

Weekly COVID-19 Epidemiological Update - Region of the Americas

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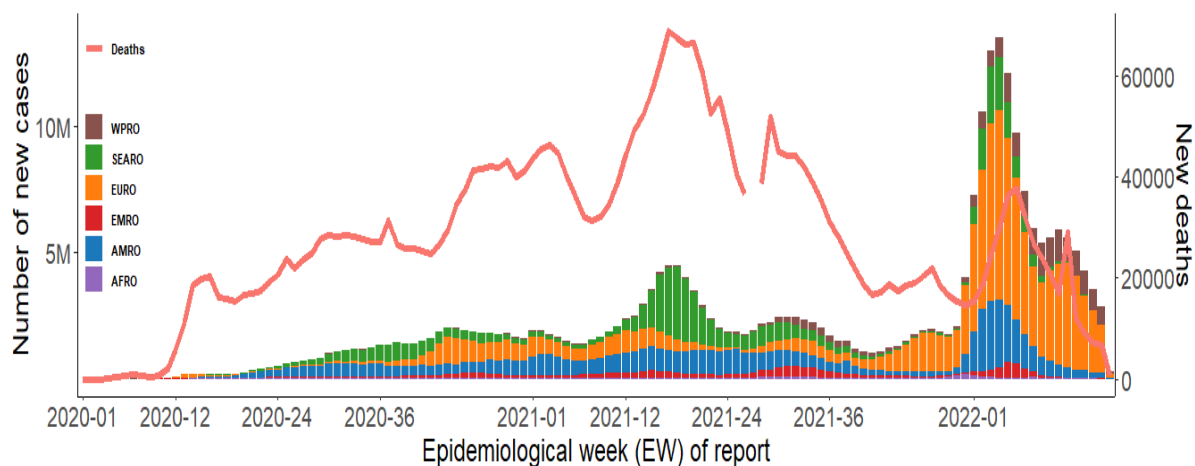
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Executive Summary

- **Since the onset of the pandemic** in 2020 and up to April 26, 2022, a cumulative total of over 508 million COVID-19 cases including 6.2 million deaths were reported from all six WHO regions. During EW 16, COVID-19 cases increased in the AFRO and the AMRO region while the remaining four WHO regions reported a decline. Similarly, increases in COVID-19 deaths were observed in the AFRO and the SEARO region while the other WHO four regions observed a declining trend.
- **Globally**, approximately 4.6 million new COVID-19 cases were reported in epidemiological week (EW) 16 (April 17, 2022-April 23, 2022) - a 19.9% decrease compared to EW 15 (April 10, 2022-April 16, 2022) (**Figure 1**). For the same period, 15,290 new COVID-19 deaths were reported globally – a 19.4% relative decrease compared the previous week.
- **In the region of the Americas**, 550,015 cases and 4,029 deaths were reported in EW 16 - a 8.7% increase in cases and - 19.1% decrease in deaths compared to the previous week.
- At the subregional level, **COVID-19 cases** increased in three subregions (North America, Caribbean and Atlantic Ocean Islands, and Central America) while they decreased in South America during EW 16. In the same period, while Central America reported a 14% increase in **weekly deaths**, the trends declined in the remaining three subregions.
- The overall weekly case notification rate for the region of the Americas was 53.8 cases per 100,000 population during EW 16 (49.5 the previous week). Between EW 16 and 15, the 14-day COVID-19 death rate was 8.8 deaths per 1 million population (10.5 the previous two weeks).
- Among 34 countries/territories in the region with available data, **COVID-19 hospitalizations** increased in 14 countries and territories (range: 0.6% - 500%) during EW 16 compared to the previous week. Similarly, among 29 countries and territories with available data, **COVID-19 ICU admissions** increased in 6 countries and territories (range: 6.4% - 150%).

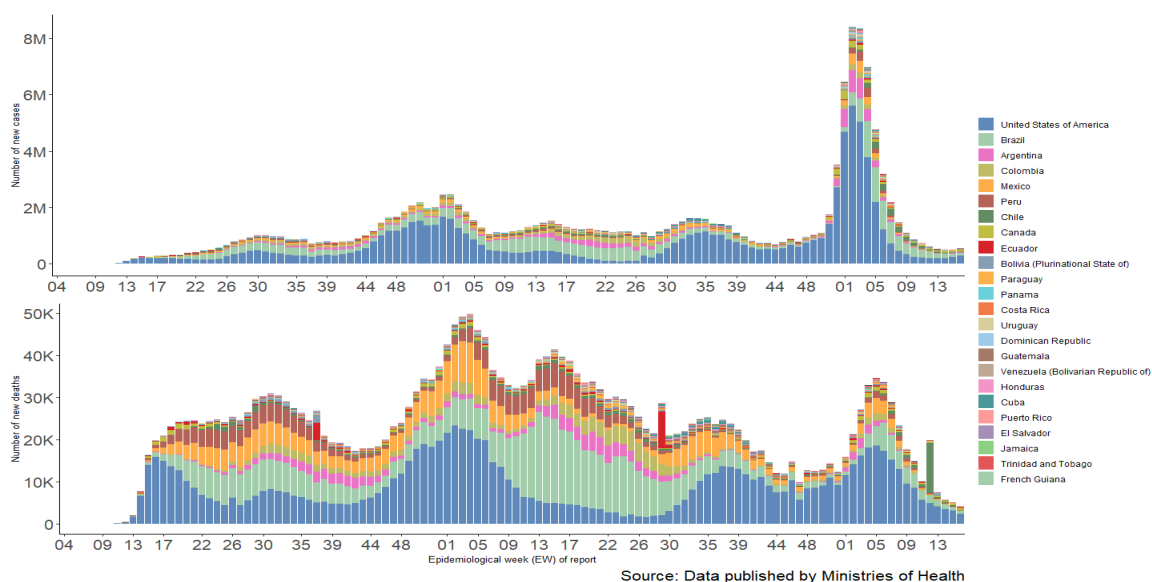
Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. As of EW 16, 2022



