

Biweekly COVID-19 Epidemiological Update - Region of the Americas

Issue 21 published 17 May 2023

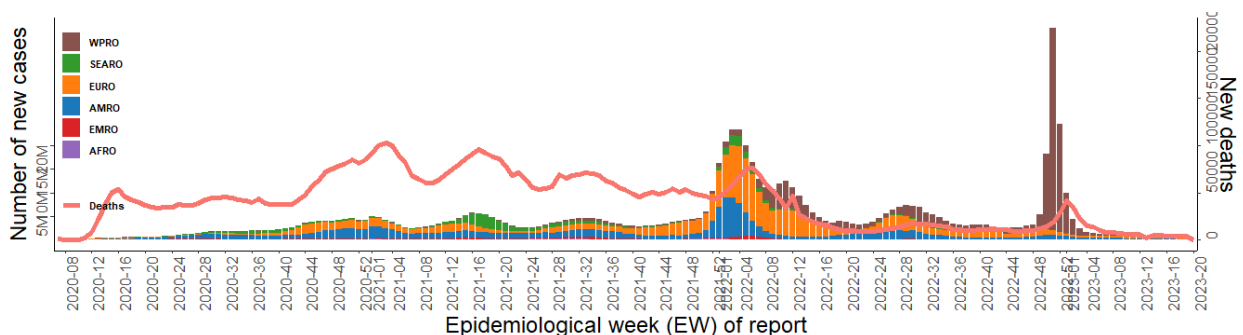
Contents:

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

Executive Summary

- **Since the onset of the pandemic** in 2020 and up to 17 May 2023, a cumulative total of 766 million COVID-19 cases including 6,9 deaths were reported from all six WHO regions. During epidemiological week (EW) 18 & 19, cases decreased in all regions, and deaths decreased in 4 regions while they increased in AMRO and AFRO.
- **Globally**, approximately 1,160,507 new COVID-19 cases were reported in EW 18 & 19 (30 April 2023 – 13 May 2023) - a -19.0% decrease compared to EW 16 & 17 (16 April 2023 - 29 April 2023) (**Figure 1**). For the same period, 8,171 new COVID-19 deaths were reported globally – an -8.6% relative decrease compared the previous week.
- **In the region of the Americas**, 275,988 cases and 4,492 deaths were reported in EW 18 & 19 – a -17.0% decrease in cases and 23.0% increase in deaths compared to the previous 2 weeks.
- At the subregional level, COVID-19 cases increased in 2 subregions (Caribbean and Atlantic Ocean Islands and Central America). Deaths increased in 3 subregions (North America, South America, and Caribbean and Atlantic Ocean Islands).
- The overall biweekly case notification rate for the region of the Americas was 27 cases per 100,000 population during EW 18 & 19 compared to 32.5 the previous 2 weeks.
- Among 26 countries/territories in the region with available data, **COVID-19 hospitalizations** increased in 8 countries and territories (range: 2.7% - 166.7%) during EW 18 & 19 compared to the previous 2 weeks. Among 16 countries and territories with available data, **COVID-19 ICU admissions** increased in 7 countries and territories (range: 1.2% - 400%).

Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. EW 4 2020 - EW 18 & 19 2023.

