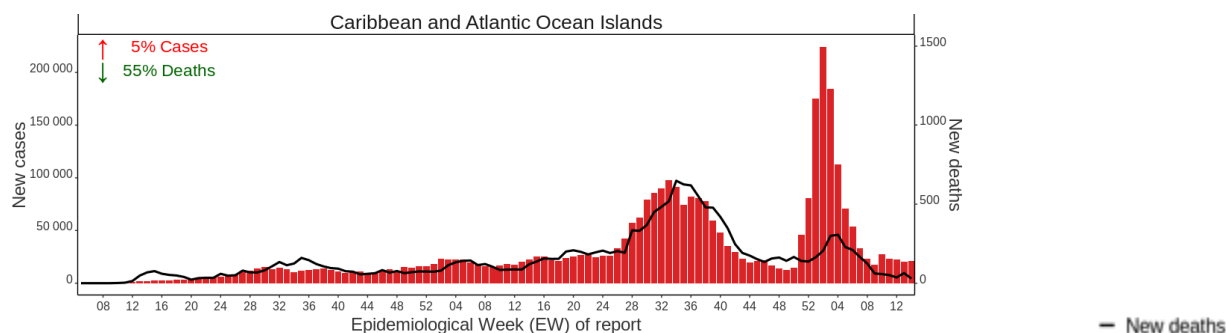
Among the six countries and territories with data available for **COVID-19 hospitalizations**, only Venezuela reported an increase during EW 14 (1,572 hospitalizations, 69.9% increase) compared to the previous week. The trends declined in the remaining five countries and territories (range: 100% - 7.4%). Similarly, among the eight countries and territories with data available for **COVID-19 Intensive Care Unit (ICU) admissions**, only Venezuela reported an increase during EW 14 (105 ICU admissions, 18% increase) compared to the previous week. The trends declined in the remaining seven countries/territories (range: 100% - 8.6%).

**Important increases in severity trends this week for the subregion were observed in** Uruguay (20 new deaths, 66.7% increase); and Venezuela (1,572 hospitalizations; 69.8% increase & 105 ICU admissions; 18% increase).

## Caribbean and Atlantic Ocean Islands

In the Caribbean and Atlantic Ocean Islands sub-region, **weekly cases** increased by 5.1% and weekly deaths decreased by 55.0% compared to the previous week (**Figure 6**). At the national level, cases increased in 14 out of the 34 countries and territories in the subregion (range: 13.5% - 362.7%) while it remained the same (n=3) or declined (n=17) in the remaining countries and territories (range: -100% - -7.5%).

**Figure 6: COVID-19 cases and deaths by epidemiological week (EW). Caribbean and Atlantic Ocean Islands. Region of the Americas. EW 6, 2020 - EW 14, 2022.**



Source: Data published by Ministries of Health. Region of the Americas.

During EW 14, the largest relative increase in cases was observed in Saint Kitts and Nevis (3 new cases, 200% increase), the U.S. Virgin Islands (108 new cases, 140% increase), and St. Maarten (89 new cases, 117.1% increase).

Out of 33 countries and territories in the Caribbean and Atlantic Ocean Islands subregion with reported **COVID-19 deaths**, 4 observed a relative increase in their weekly deaths in EW 14 compared to the previous week (range: 66.7% – 100%) . Weekly deaths either remained the same (n=18) or declined in the remaining 11 countries and territories of the subregion (range: -100% – -20%).

