

Weekly COVID-19 Epidemiological Update - Region of the Americas

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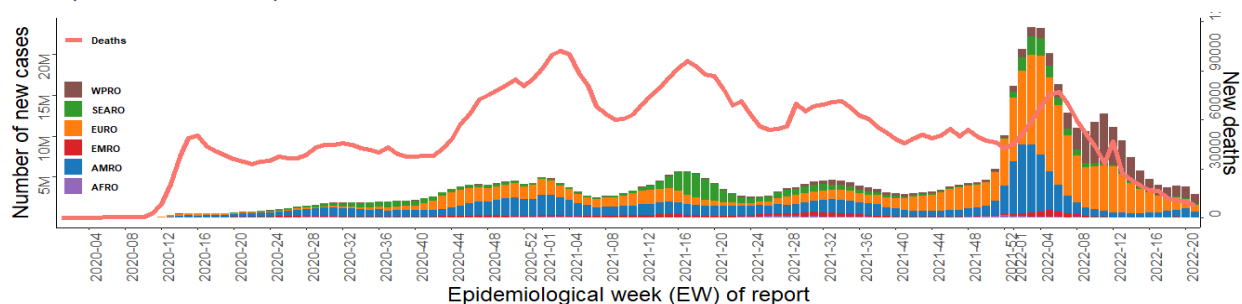
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Executive Summary

- **Since the onset of the pandemic** in 2020 and up to June 1, 2022, a cumulative total of approximately 527 million COVID-19 cases including nearly 6.3 million deaths were reported from all six WHO regions. During epidemiological week (EW) 21, cases increased in the regions of Europe (1.4%) and the Americas (10.3%) while they decreased in the remaining four WHO regions. COVID-19 deaths increased in the regions of Africa (15.2%), the Americas (14.2%), and Western Pacific (18.3%) while they decreased in the remaining three WHO regions.
- **Globally**, approximately 3,331,171 new COVID-19 cases were reported in epidemiological week (EW) 21 (May 22, 2022-May 28, 2022) - a -11.4% decrease compared to EW 20 (May 15, 2022-May 21, 2022) (**Figure 1**). For the same period, 9,635 new COVID-19 deaths were reported globally – a 2 % relative decrease compared the previous week.
- **In the region of the Americas**, 1,087,197 cases including 4,159 deaths were reported in EW 21 - a 10.3 % and 14.2 % increase in cases and deaths respectively compared to the previous week.
- At the subregional level, COVID-19 cases and deaths increased in all subregions (range: cases; 2.9-43.1%, deaths; 14.1-21.3% increase) with the exception to Caribbean and Atlantic Ocean Islands, where there was a decrease in cases (8.9%) and no change in deaths (0%).
- The **overall weekly case notification rate** for the region of the Americas was 106.3 cases per 100,000 population during EW 21 (96.3 the previous week). Between EW 21 and 20, the 14-day COVID-19 death rate was 7.6 deaths per 1 million population (7.1 the previous two weeks).
- Among 32 countries/territories in the region with available data, **COVID-19 hospitalizations** increased in 11 countries/territories (range: 0.1% - 119.4%) during EW 21 compared to the previous week. Among 28 countries/territories with available data, **weekly COVID-19 ICU admissions** increased in 11 countries/territories (range: 2.6% - 900%).

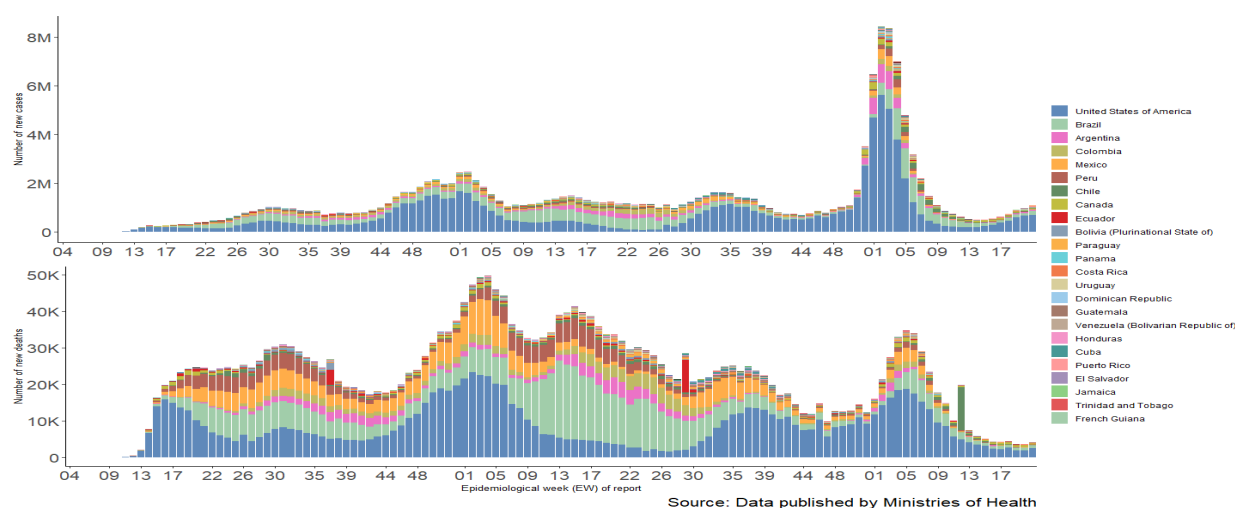
Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. EW 4, 2022 – EW 21, 2022.