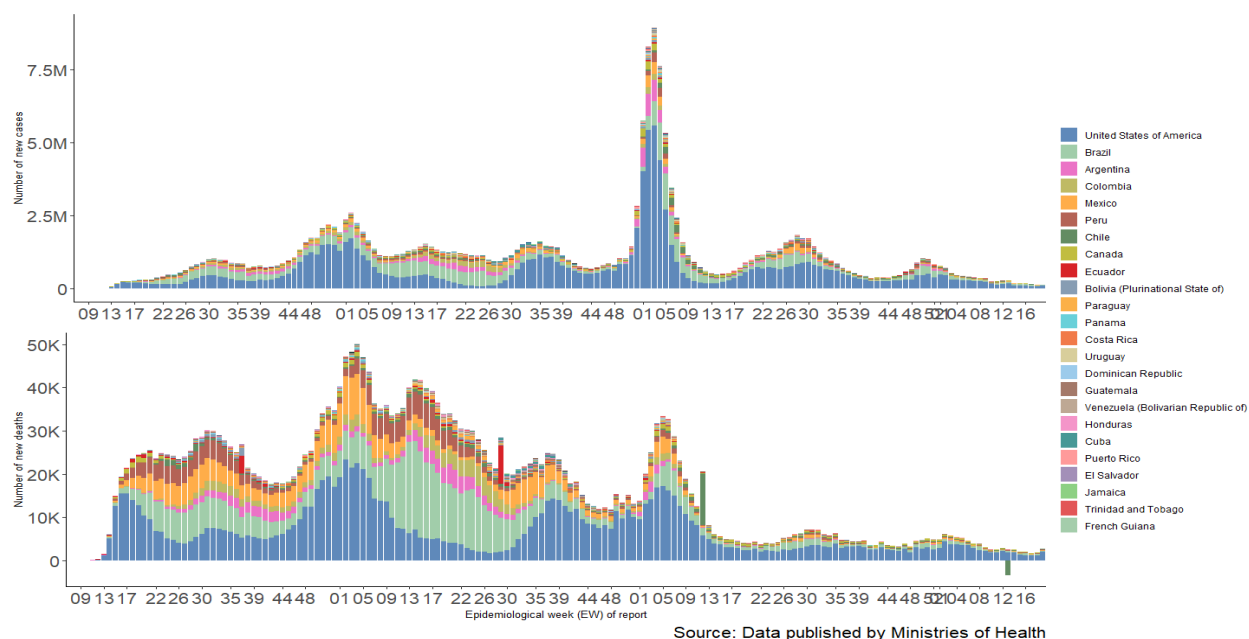


Source: Data from WHO COVID-19 Dashboard

Data are retro-adjusted every week and the numbers and percent changes of COVID-19 cumulative cases and deaths may not match with the previous COVID-19 weekly situational reports.

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 3 2020 - 18 & 19 2023.



During EW 18 & 19, 275,988 new **COVID-19 cases** were reported in the region of the Americas - a relative decrease of -17.0% compared to the previous 2 weeks (**Figure 2**). The highest number of COVID-19 cases in the last 2 weeks was reported from North America (193,026 cases, -10% decrease) compared to the previous 2 weeks. (**Table 1**). During EW 18 & 19, the highest proportion of biweekly COVID-19 cases at the national level were reported by United States of America (170,425 new cases, -7.9% decrease), Brazil (62,503 new cases, -31.6% decrease), Mexico (13,806 new cases, -24.6% decrease).

Table 1: Biweekly change (%) in cases and deaths between EW 16 & 17 and EW 18 & 19 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 16 & 17	Deaths EW 16 & 17	Cases EW 18 & 19	Deaths EW 18 & 19	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	4,430,979	36,552	6,421	29	6,648	35	3.5%	20.7%
Central America	4,279,672	54,464	5,218	30	5,312	28	1.8%	-6.7%
North America	115,710,041	1,513,466	215,627	2,619	193,026	3,320	-10.5%	26.8%
South America	68,300,286	1,349,051	105,317	973	71,002	1,109	-32.6%	14.0%

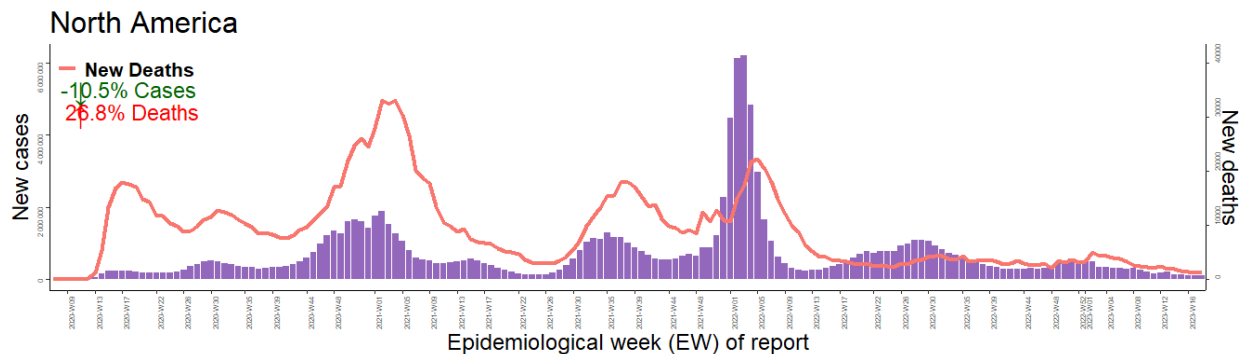
For the same period, 4,492 **COVID-19 deaths** were reported in the region of the Americas - a relative increase of 23.0% compared to the previous 2 weeks (**Figure 2**). The highest number of COVID-19 deaths in the last 2 weeks was reported from North America (3,320 deaths, 27% increase) (**Table 1**). At the national level, the highest proportion of biweekly COVID-19 deaths were reported by United States of America (3,089 new deaths, 37.7% increase), Brazil (622 new deaths, -8.9% decrease), and Peru (394 new deaths, 200.8% increase).

A summary of the COVID-19 trends for EW 18 & 19 by subregion is presented below.