Source: Data from 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 16, 2022.



During EW 16, a total of 550,015 **new COVID-19 cases** were reported in the region of the Americas - an 8.7% relative increase compared to previous week (**Figure 2**). The increase was observed in three out of the four subregions with only South America reporting a decrease (-13.4%) compared the previous week. (**Table 1**). The highest proportion of weekly COVID-19 cases were reported by the United States of America (298,306 new cases, 21.5% increase), Brazil (91,395 new cases, -25.9% decrease), Canada (63,247 new cases, -5.5% decrease).

Table 1: Weekly change (%) in cases and deaths between EW 15 and EW 16 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 15	Deaths EW 15	Cases EW 16	Deaths EW 16	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	3,411,004	32,654	20,306	63	35,745	53	76.0%	-15.9%
Central America	3,118,710	50,020	8,116	93	9,147	106	12.7%	14.0%
North America	89,638,392	1,349,351	315,256	3,467	364,488	2,847	15.6%	-17.9%
South America	56,474,582	1,290,272	162,444	1,360	140,635	1,023	-13.4%	-24.8%

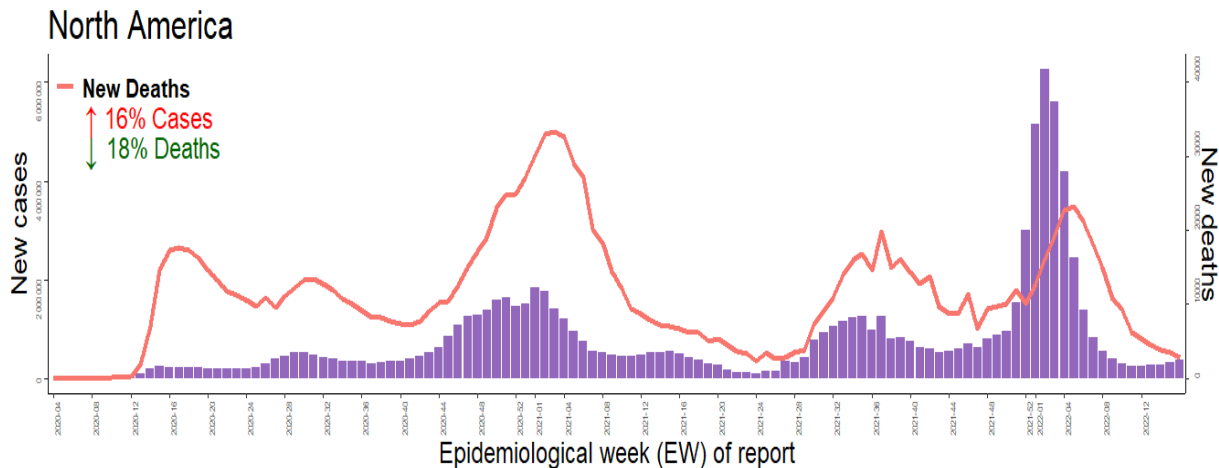
For the same period, 4,029 **COVID-19 deaths** were reported in the region of the Americas - a relative decrease of -19.1% compared to previous week (**Figure 2**). Weekly deaths declined in three out of the four subregions (range: -24.8% - -15.9%), with only the Central American subregion reporting a 14% increase compared the previous week. However, these trends should be interpreted with caution due to delays and biases in reporting from several countries and territories. The subregion reporting the highest number of COVID-19 deaths in the last week was North America (2,847 deaths, -17.9% decrease) (**Table 1**). The countries and territories with the highest proportion of weekly COVID-19 deaths were observed in the United States of America (2,354 new deaths, -23.9% decrease), Brazil (650 new deaths, -17.2% decrease), and Canada (452 new deaths, 39.5% increase).

A summary of the COVID-19 trends for EW 16 by subregion is presented below.