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. EW 4, 2022 – EW 21, 2022.



During EW 21, 1,087,197 new **COVID-19 cases** were reported in the region of the Americas - a relative increase of 10.3% compared to previous week (**Figure 2**). The highest number of weekly COVID-19 cases was reported from the North American subregion (723,805 cases, 3% increase), while the largest relative increase in cases compared to the previous week was observed in the South American subregion (274,208 cases, 43.1% increase) (**Table 1**). At the national level, the largest proportion of weekly COVID-19 cases during EW 21 was reported by the United States of America (696,385 new cases, 3.5% increase), Brazil (158,732 new cases, 62.5% increase), Argentina (51,778 new cases, 19.1% increase).

Table 1: Weekly change (%) in cases and deaths between EW 20 and EW 21 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 20	Deaths EW 20	Cases EW 21	Deaths EW 21	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	3,664,072	33,195	55,229	123	50,294	123	-8.9%	0.0%
Central America	3,263,274	50,824	35,783	174	38,890	211	8.7%	21.3%
North America	92,741,663	1,365,414	702,672	2,397	723,805	2,742	3.0%	14.4%
South America	57,484,002	1,295,736	191,636	949	274,208	1,083	43.1%	14.1%

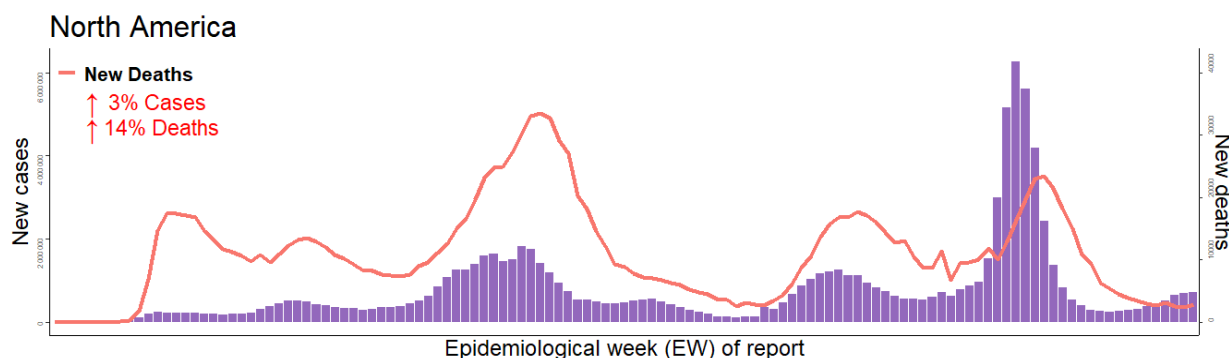
For the same period, 4,159 **COVID-19 deaths** were reported in the region of the Americas - a relative increase of 14.2% compared to previous week (**Figure 2**). The highest number of COVID-19 deaths was reported from the North American subregion (2,738 deaths, 14% increase), while the highest relative increase compared to the previous week was observed in the Central American subregion (**Table 1**). The highest proportion of weekly COVID-19 deaths were reported from the United States of America (2,420 deaths, 25.6% increase), Brazil (826 deaths, 15.8% increase), and Canada (296 deaths, -32.3% decrease).

A summary of the COVID-19 trends for EW 21 by subregion is presented below.

North America

COVID-19 cases have been increasing in the North American subregion for about two months as of EW 21. During EW 21, the largest relative increases in the subregion were observed in Mexico (12,265 cases, 75 % increase) where there has been a sustained increase in weekly cases for the last three weeks, followed by the United States of America (696,385 cases, 3.5% increase). On the other hand, Canada has been observing a continued decline since EW 15, 2022, reporting a 26.7% decrease (16,715 cases) during EW 21 compared to the previous week.

Figure 3: COVID-19 cases and deaths by epidemiological week (EW). **North America.** Region of the Americas. EW 3, 2020 - EW 21, 2022.



Weekly COVID-19 deaths increased by 14.4% in North America during EW 21 relative to the previous week, primarily due to the sharp increase of weekly deaths in the United States of America (2,420 deaths, 25.6% increase), which accounts for the largest proportion of reported deaths in the region of the Americas. On the other hand, Canada and Mexico observed a decline in weekly deaths - Canada (296 deaths, -32.3% decrease) and Mexico (89 deaths, -42 % decrease).

Among two countries with data available for **COVID-19 hospitalizations and ICU admissions**, the United States of America continued to observe an increase in their weekly COVID-19 hospitalizations (26,743 hospitalizations, 7.9% increase) and ICU admissions (2,916 ICU admissions, 9.3% increase), while Canada continued to report a decline in both weekly hospitalizations (5,291 hospitalizations, -26.7% decrease) and ICU admissions (364 ICU admissions, -2.9% decrease) during EW 21.

Severity trends remained elevated in the United States of America where there was a 7.9% increase of hospitalizations and a 9.3% increase of ICU admissions during EW 21 compared to the previous week. According to the Centers for Disease Control and Prevention (CDC), the proportion of Omicron variant of concern (VOC) sub lineage BA.2.12.1 has been steadily increased since early April 2022 - from 7.4% in early April 2022 to 59.1% in end of May 2022 of the total weekly sequenced samples - accounting for the largest proportion of new cases in the United States of America.¹ In Mexico, although there has been a steady increase in cases for the third consecutive weeks, the COVID-19 national bed occupancy as well as bed occupancy with mechanical ventilators remained stable— approximately 2% and 1% during EW 21, respectively, within the country².