North America

The overall trends for COVID-19 cases have been decreasing in North America as of EW 18 & 19 when compared to the previous 2 weeks (-10.5% decrease). During EW 18 & 19, the largest decline in cases were reported by Canada (8,795 cases, -28.9% decrease), followed by Mexico (13,806 cases, -24.6% decrease), and United States of America (170,425 cases, -7.9% decrease).

Figure 3: COVID-19 cases and deaths by epidemiological week (EW). **North America.** Region of the Americas. EW 3 2020 - EW 18 & 19 2023.



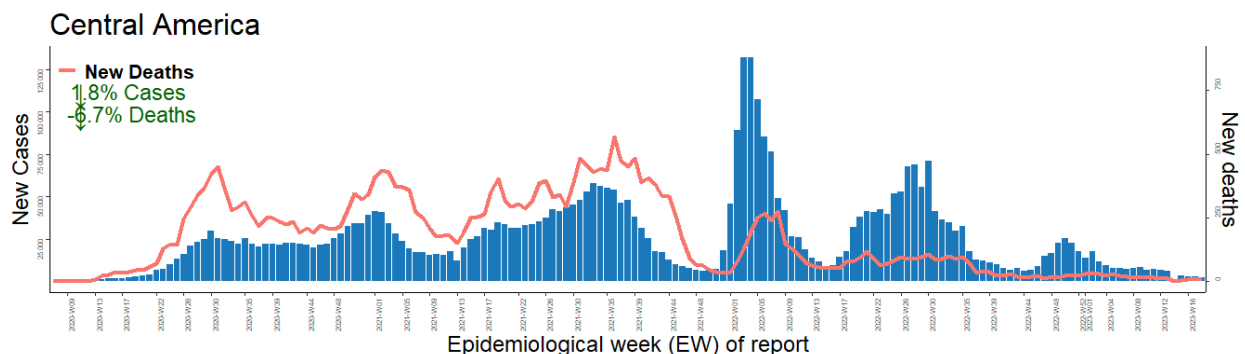
For the same period, **biweekly COVID-19 deaths** increased by 26.8% in North America during EW 18 & 19 relative to the previous 2 weeks. The largest proportion of reported deaths were reported by United States of America (3,089 new deaths, 37.7% increase), followed by Canada (180 new deaths, -28.6% decrease), and Mexico (51 new deaths, -58.5% decrease).

During EW 18 & 19, among the two countries in North America with available data for **COVID-19 hospitalizations and ICU admissions**, the United States of America reported an increase in their biweekly COVID-19 hospitalizations and ICU admissions. (13,608 hospitalizations, 2.7% increase & 1,726 ICU admissions, 2.2% increase). In Canada, biweekly hospitalizations decreased, and biweekly ICU admissions decreased during EW 18 & 19 compared to the previous 2 weeks (3,172 hospitalizations, -0.3% decrease & 167 ICU admissions, 1.2% increase).

Central America

In Central America, the overall **COVID-19 incidence** for the sub-region is on an upward trend with 5,312 new cases being reported during EW 18 & 19 – a 1.8% increase compared to the previous 2 weeks (**Figure 4**).

Figure 4: COVID-19 cases and deaths by epidemiological week (EW). **Central America.** Region of the Americas. EW 6 2020 - EW 18 & 19 2023.



The countries with the largest proportion of reported cases these 2 weeks included Guatemala (2,097 new cases, 45.5% increase), Costa Rica (1,893 new cases, -19.2% decrease), and Panama (1,245 new cases, -9.5% decrease).

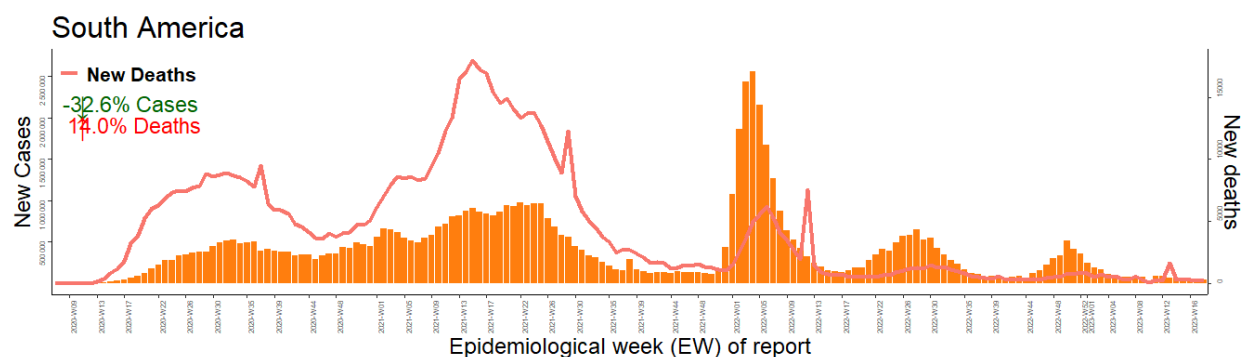
During EW 18 & 19, **biweekly deaths** decreased by approximately -6.7% relative to the previous 2-week period (**Figure 4**) with 2 out of the seven countries and territories reporting an increase (both with a 100% increase).