North America

The overall trends for **COVID-19 cases** have been increasing in North America for the last four consecutive weeks with 364,488 new cases reported during EW 16 – a 15.6% increase compared to the previous week. The increase was mainly due to increasing incidence trends in the United States of America (298,306 cases, 21.5 % increase), which accounted for the largest proportion of cases in the entire region. Canada reported a decrease in cases (63,247 cases, -5.5% decrease) for the second consecutive week. Mexico reported an increase in cases for the first time (2,935 cases, 6.3% increase) since EW 2, 2022.

Figure 3: COVID-19 cases and deaths by epidemiological week (EW). **North America.** Region of the Americas. EW 3, 2020 - EW 16, 2022.



During EW 16, **weekly COVID-19 deaths** decreased by -17.9% in North America relative to the previous week (**Figure 3**). The largest decline in deaths was reported by United States of America (2,354 new deaths, -23.9% decrease), followed by Mexico (41 new deaths, -14.6% decrease). On the other hand, Canada reported 452 new deaths in EW 16 – a 39.5% relative increase compared to EW 15 – primarily in the provinces of Ontario and Quebec.

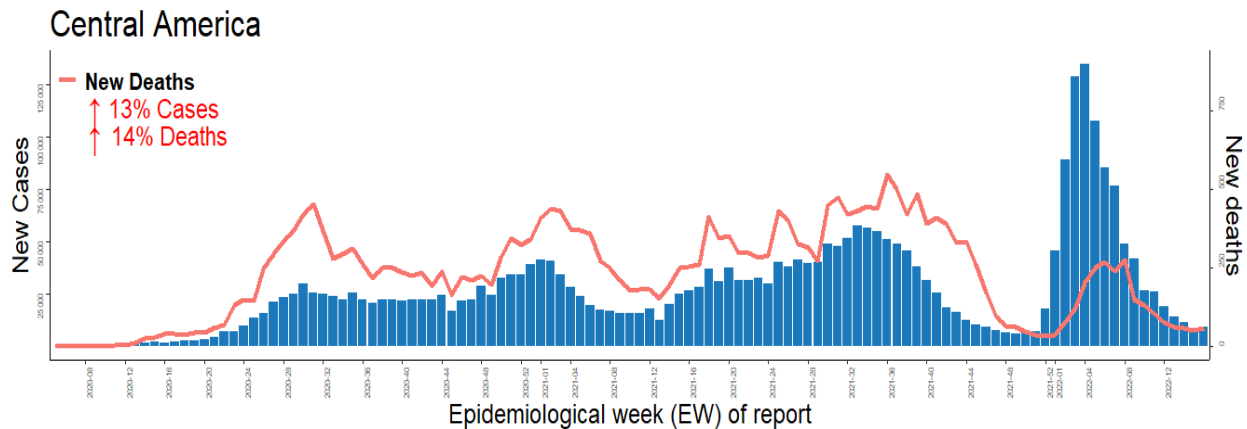
Weekly data for COVID-19 hospitalizations and Intensive Care Unit (ICU) admissions are available for Canada and the United States of America. The United States of America reported 15,861 hospitalizations (5.8% increase) and 1,951 ICU admissions (7.4% decrease) in EW 16. Canada also continued to observe an increase in their weekly hospitalizations (6,787 hospitalizations, 13.9% increase) and ICU admissions (468 ICU admissions, 6.4% increase) during EW 16. According to the Public Health Agency of Canada (PHAC), based on the data from 7 March to 3 April 2022, comparisons of hospitalization rates adjusted for age indicated that unvaccinated people were 3 times more likely to be hospitalized with COVID-19 than fully vaccinated people among youth and adults aged 12 to 59 years.¹ For the same period, unvaccinated people were 4 times more likely to be hospitalized with COVID-19 than fully vaccinated people among older adults aged 60 years or older.¹

¹ Public Health Agency of Canada (PHAC). Canada COVID-19 Weekly Epidemiology Report. 10 April to 16 April 2022 (Week 15). Available at: <https://bit.ly/3LjANMn>

Central America

In Central America, the weekly COVID-19 incidence for the sub-region increased for the first time since EW 3, 2022, with 9,147 new cases reported during EW 16 – a 12.7% increase 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 16, 2022.**



Out of the seven countries/territories in the subregion, three reported an increase in **weekly COVID-19 cases** – Guatemala (3,964 new cases, 36.9% increase), Panama (2,535 new cases, 28.9% increase), and Belize (88 new cases, 100% increase). Two countries reported a decrease – Nicaragua (32 cases, 1% decrease) and Costa Rica (1,642 cases, -38.2% decrease). The weekly case data for El Salvador was not available as of EW 16 and is subject to change. Data for Honduras for EW 15 was not available, resulting in an artificial increase in both cases and deaths.

During EW 16, **COVID-19 weekly deaths** increased in the subregion by approximately 14.0% relative to the previous week (**Figure 4**). Guatemala, which reported the highest proportion of weekly COVID-19 deaths in the subregion, is also the only country reporting an increase in weekly deaths (74 deaths, 34.5% increase) during EW 16. The remaining countries/territories either remained the same (Panama, Nicaragua, and El Salvador) or decreased – Belize (4 deaths, 50% decrease) and Costa Rica (18 deaths, -18.2% decrease).