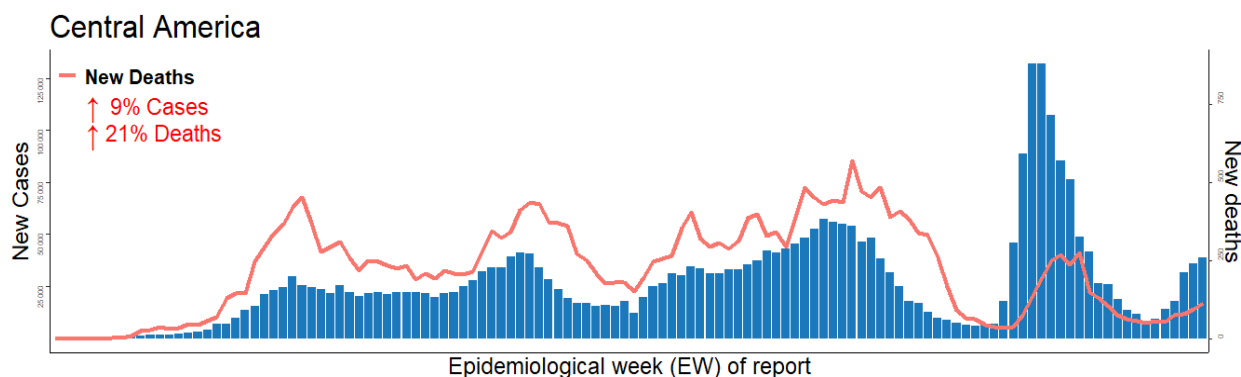
¹ Centers for Disease Control and Prevention. COVID-19 Data Tracker – Variant Proportions. Available at : <https://bit.ly/38U7pP3>

² Secretaría de Salud de México. COVID-19 Technical Statement. May 30, 2022. Available at: <https://bit.ly/3m3oGYR>

Central America

In Central America, the **overall COVID-19 incidence** for the sub-region **is has been** on an upward trend for the last six consecutive weeks with 38,890 new cases reported during EW 21 – a 8.7% 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 21, 2022.



Out of the seven countries and territories in the subregion, Guatemala (3,509 cases, -10.6% decrease) and Honduras (254 cases, -38.3% decrease) reported a decrease while the remaining five countries/territories observed an increase in their **weekly COVID-19 cases** (range: 3.9% – 100% increase). The highest relative increase compared to the previous week was observed in El Salvador (666 cases, 100% increase), followed by Nicaragua (35 cases, 34.6% increase), and Belize (630 cases, 20.5% increase). However, the increase in cases for El Salvador during EW 21 is a result of a data artifact since new cases had not been reported between EW 16 and EW 20, 2022. The countries/territories with the largest proportion of reported cases during EW 21 included Panama (20,291 cases, 3.9% increase), Costa Rica (13,505 cases, 18.8% increase), and Guatemala (3,509 cases, -10.6% decrease).

During EW 21, **COVID-19 weekly deaths** increased by approximately 21.3% relative to the previous week in the Central American subregion (**Figure 4**). Approximately 97% of weekly deaths in the subregion was contributed by three countries/territories – Guatemala (161 deaths, 22.9% increase), Panama (22 deaths, 83.3% increase), and Costa Rica (23 deaths, -17.9% decrease).

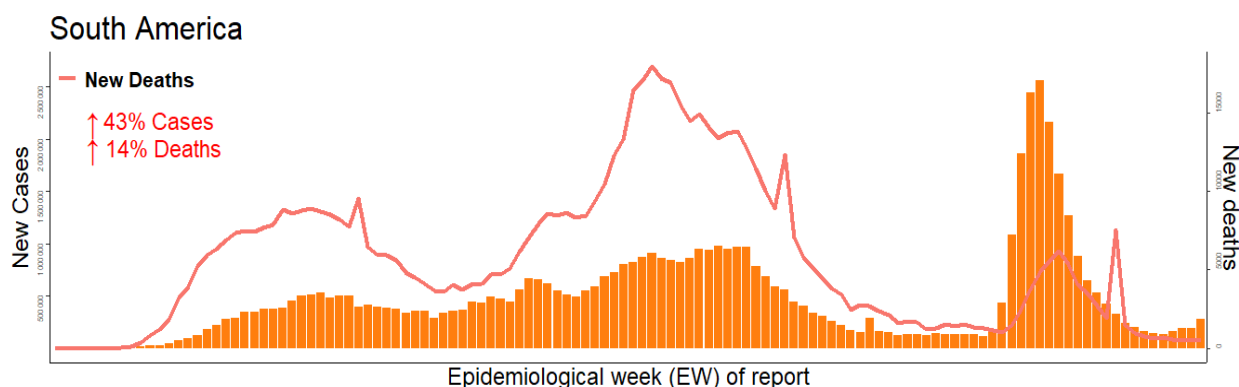
Among four countries/territories with available data **weekly COVID-19 hospitalizations** in the Central American Subregion, Costa Rica is the only country reporting an increase in its weekly hospitalizations (346 hospitalizations, 12.7% increase) while the remaining three reported the same (Belize, 0%) or a decline – Panama (265 hospitalizations, -3.3% decrease) and Honduras (19 hospitalizations, -53.7% decrease). Among three countries/territories with available data for **weekly COVID-19 ICU admissions**, for Honduras and Panama reported an increase of 300% (4 ICU admissions) and 2.6% (40 ICU admissions), respectively, in their weekly ICU admissions, while Costa Rica reported a -6.3% decline (45 ICU admissions) during EW 21 relative to the previous week.