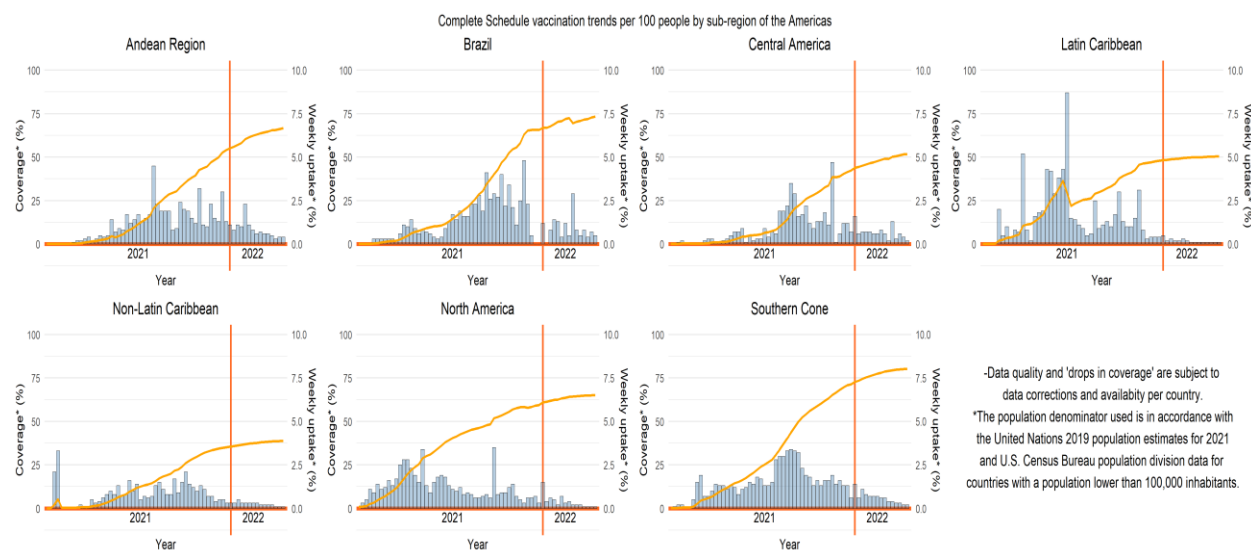
Among the 24 countries and territories with available data for **COVID-19 hospitalizations** in the subregion, eight reported an increase in their weekly COVID-19 hospitalizations (range: 9.8% - 400%), three did not report any substantial changes (0%), and 12 reported a decrease (range: -100% - 2.5%) compared to the previous week. For the same period, five out of 16 countries and territories with available data for **COVID-19 Intensive Care Unit (ICU) admissions** reported an increase in during EW 14 (range: 12.5% - 100%), five did not report any substantial changes, and the remaining six reported a decrease compared to the previous week (range: -100% - -6.1%).

**Important increases in severity trends this week for the subregion were observed in Cuba** (10 hospitalizations; 400% increase & 5 deaths; 6.7% increase), **French Guiana** (17 hospitalizations; 100% increase & 4 ICU admissions; 100% increase), and **Suriname** (10 hospitalizations, 400% increase). Of concern is the fact that among the three countries/territories, while Cuba has vaccinated at least 87.4% of their population with a completed schedule <sup>3</sup> of the COVID-19 vaccine, French Guiana and Suriname have only vaccinated 28.7% and 40.1% of their populations respectively.

## Immunization

**Figure 7** shows the COVID-19 vaccination trends per 100 people by sub-region of the Americas. Each sub plot presents the sub-region's cumulative coverage rate (% yellow line) and the weekly uptake as a portion of the total population (% blue bars). The orange line notes the demarcation between week 52 of 2021 and week 1 of 2022.

**Figure 7: COVID-19 vaccination trends per 100 people by sub-region of the Americas . As of EW 14, 2022.**



Source: Source: Data published by Ministries of Health and analyzed by PAHO/WHO Immunization.

<sup>3</sup> Completed schedule represents the % of population who received the last recommended dose of any vaccine or completed their schedule. This includes the second dose if it is a two-dose schedule and the single dose in a single-dose schedule.



There is a notable decrease in weekly uptake for 2022 across all sub-regions, which is reflected in the plateau of the line for cumulative coverage rate (**Figure 7**). In subregions that achieved high coverage rates, this decline can be attributed to the shift in priority towards the administration of additional doses (which are not reported in the coverage rate calculations). However, the same trend is found in subregions with vaccination coverage rate below 50% (**Figure 7**). If the sub-regions with lower coverages are to reach the global target of 70% coverage by the end of June 2022, countries must make significant efforts to increase the reach of vaccination programs in the coming weeks – so that persons with fewer than two vaccine doses can be fully vaccinated.

## Genomic Surveillance

Through PAHO's Genomic Surveillance Regional Network and the work from the Member States, more than 314,430 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 12 April 2022.