Among four countries/territories with available data for **COVID-19 hospitalizations** in the Central American subregion, two countries/territories reported an increase in their biweekly COVID-19 hospitalizations (range: 7.3 - 100%). Among three countries and territories with available data for **COVID-19 ICU admissions**, only Costa Rica reported an increase in their biweekly COVID-19 ICU admissions (13 ICU admissions, 100% increase).

South America

In South America, the overall **COVID-19 incidence** for the subregion has decreased by -32.6%, with a total of 71,002 COVID-19 cases being reported during EW 18 & 19 compared to the previous 2-week period (**Figure 5**).

Figure 5: COVID-19 cases and deaths by epidemiological week (EW). **South America. Region of the Americas.** EW 3 2020 - EW 18 & 19 2023.



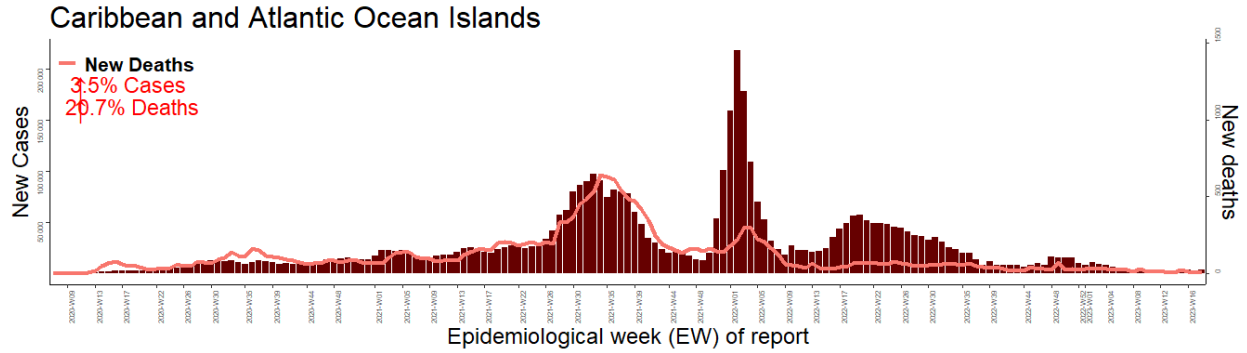
Out of the 10 countries and territories the sub-region, only Colombia experienced an increase in cases during EW 18 & 19 (1,358 new cases, 24.4% increase). The countries with the largest proportion of reported cases these 2 weeks included Brazil (62,503 new cases, -31.6% decrease), Peru (4,090 new cases, -3.4% decrease), and Chile (2,190 new cases, -61.3% decrease). During EW 18 & 19, a total of 1,109 **COVID-19 deaths** were reported in South America – a 14.0% increase compared to the previous 2 weeks.

Among 5 countries and territories in the subregion with data available for **COVID-19 hospitalizations**, Venezuela (Bolivarian Republic of) reported an increase in their biweekly COVID-19 hospitalizations (35 hospitalizations, 2.9% increase). For the same period, Uruguay and Peru reported an increase in their biweekly **COVID-19 ICU admissions** (12 ICU admissions, 20% increase & 35 ICU admissions, 25% increase).

Caribbean and Atlantic Ocean Islands

In the Caribbean and Atlantic Ocean Islands sub-region, **COVID-19 cases** increased by 3.5% (6,648 new cases) compared to the previous 2 weeks (**Figure 6**). At the national level, cases increased in 11 out of the 34 countries and territories in the subregion (range: 0.9% - 416.3%) while they declined in the remaining 9 countries and territories.

Figure 6: COVID-19 cases and deaths by epidemiological week (EW). **Caribbean and Atlantic Ocean Islands.** Region of the Americas. EW 6 2020 - EW 18 & 19 2023.



For the same period, **COVID-19 deaths** increased by 20.7% (35 deaths) in the Caribbean and Atlantic Ocean Islands sub-region. At the national level, 5 countries and territories observed a relative increase in their biweekly deaths in EW 18 & 19 compared to the previous 2 weeks.