Severity trends in the subregion for EW 21 continued to be on the rise in Panama, where there has been an 83.3% increase in weekly deaths (22 deaths) along with a 2.6% increase in COVID-19 ICU admissions (40 ICU admissions).

South America

In South America, there has been a sharp increase in COVID-19 weekly cases during EW 21, primarily due to a big case surge reported from Brazil, with a total of 274,208 new COVID-19 cases being reported – a 43.1% increase 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 21, 2022.



Out of the 10 countries and territories in the subregion, eight experienced an increase in **COVID-19 weekly cases** during EW 21 (range: 6.8 – 62.5% increase). The largest proportion of reported weekly cases was reported by Brazil (158,732 new cases, 62.5% increase) – accounting for the largest relative increase in the subregion – followed by Argentina (51,778 new cases, 19.1% increase), and Chile (43,367 new cases, 34.3% increase). Peru and Venezuela (Bolivarian Republic of) observed a decline in their COVID-19 incidence – 4.2% (2,737 cases) and 17.6% (225 cases) decreases, respectively in each country.

During EW 21, a total of 1,083 **COVID-19 deaths** was reported in South America – a 14.1% increase compared to the previous week with six countries/territories reporting an increase (range: 8.9 – 125% increase). The largest proportions of reported deaths were reported by Brazil (826 deaths, 15.8% increase), Chile (75 deaths, -2.6% decrease), and Argentina (64 deaths, 30.6% increase).

For the same period, among five countries/territories with data available for **COVID-19 hospitalizations**, two reported an increase in their weekly hospitalizations – Chile (982 hospitalizations, 12.4% increase) and Colombia (824 hospitalizations, 5.6% increase) – and two remained stable – Peru (722 hospitalizations, 0.1% increase) and Ecuador (57 hospitalizations, 0%), while Venezuela (Bolivarian Republic of) reported a 4.4% decline (282 hospitalizations) compared to EW 20. Among seven countries/territories with data available for **COVID-19 ICU admissions**, three reported an increase in their weekly ICU admissions (range: 7.7 – 45% increase).

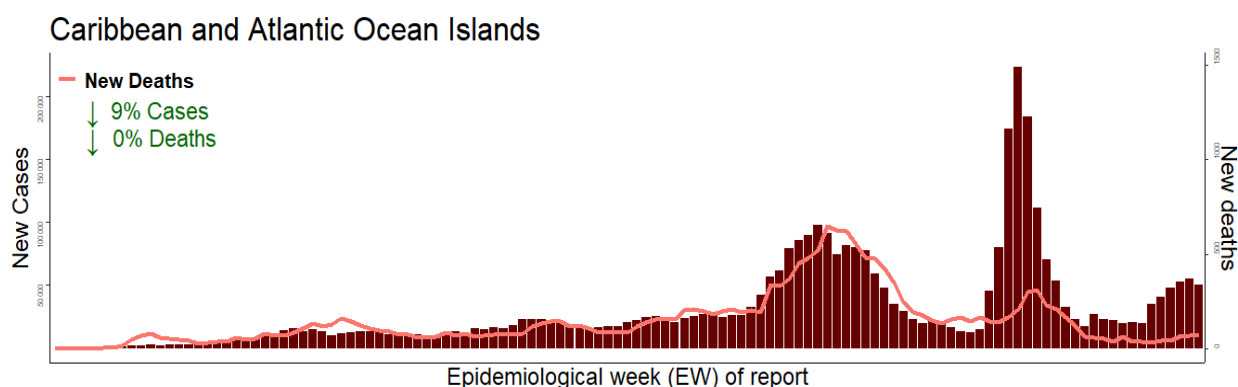
Severity trends are elevated in Colombia where there was a 75% increase in weekly deaths (21 deaths), and a 5.6% increase in hospitalizations (824 hospitalizations) including an 8.9% increase in ICU admissions (172 ICU admissions). Similarly, Argentina experienced a large increase in its weekly deaths (64 deaths, 30.6% increase), along with increased ICU admissions (323 ICU admissions, 7.7% increase) and a sustained increase in cases (51,778 cases, 19.1% increase) that

have been observed over the last five consecutive weeks. However, these trends should be interpreted with caution due to possible biases such as delays in reporting, historical deaths included in the weekly counts etc.

Caribbean and Atlantic Ocean Islands

In the Caribbean and Atlantic Ocean Islands sub-region, **COVID-19 weekly cases** decreased for the first time after five-weeks of an upward trend by 8.9%, and there was no substantial change in weekly deaths (0%) during EW 21 compared to the previous week (**Figure 6**). At the national level, COVID-19 weekly cases increased in 13 out of the 34 countries/territories in the subregion (range: 2% - 145.7%) and declined in the remaining 21 countries/territories (range: -100% - -0.4%).

Figure 6: COVID-19 cases and deaths by epidemiological week (EW). **Caribbean and Atlantic Ocean Islands.** Region of the Americas. EW 6, 2020 - EW 21, 2022.



During the same period, **COVID-19 weekly deaths** remained stable (123 deaths, 0% change) in subregion. Five countries/territories in the subregion reported an increase in weekly deaths during EW 21 compared to the previous week (range: 6.1 – 100%). The largest increase in COVID-19 deaths was observed in Martinique (20 deaths, 100% increase), followed by Barbados (8 deaths, 100% increase), Dominica (2 deaths, 100% increase), and Grenada (3 deaths, 50% increase). However, all reported deaths from Martinique during EW 21 were historical deaths occurred between EW 14-20, 2022, resulting in a data artifact in its weekly percent change. Weekly deaths either remained the same – Suriname and Curaçao (0% change) – or declined in the remaining countries/territories of the subregion (range: -100 – -4.5% decrease).