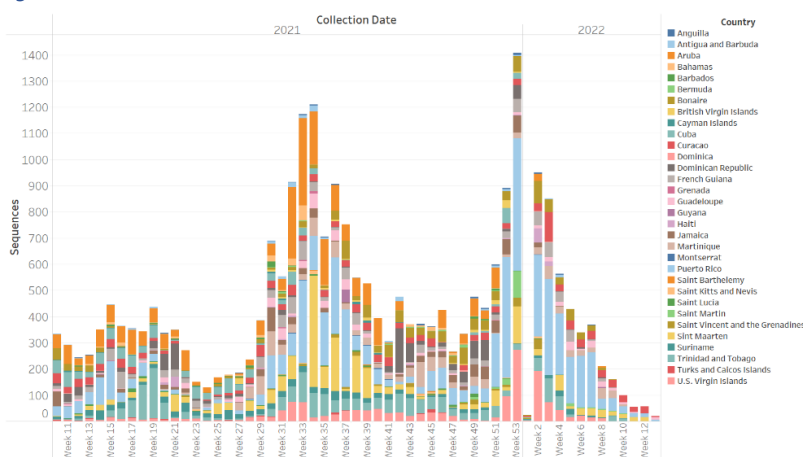
After the introduction of the Omicron VOC in the Americas by the end of December 2021, it has rapidly increased in prevalence and has been officially reported by 53 Countries or Territories. Omicron is now predominant in all PAHO countries with the BA.1 and BA.1.1 sub lineages identified in more than 97% of the characterized samples. Nevertheless, BA.2 has slightly increased in the Region, and has been reported in around 50% of the samples during the last 4 weeks, particularly in Curacao (94%), Sint Maarten (73%), and Puerto Rico (52%).

### Spotlight: Sequencing and genomic surveillance at the Caribbean and Atlantic Ocean Island subregion

Between January 2021 and April 2022, 26,590 whole genome sequences from Caribbean Countries and Territories have been generated as part of the genomic surveillance systems (**Figure 8**). The “previously circulating” VOCs (Alpha - last detected 15 December 2021; Beta - last detected 9 June 2021; Gamma - last detected 17 December 2021) and the “currently circulating” VOCs (Delta - last detected 9 February 2022; and Omicron) have been detected in the subregion, in addition to “previously circulating” VOIs (Lambda - last detected 2 November 2021 and Mu - last detected 19 October 2021) along with other lineages/variants (**Figure 9**).

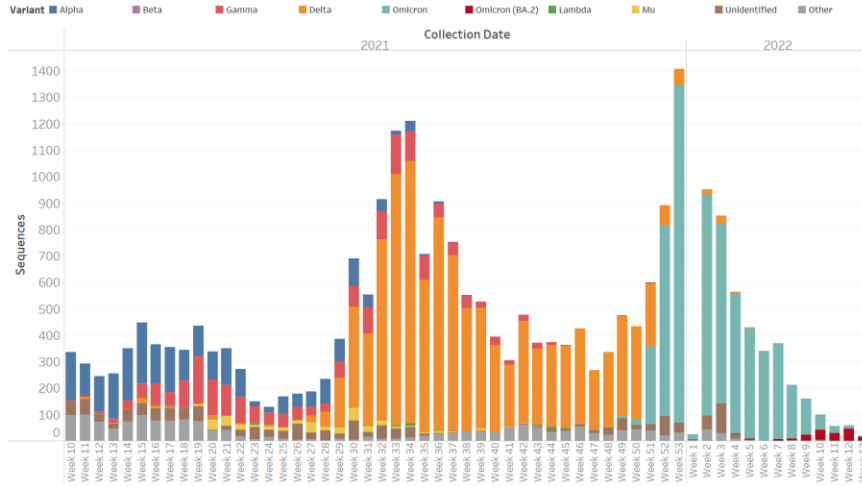
In the Caribbean subregion, VOC Omicron was first detected in the subregion in November 2021 by Bermuda. After replacing Delta, Omicron has been predominant in all the subregion and has been detected in more than 227 (98%) samples sequenced and reported to GISAID during the last 6 weeks. So far, BA.1.1 (56%) and BA.1 (40%) sub lineages are predominant with BA.2 (<3%) present, but BA.3 still not detected.

**Figure 8:** Number of sequences generated monthly by countries in the Caribbean and Atlantic Ocean Islands Subregion. Region of the Americas. (March 2021 – March 2022).