Among 17 countries and territories in the subregion with data available for **COVID-19 hospitalizations**, Cuba (109 hospitalizations, 100% increase), Suriname (8 hospitalizations, 166.7% increase), U.S. Virgin Islands (4 hospitalizations, 100% increase) and Guyana (1 hospitalization, 100% increase) reported an increase in their biweekly COVID-19 hospitalizations. For the same period, Puerto Rico and U.S. Virgin Islands reported an increase in their biweekly **COVID-19 ICU admissions** (15 ICU admissions, 36% increase & 5 ICU admissions, 400% increase).

Immunization

Figure 7: COVID-19 vaccination coverage by subregion for the Americas

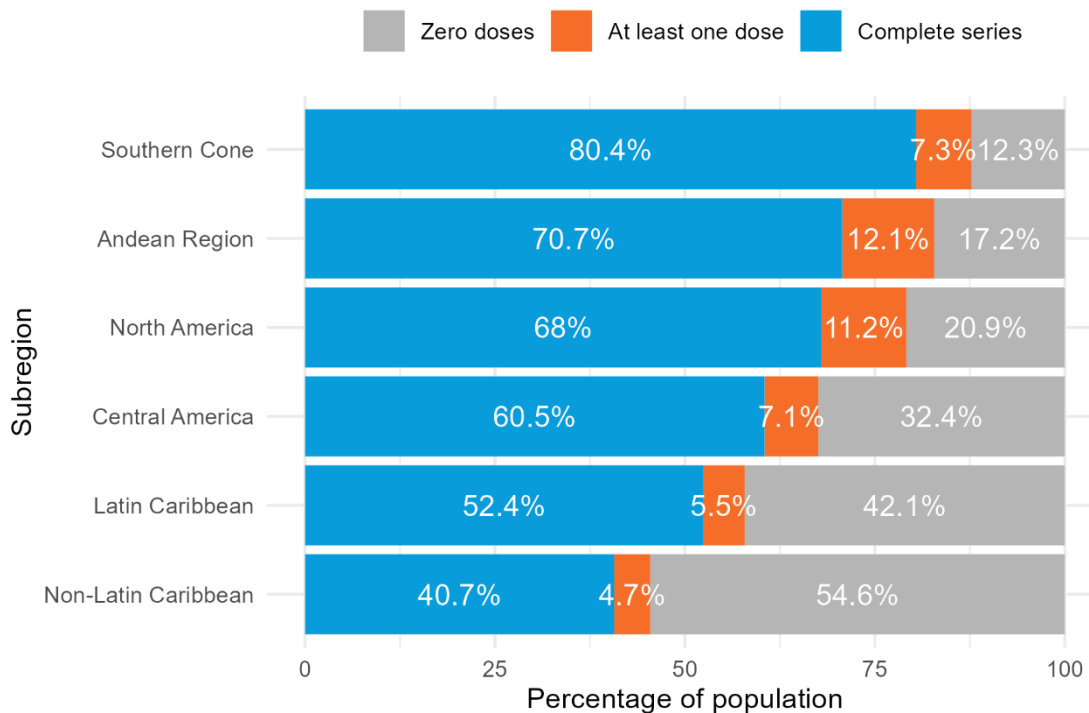


Figure 7 reports the current status for COVID-19 vaccination coverage* in the Americas, by subregion and by number of doses administered. The Southern Cone reports the highest complete primary series coverage rate as well as the lowest percentage of zero-dose persons. On the other hand, the Caribbean reports the lowest coverage rate and highest number of zero-dose persons in the Region.

**Based on the United Nations (UN) Population Prospects for 2021 and projections from the United States (US) Census Bureau for countries with 100,000 or fewer inhabitants*

Genomic surveillance in the PAHO Region

Through PAHO's Genomic Surveillance Regional Network and the work of Member States, 567,128 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 16 May 2023.

The vast majority of SARS-CoV-2 viruses circulating globally belong to sublineages of Omicron. According to the Pango Network nomenclature, Omicron comprises the BA.1 to BA.5 sublineages, which are in turn subdivided into diverse sublineages based on additional mutations that slightly change their genomic profile. Multiple sublineages arising from recombinations involving Omicron viruses have also been described and they now make up the majority of the circulating SARS-CoV-2 viruses worldwide.

Starting 15 March 2023, the WHO variant tracking system considers the classification of Omicron sublineages independently as variants under monitoring (VUM), variants of interest (VOIs), or variants of concern (VOCs), while Alpha, Beta, Gamma, Delta and the Omicron original lineages are classified as “previously circulating” VOCs 1. At present, in this classification, no lineage is classified as currently circulating VOC. The recombinant sublineage XBB.1.5 and XBB.1.16 were classified as currently circulating VOIs in January and April 2023, respectively. Risk assessments for both VOIs have been published 2,3. These risk assessments found that available information does not suggest that XBB.1.5 nor XBB.1.16 have additional public health risk relative to XBB and the other currently circulating Omicron descendent lineages. Additionally, BQ.1 (a BA.5 sublineage), BA.2.75 and CH.1.1 (two BA.2 sublineages), and XBB, XBB.1.9.1, and XBB.1.9.2 are classified as currently circulating VUMs.