Among 21 countries/territories with available data, six countries/territories reported an increase in their **weekly COVID-19 hospitalizations** (range: 7.7 – 119.4% increase). The highest increase in weekly hospitalizations during EW 21 was observed in Dominican Republic (68 hospitalizations, 119.4% increase), followed by Jamaica (124 hospitalizations, 57% increase) and Martinique (77 hospitalizations, 42.6% increase). For 16 countries/territories with data available for **COVID-19 ICU admissions**, five reported an increase (range: 25 – 900% increase), four reported a decline (range: -60 - -6.3% decrease), and seven remained the same during EW 21 compared to the previous week.

During EW 21, **significant increases** in weekly cases were reported from Dominican Republic (1,796 cases, 145.7% increase). Additionally, a notable increase was observed during EW 21 in

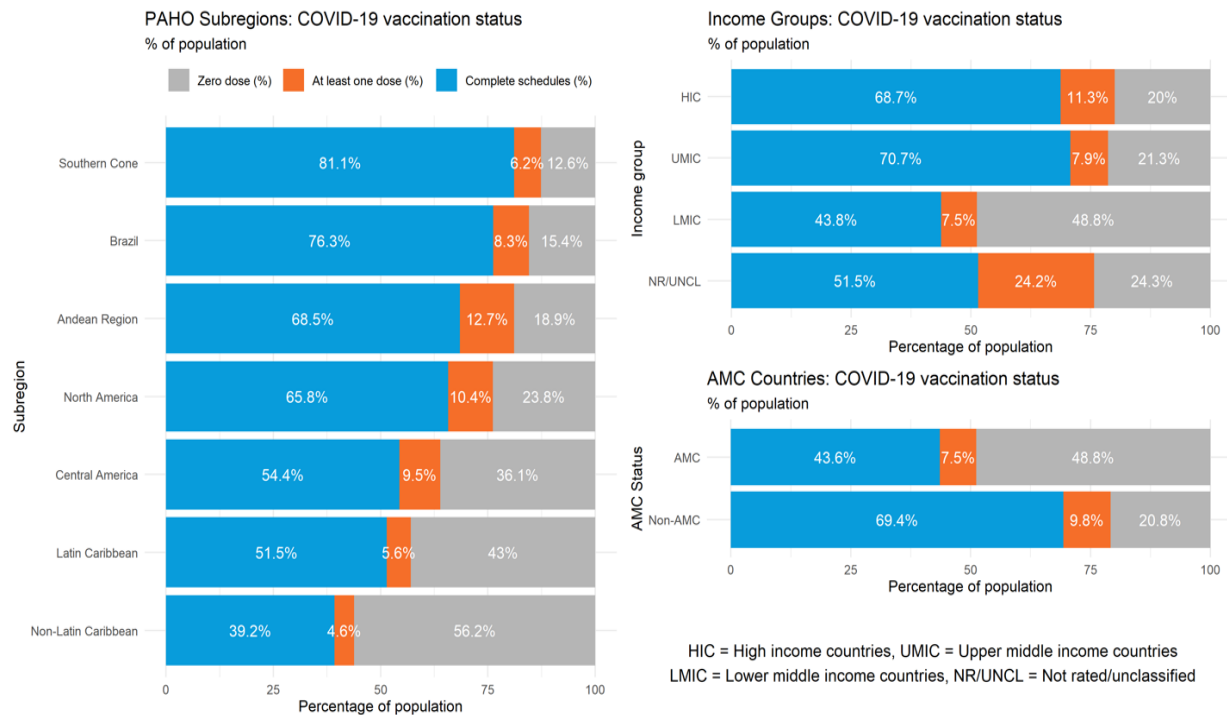
Sint Maarten (156 cases, 100% increase) and Falkland Islands (Malvinas) (537 cases, 100% increase).

During EW 21, **important increases in severity trends** continued to be observed in Puerto Rico where there is a continued increase in weekly deaths (52 deaths, 6.1% increase) despite a slight decline observed in hospitalizations (400 hospitalizations, -2.4%) and ICU admissions (45 ICU admissions, -6.3%). Moreover, Martinique has been experiencing notable increases in severity trends, observing a 42.6% increase in hospitalizations (77 hospitalizations) and a 25% increase of ICU admissions (5 ICU admissions) along with an increasing trend in cases (5,353 cases, 9.9% increase) for the past five consecutive weeks.

Immunization

Figure 7 shows three different ways of reporting COVID-19 vaccination coverage* rates in the region of the Americas as of EW 21, 2022. Each graph assesses the strengths and weaknesses of the COVID-19 vaccination programs.

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 21, 2022.



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.

The second sub-plot (i.e., “Income groups: COVID-19 vaccination status”) reports an increase of 2% 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. 48.8% of the population of the 10 AMC countries remains to be vaccinated with at least one dose.

*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, 351,559 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 31 May 2022.