Among three countries and territories with available data for **weekly COVID-19 hospitalizations** in the Central America, Belize reported a 25% increase (5 hospitalizations) in their weekly COVID-19 hospitalizations, while the trends declined in Costa Rica (414 hospitalizations, 14.5% decrease) and Panama (82 hospitalizations, 18% decrease). In terms of **weekly COVID-19 ICU admissions**, Panama reported a 20% increase (12 ICU admissions) in EW 16 as compared to the previous week. ICU admissions remained the same in Belize and declined in Costa Rica (44 ICU admissions, 30.2% decline)

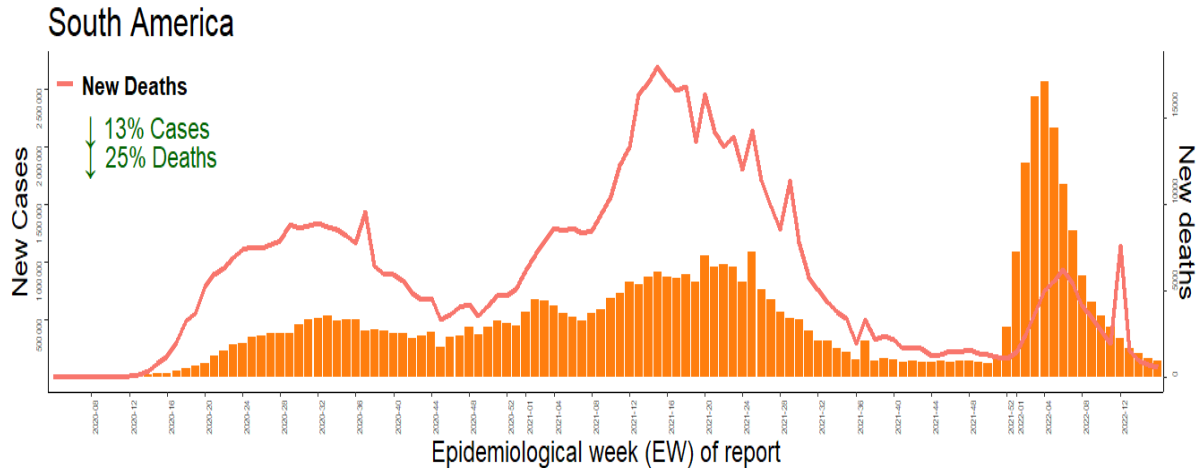
To date, the highest COVID-19 vaccination coverages for those considered “fully vaccinated”² in Central America were observed in Costa Rica (78.9%), followed by Panama (69.8%) and El Salvador (65.8%).

² 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

South America

In South America, a total of 140,635 new COVID-19 cases were reported during EW 16 – a 13.4% 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 16, 2022.



Out of the 10 countries/territories in the sub-region, three countries experienced an increase in **new COVID-19 cases** during EW 16 – Paraguay (352 cases, 49.2% increase), Argentina (9493 cases, 31.4% increase), and Peru (4,674 cases, 20.5% increase). The remaining seven countries/territories reported a decline in COVID-19 cases (range: -86.7% - -21.1%). The largest decline in cases being reported by Uruguay (324 new cases, -86.7% decrease), followed by Venezuela (Bolivarian Republic of) (142 new cases, -77.1% decrease), and Ecuador (1,333 new cases, -49.6% decrease). Please note that there was data reporting delay for Paraguay in the previous week, resulting in a data artifact in the percent change of weekly cases and deaths.

During EW 16, a total of 1023 **COVID-19 deaths** was reported in South America – a 24.8% decrease compared to the previous week. All countries in the sub-region reported a decrease in weekly COVID-19 deaths (Range: -82.7% - -10%).