Since the introduction of Omicron in the Americas, different sublineages have been predominant and have then progressively been replaced by new sublineages (**Figure 8**). BA.1 sublineages were dominant at the beginning of Omicron circulation, followed by a predominance of BA.2 sublineages from week 12 to 24 of 2022, and then by a combination of BA.4 and BA.5 from week 25 to 34. In weeks 34 to 40 of 2022, BA.5 sublineages continued their expansion and, since week 41, the proportion of recombinant lineages has been increasing. Currently, most circulating viruses are recombinant and, to a lesser extent, BA.5 sublineages, with some circulation of BA.2 sublineages (**Figure 8**). In fact, in the past eight weeks, recombinant lineages represented 91.58%, 90.09%, 98.8%, and 94.4% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively. During the same period, BA.5 sublineages represented 7.1%, 2.1%, 1.2% and 5.2% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively.

¹ WHO. Statement on the update of WHO's working definitions and tracking system for SARS-CoV-2 variants of concern and variants of interest. 16 March 2023. Available at: <https://www.who.int/news/item/16-03-2023-statement-on-the-update-of-who-s-working-definitions-and-tracking-system-for-sars-cov-2-variants-of-concern-and-variants-of-interest>

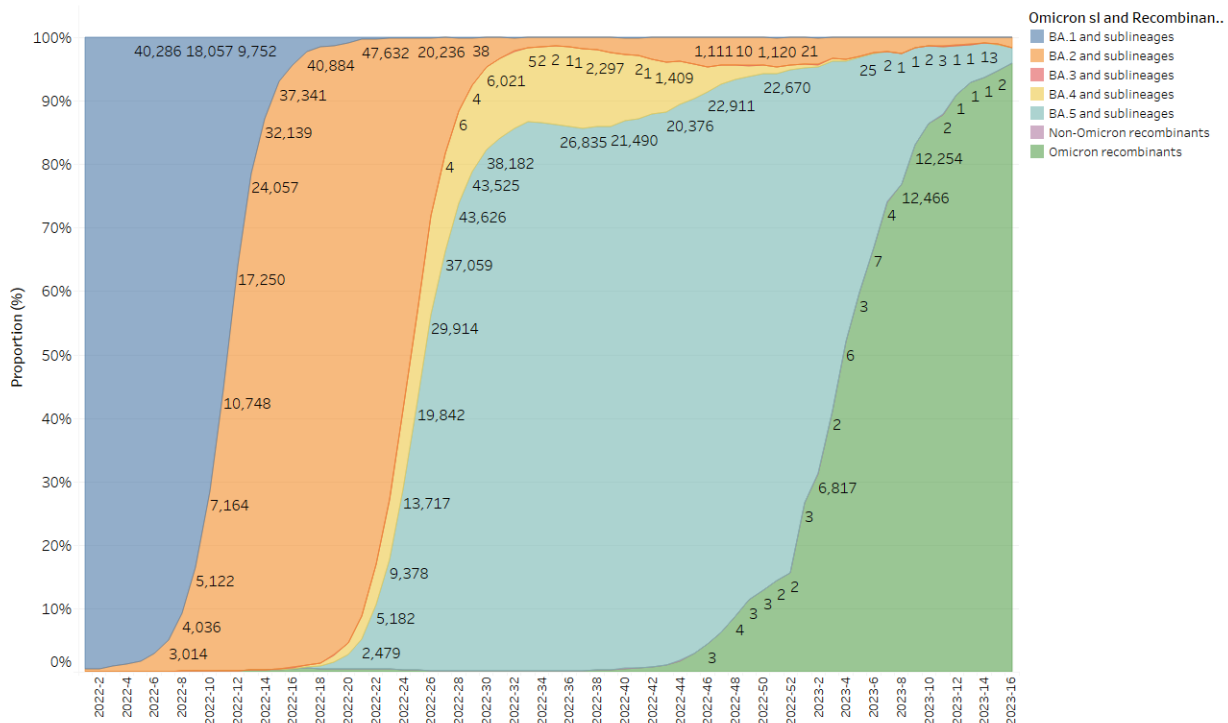
² WHO. XBB.1.5 Updated Rapid Risk Assessment, 24 February 2023. Available at: <https://www.who.int/docs/default-source/coronaviruse/22022024xbb.1.5ra.pdf>