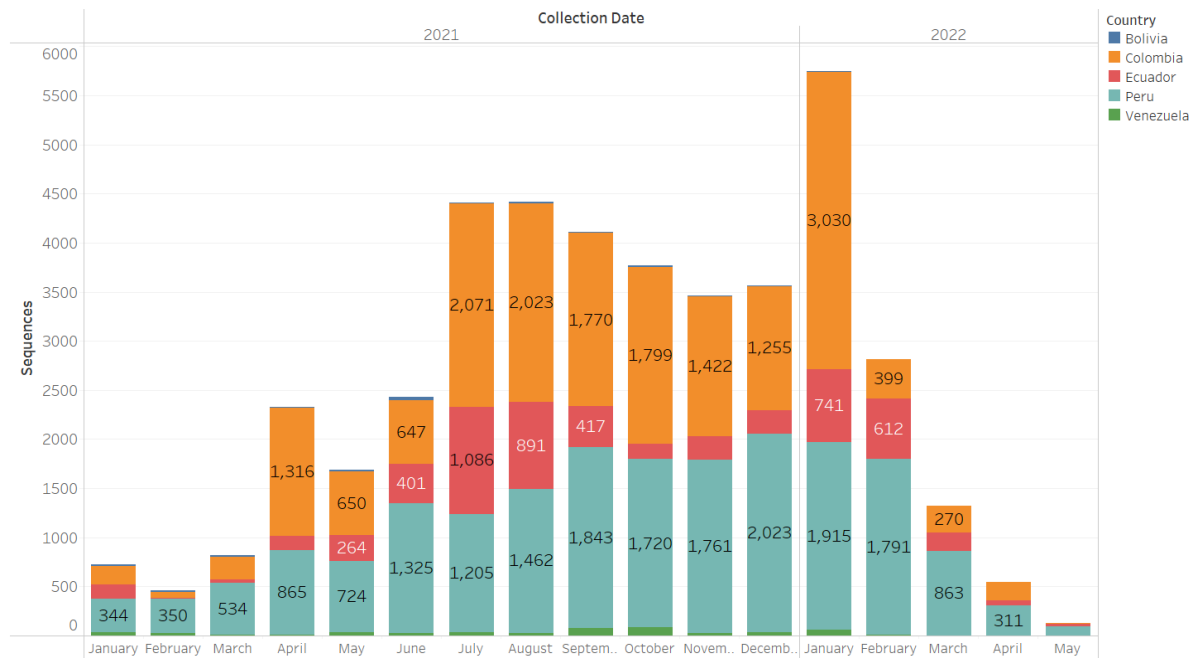
After the introduction of the Omicron VOC in the Americas by the end of December 2021, it has rapidly increased in prevalence and has been officially reported by 54 countries or territories. Omicron is now predominant in all PAHO countries with the BA.1 and BA.1 sub lineages identified in more than 76% of the characterized samples from the Americas, less than 23% of BA.2 (and BA.2 sublineages). The BA.3, BA.4, and BA.5 sub-lineages account for <0.01%, 0.03%, and 0.02% respectively of samples detected.

Spotlight: Sequencing and genomic surveillance in the Andean subregion

During the last 16 months (January 2021 to 24 May 2022), 10,374 whole genome sequences from Andean countries (Bolivia, Colombia, Ecuador, Peru, and Venezuela) have been generated as part of the genomic surveillance systems (**Figure 8**). The “previously circulating” VOC (**Alpha**-last detected 3 October 2021; **Beta**-last detected 15 October 2021; **Gamma**-last detected 23 December 2021) and the “currently circulating” VOC (Delta-last detected 17 May 2022; and **Omicron**) have been detected in the subregion, in addition to “previously circulating” VOIs **Lambda** (last detected 13 April 2022) and **Mu** (last detected 11 January 2022) and other lineages/variants (**Figure 9,10**).

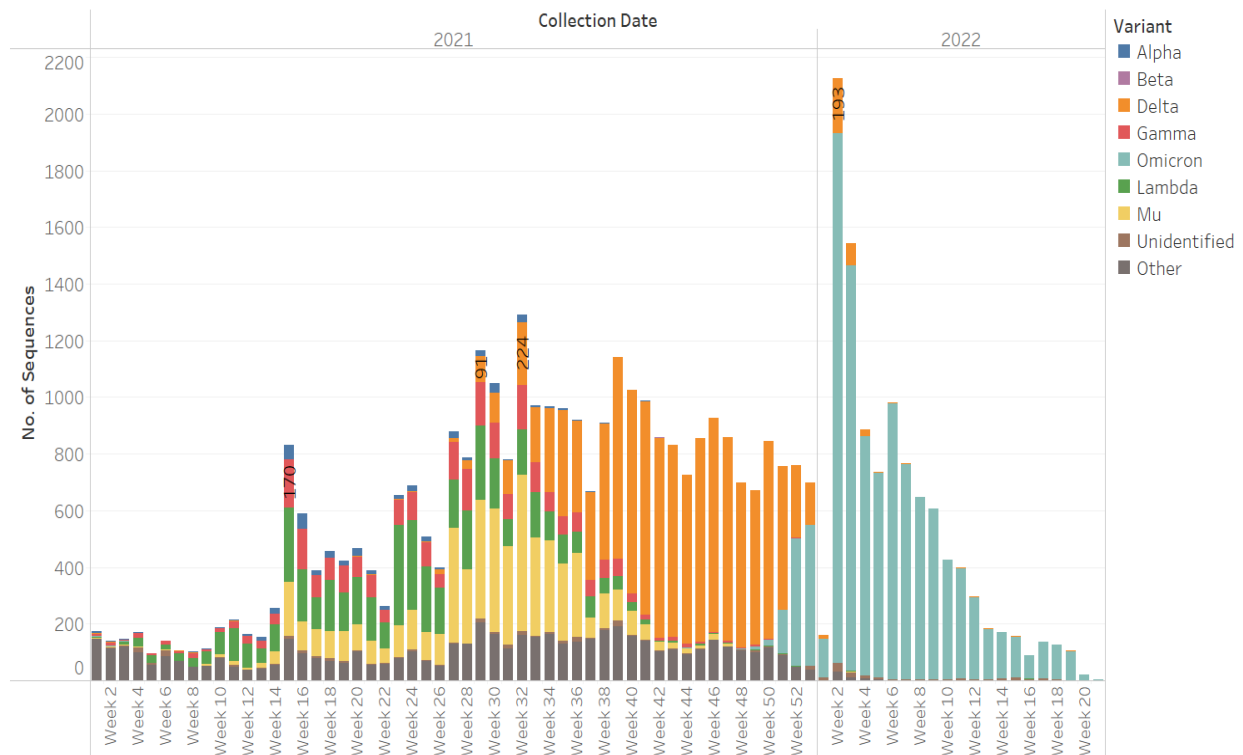
After replacing Delta, Omicron has been predominant in the subregion, being detected in 759 samples (97%) sequenced and reported to GISAID during the last 8 weeks of available data. Since Omicron's first detection, BA.1 and BA.1 sublineages represent the majority (95%) of sequences, while BA.2 and BA.2 sublineages represent 5% 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 while BA.2 (and BA.2 sublineages) has been increasing during the same period. In EW 19, 2022, BA.2 and its sublineages increased to 86% of sequences submitted (**Figure 11**).