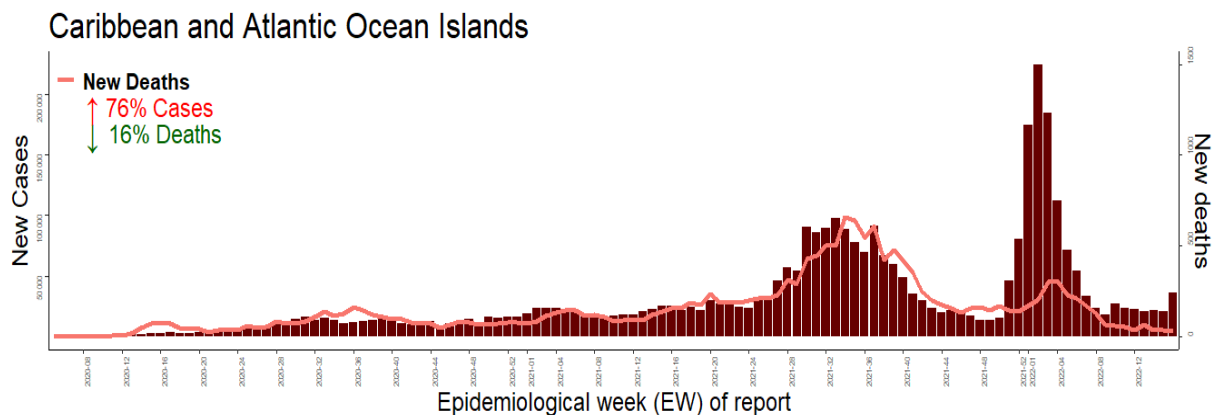
Among five the countries and territories with available data for **COVID-19 hospitalizations**, two countries/territories reported an increase in their weekly COVID-19 hospitalizations – Colombia (1,115 hospitalizations, 12.9% increase) and Venezuela (Bolivarian Republic of) (1,336 hospitalizations, 2.1% increase), while the remaining three countries/territories observed a decline in their weekly hospitalizations – Peru (1,119 hospitalizations, -9.3% decrease), Chile (1,375 hospitalizations, -20.7%), and Ecuador (189 hospitalizations, -24.1%). Similarly, among seven countries with available data for **weekly COVID-19 ICU admissions**, Venezuela (Bolivarian Republic of) experienced an increase (119 ICU admissions, 7.2% increase), and the remaining six countries/territories reported declining trends (range: -40.6% - -4.0%).

To date, the COVID-19 vaccination coverages for those considered fully vaccinated² in the South American sub-region ranged from 46.6% to 90.8%.

Caribbean and Atlantic Ocean Islands

In the Caribbean and Atlantic Ocean Islands sub-region, **weekly cases** increased by 76.0% and **weekly deaths** decreased by -15.9% compared to the previous week (**Figure 6**). At the national level, cases increased in 18 out of the 34 countries and territories in the subregion (range: 1.1% - 950%) and remained the same in two countries (Saint Kitts and Nevis & Montserrat), while it declined in the remaining 14 countries and territories (range: -100% - -9.5%). During EW 16, the largest relative increase in cases were observed in Falkland Islands (Malvinas) (21 cases, 950% increase), Saint Vincent and the Grenadines (45 cases, 400% increase), and Puerto Rico (21,622 cases, 323.5% increase).

Figure 6: COVID-19 cases and deaths by epidemiological week (EW). **Caribbean and Atlantic Ocean Islands.** Region of the Americas. EW 6, 2020 - EW 16, 2022.



While four countries/territories observed a relative increase in their **weekly COVID-19 deaths** during EW 16 (range: 41.7% - 250% increase), the overall sub-regional trends decreased compared to the previous week (53 new deaths, 15.9%). The highest proportion of the weekly deaths were observed in Jamaica (17 deaths, 41.7% increase), followed by Trinidad and Tobago (13 deaths, -25% decrease) and Barbados (7 deaths, 250% increase). COVID-19 weekly deaths either declined in the remaining countries/territories (n=8) (range: -100% - -25%) or remained the same (n=22) in the subregion. Weekly data including deaths should be interpreted with caution due to delays and biases in reporting. For example, all but one death reported in Jamaica over the last two weeks were historical deaths under investigation from 2021 that are now being classified as COVID-19 deaths.

Among the countries and territories with available data for **COVID-19 hospitalizations**, 10 countries and territories out of 24 reported an increase in their weekly COVID-19 hospitalizations (range: 0.6% - 500% increase). Similarly, three out of 13 with available data for **COVID-19 ICU admissions** reported an increase in their weekly COVID-19 ICU admissions (range: 100% - 150%), six countries/territories reported a decline (range: -100% - -15%), and the remaining four countries/territories remained the same.

During EW 16, **important increases in severity trends this week for the sub-region** were observed in Puerto Rico (198 hospitalizations; 90.5% increase & 15 ICU admissions; 150% increase), Aruba (6 hospitalizations; 500% increase & 2 ICU admissions; 100% increase), and Curaçao (8 hospitalizations; 60% increase & 1 ICU admission; 100% increase).