³ WHO. XBB.1.16 Initial Risk Assessment. 17 April 2023. Available at: <https://www.who.int/docs/default-source/coronaviruse/21042023xbb.1.16ra-v2.pdf>

Within these main sublineages, most viruses currently circulating in the Americas correspond to VOI XBB.1.5 and, to a lesser extent, VUMs XBB.1.9.1 and XBB.1.9.2, and VOI XBB.1.16. Since 26 March 2023, VOI XBB.1.5 (and sublineages) represented 74.7%, 75.4%, 94.3%, and 58.1% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively. However, the proportion of XBB.1.5 has been decreasing over the past few weeks. During the same period, VUMs XBB.1.9.1 and XBB.1.9.2 (combined and including sublineages) represented 5.5%, 9.1%, and 1.1% of the characterized samples in North America, the Caribbean, and South America, respectively (no XBB.1.9.1 and XBB.1.9.2 were reported from Central America since 26 March). VOI XBB.1.16 has been detected in Aruba, Brazil, Canada, Chile, Costa Rica, French Guiana, Mexico, Puerto Rico, and the US, and has been increasing in Canada and the US during the past few weeks. Since 26 March 2023, XBB.1.16 (and sublineages) represented 4.0%, 2.9%, and 0.6% of the characterized samples in North America, the Caribbean, and South America, respectively (no XBB.1.16 were reported from Central America since 26 March). Model-based projections estimate that XBB.1.5, XBB.1.16, XBB.1.9.1, and XBB.1.9.2, represent 68.2%, 14.3%, 9.2%, and 4.0% of the US sequences in the two-week period ending 13 May 2023.

It is important to note that the number of SARS-CoV-2 sequences deposited in GISAID by PAHO Member States has significantly decreased compared to mid-2022 (**Figure 9**). This decrease, which is also observed in other regions, increases the risk of bias in the sublineage prevalence estimates reported above and reduces our collective ability to timely identify new emerging lineages or new variants. In this context, **PAHO strongly encourages all countries in the Region to continue collecting representative samples for sequencing and to maintain appropriate COVID-19 genomic surveillance.**

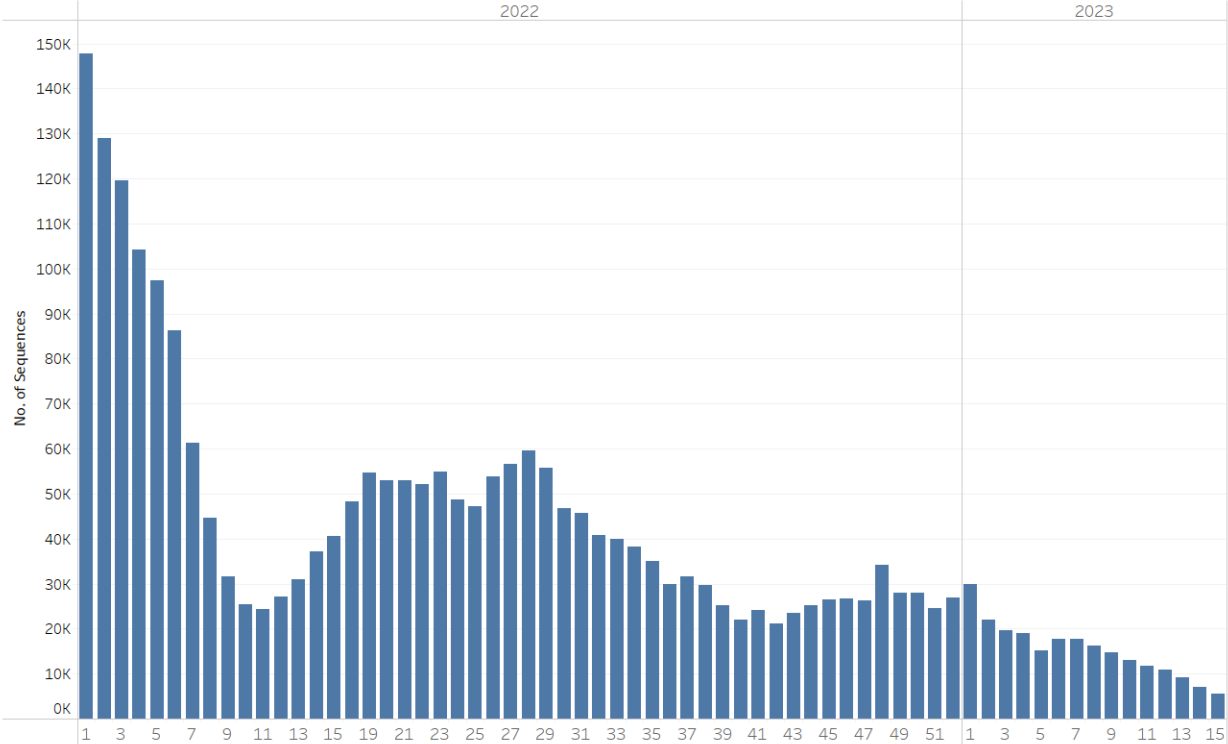
Figure 8. Proportions of VOC Omicron sublineages identified by the countries in the Region of the Americas (January 2022 - April 2023)