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



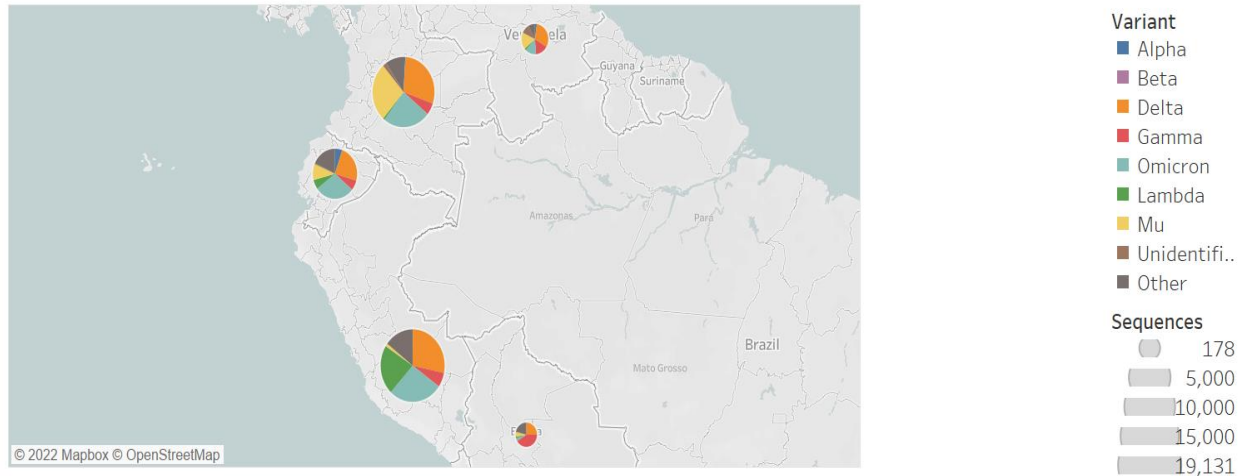
Source: GISAID

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



Source: GISAID. Country-specific data is 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 Andean subregion (January 2021-May 2022)