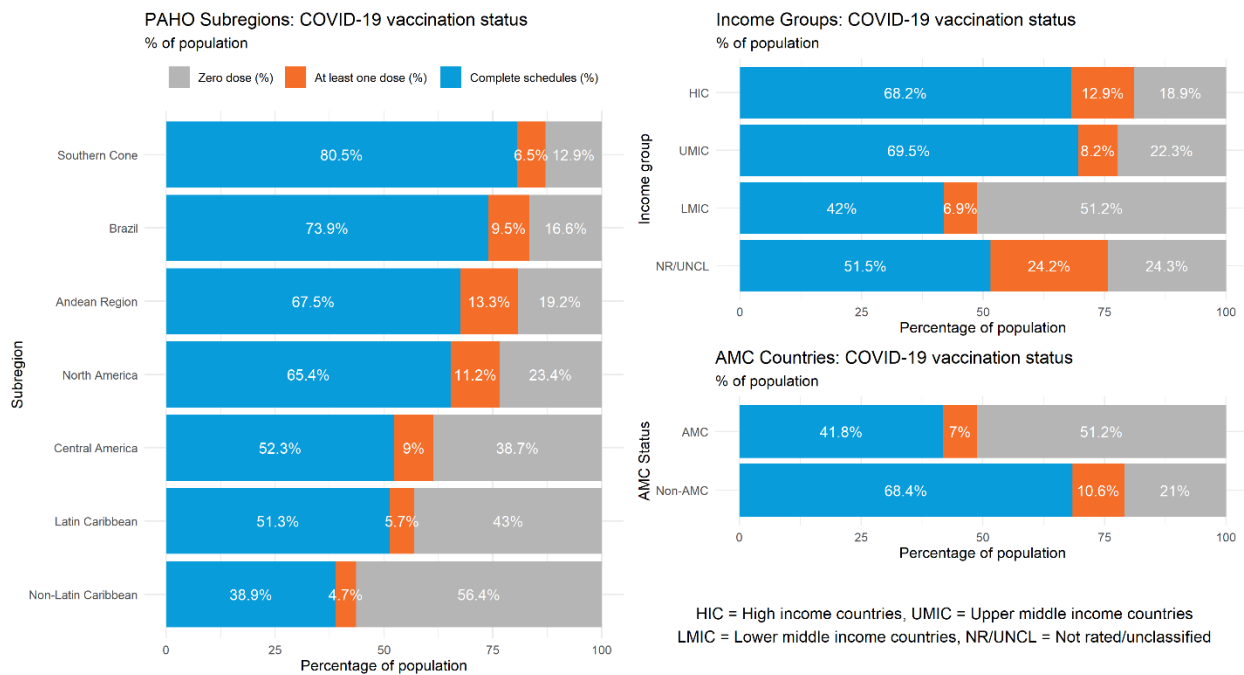
To date, the COVID-19 vaccination coverages for those considered fully vaccinated² in the Caribbean and Atlantic Ocean Islands sub-region ranged from 1.1% to 93.6%.

Immunization

Figure 7 shows three different ways of reporting COVID-19 vaccination coverage* rates. Each graph assesses the strengths and weaknesses of the COVID-19 vaccination programs of the Americas.

The first sub-plot (i.e., “PAHO subregions: COVID-19 vaccination status”) reports coverage rates stratified by subregion. The southern cone reports the highest percentage of complete vaccination schedules in the Americas, while the non-Latin Caribbean countries report the lowest.

Figure 7: COVID-19 vaccination rates per 100 people in the region of the Americas grouped by subregion, country income, and AMC status. The region of the Americas. As of EW 16, 2022.



The second sub-plot (i.e., “Income groups: COVID-19 vaccination status”) reports an increase of 1.3% in vaccination coverage rates for upper/middle income countries (UMIC) compared to high-income countries (HIC). Lower/middle income countries (LMIC) report the lowest vaccination coverage rates. Countries not classified by the World Bank (NR/UNCL) report coverage rates at an intermediate point between these groups. This sub-plot shows that income inequality is still one of the biggest barriers to increasing COVID-19 vaccination coverage in the Region, also because LMIC received COVID-19 vaccine doses later than HIC or UMIC countries and therefore were delayed in starting vaccination operations.

The third subplot (i.e., “AMC countries: COVID-19 vaccination status”) reports vaccination coverage rates stratified by AMC status. More than half of the population of the 10 AMC countries remains to be vaccinated.

*Population estimates based on UN Population prospects 2019 projections for 2021, excepting countries with less than 100,000 inhabitants where US Census Bureau population projections are used.

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.

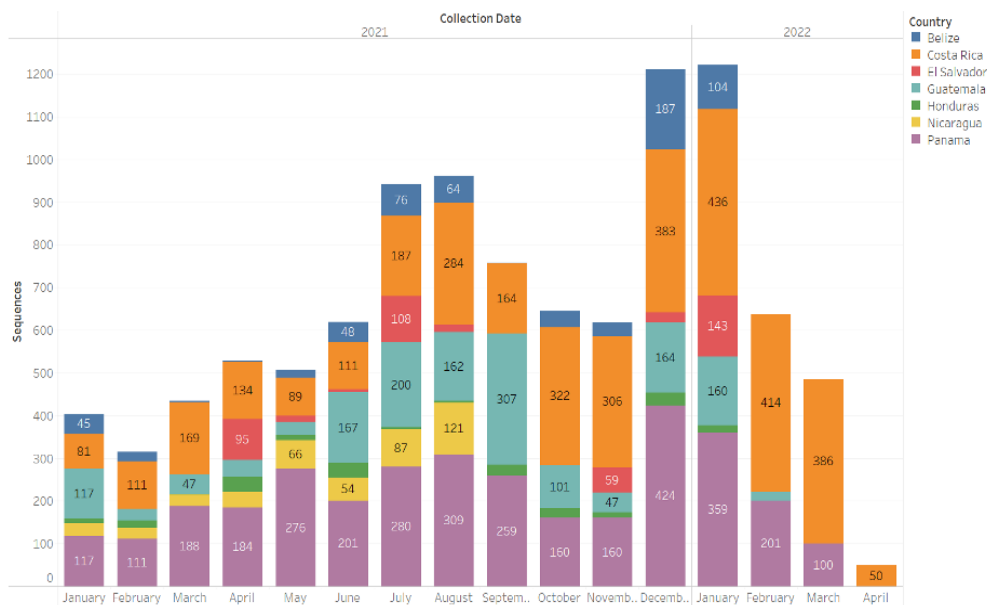
After the introduction of the Omicron VOC in the Americas at the end of 2021, it has rapidly increased in prevalence and has been officially reported by 54 countries or territories. Omicron now represents the vast majority of sequences detected in the PAHO Region, outcompeting Delta and other lineages. In fact, the last documented detection of Delta in the Region was on 9 April 2022 in the Caribbean.