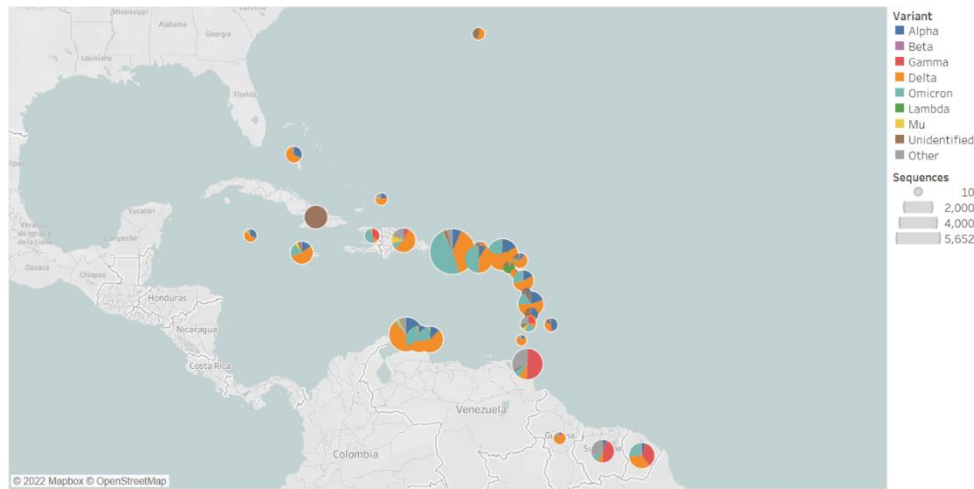
Source: GISAID. Country specific data available at: [https://ais.paho.org/phi/viz/SARS\\_CoV2\\_variants\\_regional.asp](https://ais.paho.org/phi/viz/SARS_CoV2_variants_regional.asp)

**Figure 9:** Variants detected and reported by the Countries in the Caribbean and Atlantic Ocean Islands Subregion. Region of the Americas. (March 2021 – March 2022).



Source: GISAID. Country specific data available at: [https://ais.paho.org/phi/viz/SARS\\_CoV2\\_variants\\_regional.asp](https://ais.paho.org/phi/viz/SARS_CoV2_variants_regional.asp)

**Figure 10:** Distribution of SARS-CoV-2 Variants of Concern (VOC) and Variants of Interest (VOI), identified by countries and territories in the Caribbean and Atlantic Ocean Islands Subregion (March 2021 - March 2022)