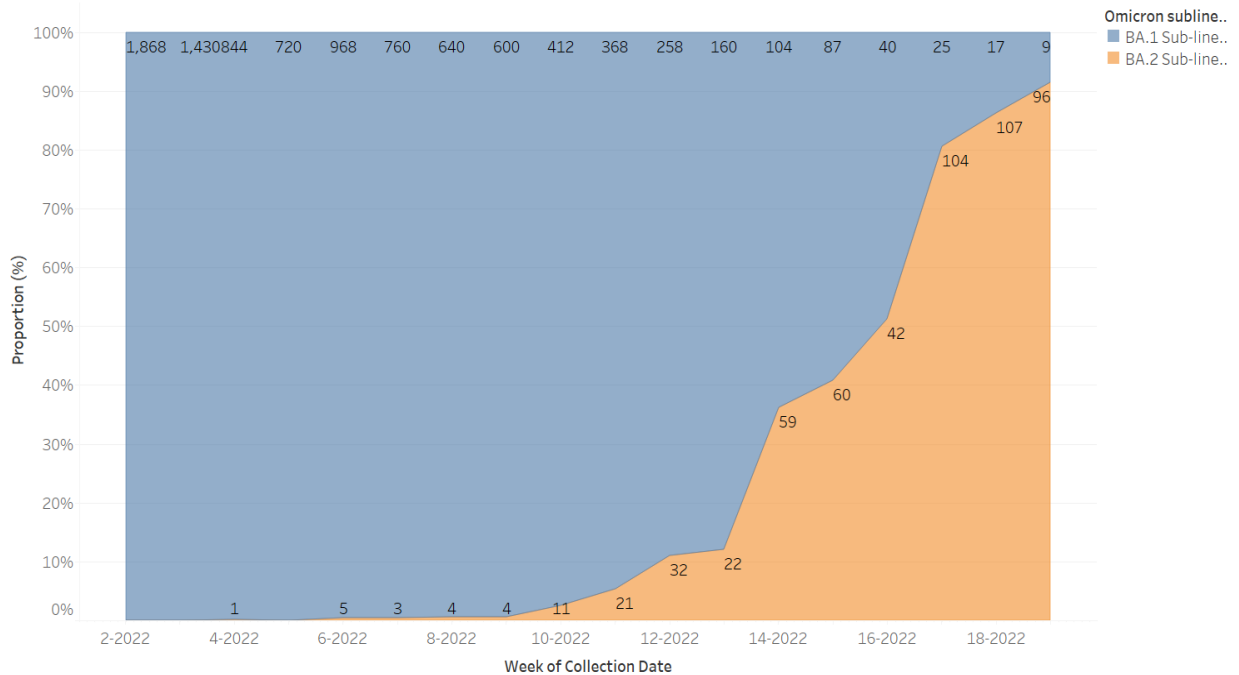


Variants id

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

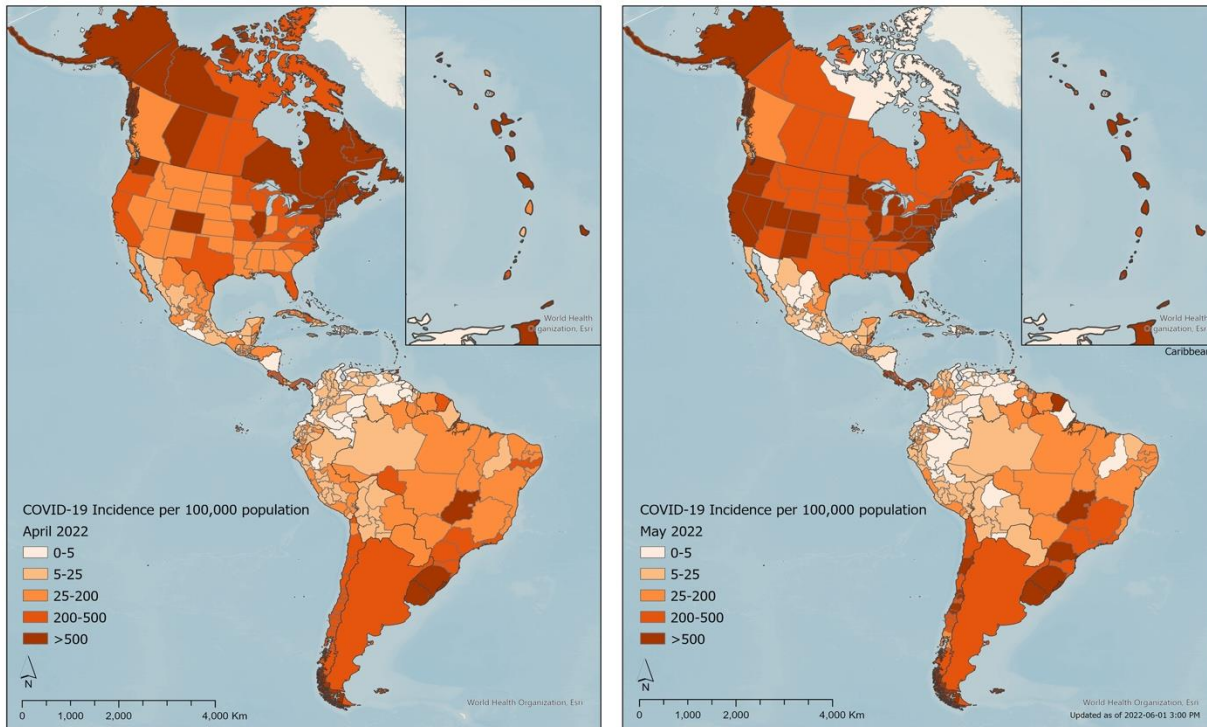
Source: GISAID

Figure 11. Distribution of VOC Omicron sublineages identified by the countries in the Andean subregion (January-May 2022)



Source: GISAID

Annex 1. The comparison of COVID-19 case incidence rates per 100,000 population between April and May 2022. The region of the Americas. April 2022 vs May 2022.



The maps (**Annex1**) compare the COVID-19 case incidence rates per 100,000 population between April and May 2022, in the region of the Americas for the months of April and May 2022. Overall, there was an increase in COVID-19 incidence in May compared to April in all subregions. The largest relative increase was observed in Central America and the smallest increase in South America. In North America, the United States of America was the main driver for the sub-regional increase in incidence, with most states reporting under 200 cases per 100,000 in April and 200-500 cases per 100,000 people in May. A slight increase was also observed in Mexico between April and May 2022, while on the other hand, a slight relative decrease in incidence was observed in Canada, especially in the eastern provinces. In Central America, the largest increases were seen in Belize and Panama. Most territories/provinces in Costa Rica and Panama reported incidence rates of over 500 cases per 100,000 people. COVID-19 incidence remained high in the Caribbean and Atlantic Ocean Islands for both months, with numerous islands reporting over 500 cases per 100,000 in April and May (i.e., Guadeloupe, Martinique, and Barbados). Relatively mild increases in incidence were observed in numerous countries/territories in the sub-region including Jamaica, Saint-Lucia, Dominica, Antigua and Barbuda, St Vincent and the Grenadines, the Bahamas and Aruba. In South America, the slight increase was mostly driven by Argentina, Uruguay, and Chile while decreases were observed in Venezuela (Bolivarian Republic of), Peru, Ecuador, and Paraguay.