Spotlight: Sequencing and genomic surveillance at Central American subregion

During the last fifteen months (January 2021 to 23 March 2022), 11,686 whole genome sequences from Central American countries have been generated as part of the genomic surveillance systems (**Figure 8**). The “previously circulating” VOCs (**Alpha** - last detected 17 September 2021; **Beta** - last detected 8 July 2021; **Gamma** - last detected 14 November 2021) and the “currently circulating” VOCs (**Delta** - last detected 27 January 2022; and **Omicron**) have been detected in the subregion, in addition to “previously circulating” VOIs (**Lambda** - last detected 24 October 2021 and **Mu** - last detected 10 November 2021) and other lineages/variants (**Figure 9**).

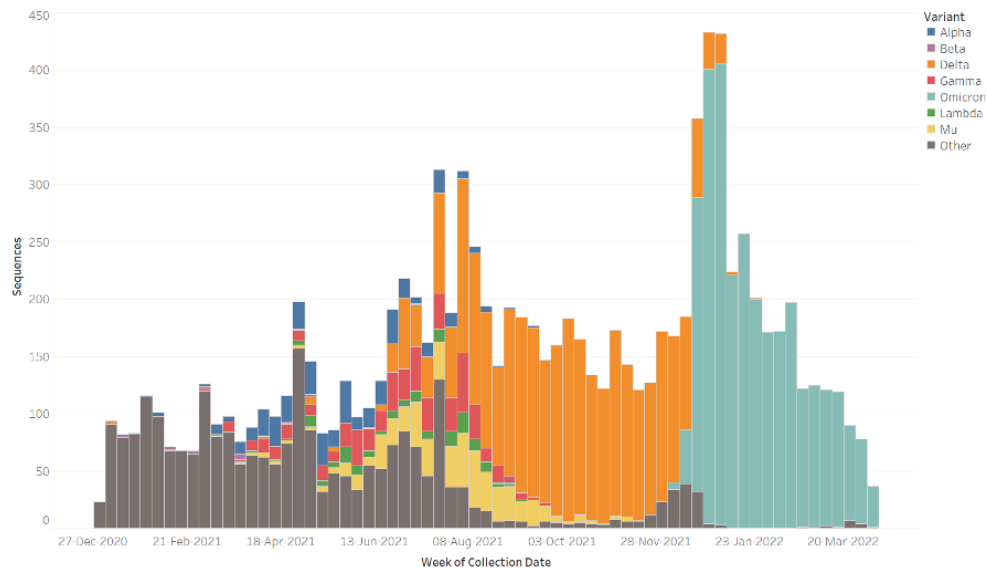
In the Central America subregion, Delta VOC was first detected in April 2021 by Guatemala, and rapidly expanded to become predominant by July 2021 in all countries. VOC Omicron was first detected in the subregion in December 2021 by Costa Rica and has been detected in all countries of the subregion (Figure 10). After replacing Delta, Omicron has been predominant in the subregion, being detected in 311 samples (97%) sequenced and reported to GISAID during the last 6 weeks of available data (27 February to 9 April). Since Omicron's first detection, BA.1 and BA.1 sublineages represent the majority (90%) of sequences, while BA.2 and BA.2 sublineages represent 6% of the sequences, and BA.3, 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 10 April) while BA.2 (and BA.2 sublineages) has been increasing during the same time period.

Figure 8: Number of sequences generated monthly by countries in the Central American subregion (January 2021–April 2022)