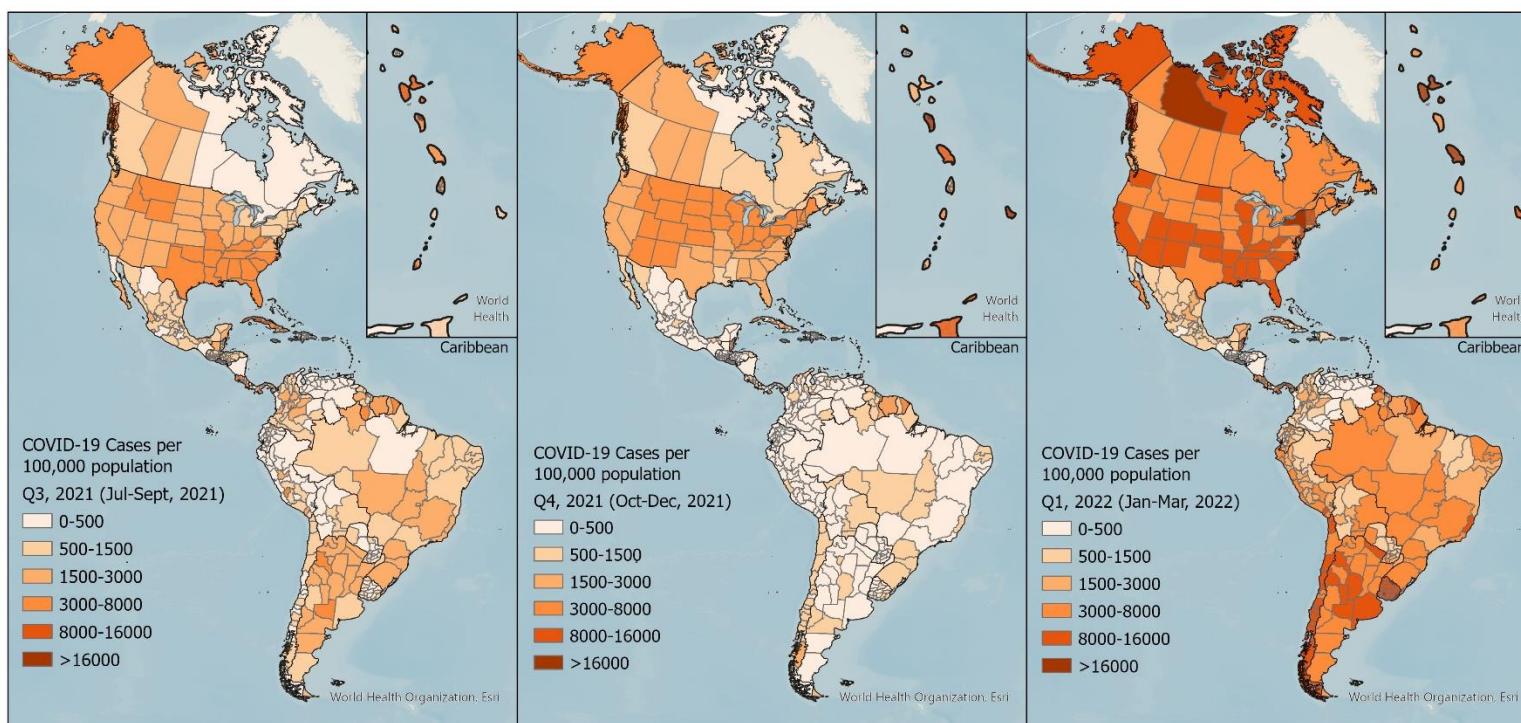


Country	Alpha	Beta	Gamma	Delta	Omicron	Lambda	Mu
Anguilla	+						
Antigua and Barbuda	+	+					
Aruba	+	+					+
Bahamas	+						
Barbados	+						+
Bermuda	+						
Bonaire	+						+
British Virgin Islands	+						+
Cayman Islands	+	+					+
Curacao	+						+
Dominica	+						
Dominican Republic	+					+	+
French Guiana	+	+					
Grenada	+						
Guadeloupe	+	+					
Guyana	+						
Haiti	+						+
Jamaica	+						+
Martinique	+	+					
Montserrat	+						
Puerto Rico	+	+				+	+
Saint Barthelemy							
Saint Kitts and Nevis						+	
Saint Lucia	+						
Saint Martin							
Saint Vincent and the Grenadines							+
Sint Maarten	+					+	+
Suriname	+	+					
Trinidad and Tobago	+						
Turks and Caicos Islands	+						+
U.S. Virgin Islands	+						+

Source: GISAID. Country specific data available at: [https://ais.paho.org/phi/viz/SARS\\_CoV2\\_variants\\_regional.asp](https://ais.paho.org/phi/viz/SARS_CoV2_variants_regional.asp)



**Annex 1:** Maps comparing COVID-19 incidence (per 100,000 population) for the two last quarters of 2021 (Q3: July – September 2021, Q4: October – December 2021) and the first quarter of 2022 (Q1: January – March 2022) by country and first administrative level divisions. Region of the Americas.



Overall, much higher case incidence rates per 100,000 population were observed in the first quarter of 2022 compared to incidence in the last two quarters of 2021 – most likely due to the spread of the highly infectious Omicron Variant of Concern (VOC) in the Region. The highest incidence rates in the first quarter of 2022 (January – March 2022) were found in Canada, the U.S., Panama, Chile, Argentina, and Uruguay as well as several Caribbean Islands including Guadeloupe, Martinique, Curacao, Bonaire, and Aruba. Most countries and territories reported above 3000 COVID-19 cases per 100,000 population in the first quarter of 2022.

During the third quarter of 2021 (July – September 2021), highest incidence rates were found in the United States, Canada as well as Argentina (rates between 1500 and 8000 cases per 100,000). During the fourth quarter of 2021 (October – December 2021), rates were relatively lower in South America compared to the previous quarter while more states in the United States reported between 3000 and 8000 cases per 100,000. In the Caribbean and Atlantic Ocean Island subregion, incidence was higher in Cuba in Q3 2021 compared to Q4 2021, but it increased from Q3 to Q4, 2021 in Puerto Rico, Trinidad and Tobago and smaller islands including Dominica, Barbados, and Anguilla.