Source: GISAID

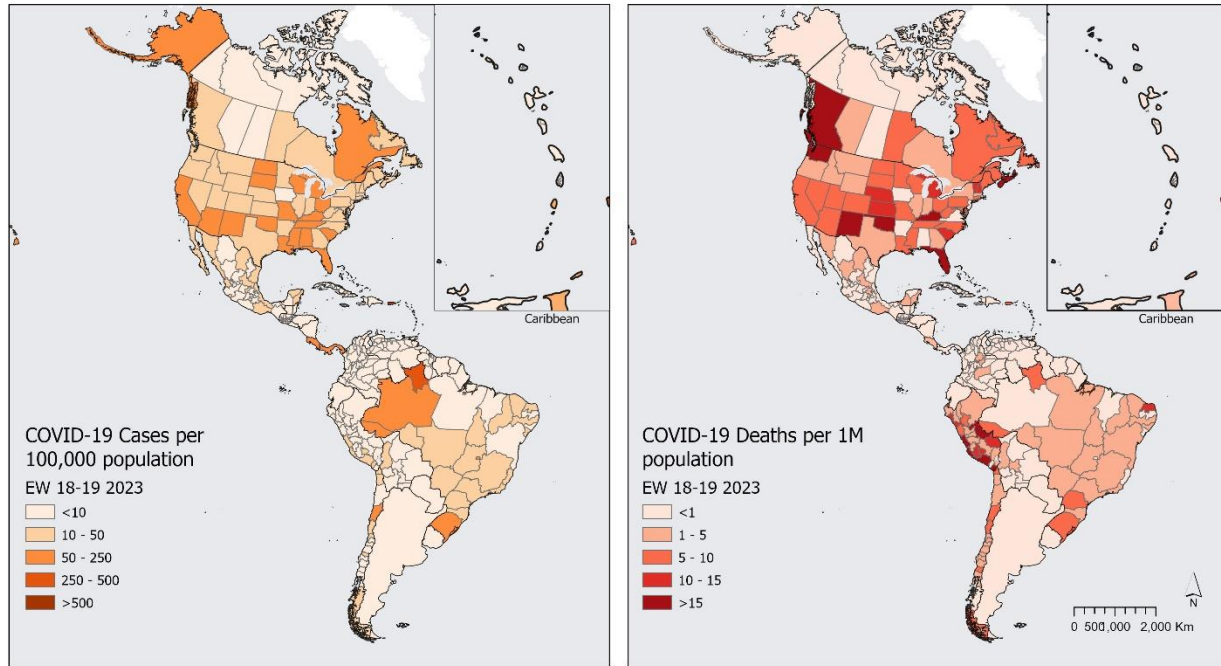
⁴ US CDC. COVID Data Tracker - Variant Proportions. Available at: <https://covid.cdc.gov/covid-data-tracker/#variant-proportions>

Figure 9. Number of weekly sequences generated in the Region of the Americas (January 2022 - April 2023)



Source: GISAIID

Annex 1: COVID-19 incidence rate per 100,000 population and COVID-19 mortality rate per 1 million population. Region of the Americas. Between EW 18 and 19 in 2023



These maps depict the COVID-19 case incidence and mortality rates in the Americas during EW 18 and 19 2023.

We observe the highest case incidence in the USA, Brazil, Canada, Panama, and Costa Rica, while the highest mortality was seen in parts of the US, Canada, and Peru.

In North America, we see most parts of the US and Canada (Quebec) with moderately high incidence rates. We observe the highest mortality rates in the region in parts of the US (Washington, New Mexico, Oklahoma, Florida, Kentucky) and Canada (British Columbia, Nova Scotia).

In Central America, we see the largest number of reported cases in Costa Rica and Panama, while in South America, Brazil (Amazonas, Roraima, Acre) reports moderately high incidence rates. Some territories in Peru (Ucayali, Lima, Ica, Arequipa, Tacna) observe some of the highest mortality rates in South America.

In the Caribbean islands, Puerto Rico, Barbados, and St Vincent and the Grenadines report moderately high incidence in the last 2 weeks.