Source: GISAID

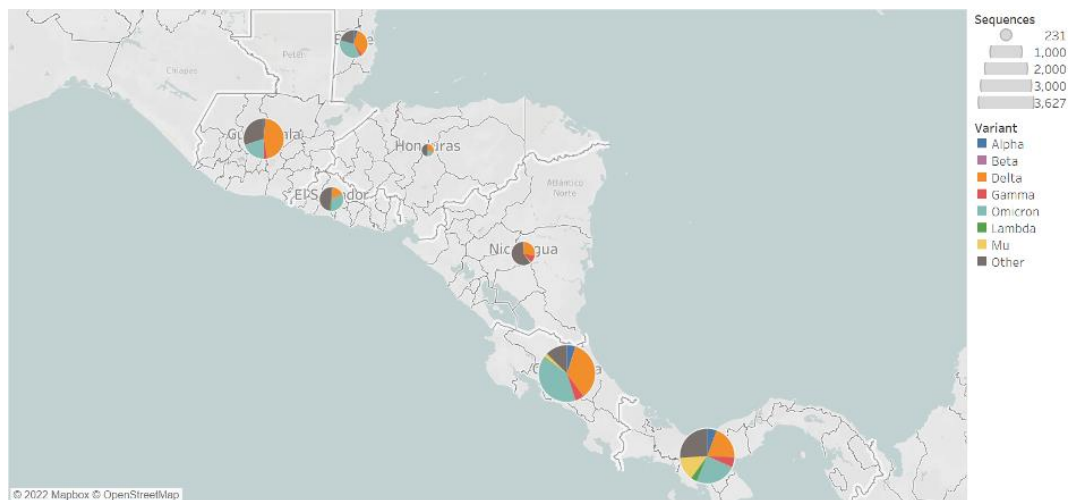
Figure 9: Variants detected and reported by countries in the Central American subregion (January 2021-April 2022)



Source: GISAID.

Country specific data available at: https://ais.paho.org/phi/viz/SARS_CoV2_variants_regional.asp

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

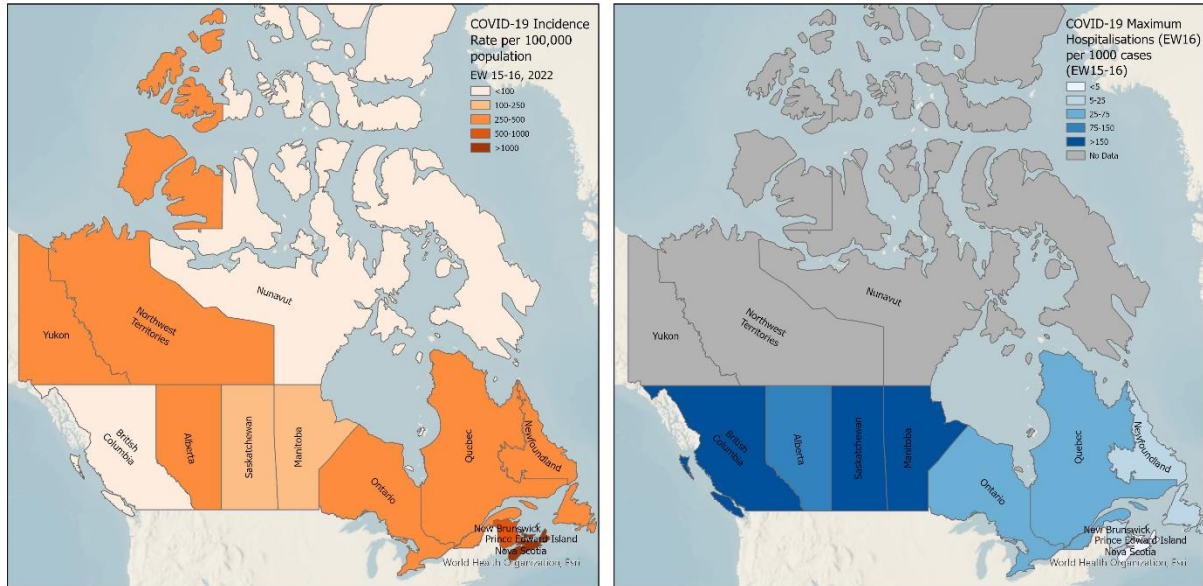


Country	VOC					VOI	
	Alpha	Beta	Delta	Gamma	Omicron	Lambda	Mu
Belize	+		+	+	+		
Costa Rica	+	+	+	+	+	+	+
El Salvador	+		+	+	+	+	
Guatemala	+	+	+	+	+	+	+
Honduras	+		+	+	+		
Nicaragua	+	+	+	+		+	+
Panama	+	+	+	+	+	+	+

Source: GISAID

*Nicaragua has also officially reported Omicron detection and circulation. Nevertheless, sequences are not available yet at GISAID.

Annex 1. Maps of COVID-19 Incidence rate per 100,000 people in EW 15-16 and maximum COVID-19 hospitalizations (EW16) per 1,000 cases during EW 15-16. By Province and territories. Canada. 2022.



The left map represents the COVID-19 incidence rate per 100,000 people in EW 15-16, while the right one indicates the maximum number of COVID-19 hospitalizations (EW16) per 1000 new COVID-19 cases in EW 15-16, in Canada. The high incidence rates (>500 per 100,000) were observed in Nova Scotia, Prince Edward Island, and New Brunswick over the last 2 weeks, while most of the other provinces had incidence rates between 250-500 per 100,000 population. British Columbia, Manitoba, and Saskatchewan have the highest number of hospitalizations per new case over the last 2 weeks (>150 per 1000 cases), followed by Alberta (75-150 per 1000 cases). The hospitalization rate in the other provinces is relatively low.