

Weekly COVID-19 Epidemiological Update - Region of the Americas

Issue 57, published 7 March 2023

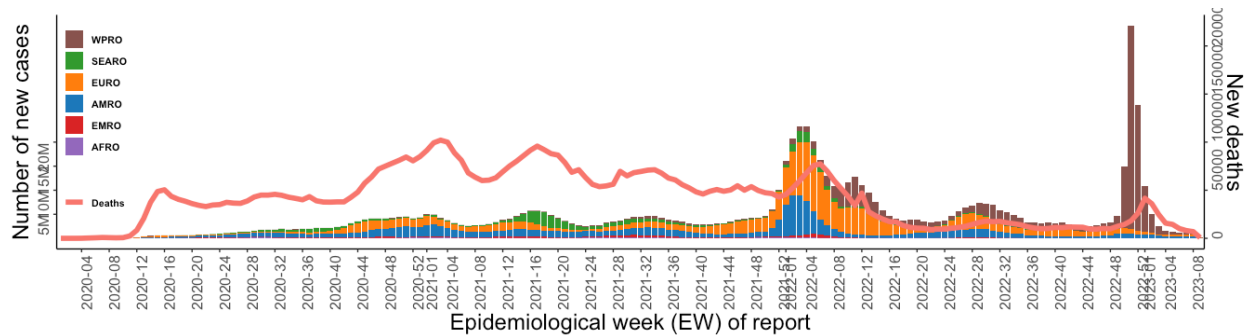
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Executive Summary

- **Since the onset of the pandemic** in 2020 and up to 07 March 2023, a cumulative total of approximately 758.7 million COVID-19 cases including about 6.9 million deaths were reported from all six WHO regions. During epidemiological week (EW) 9, both cases and deaths decreased in all regions.
- **In the region of the Americas**, 340,487 cases and 3,005 deaths were reported in EW 9 – a -4.9% decrease in cases and -20.5% decrease in deaths compared to the previous week.
- At the subregional level, COVID-19 cases increased in two subregions – South America (49.8%) and Central America (5.6%). Deaths increased in two subregions – Caribbean and Atlantic Ocean Islands (53.8%) and Central America (10.3%).
- The overall weekly case notification rate for the region of the Americas was 33.3 cases per 100,000 population during EW 9 (35 the previous week). Between EW 9 and 8, the 14-day COVID-19 death rate was 6.6 deaths per 1 million population (7.4 the previous two weeks).
- Among 18 countries and territories in the region with available data, **COVID-19 hospitalizations** increased in 8 countries and territories (range: 2.1% - 68.4%) during EW 9 compared to the previous week. Among 15 countries and territories with available data, **COVID-19 ICU admissions** increased in 4 countries and territories (range: 3.8% - 100%).

Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. EW 4 2020 - EW 9 2023.

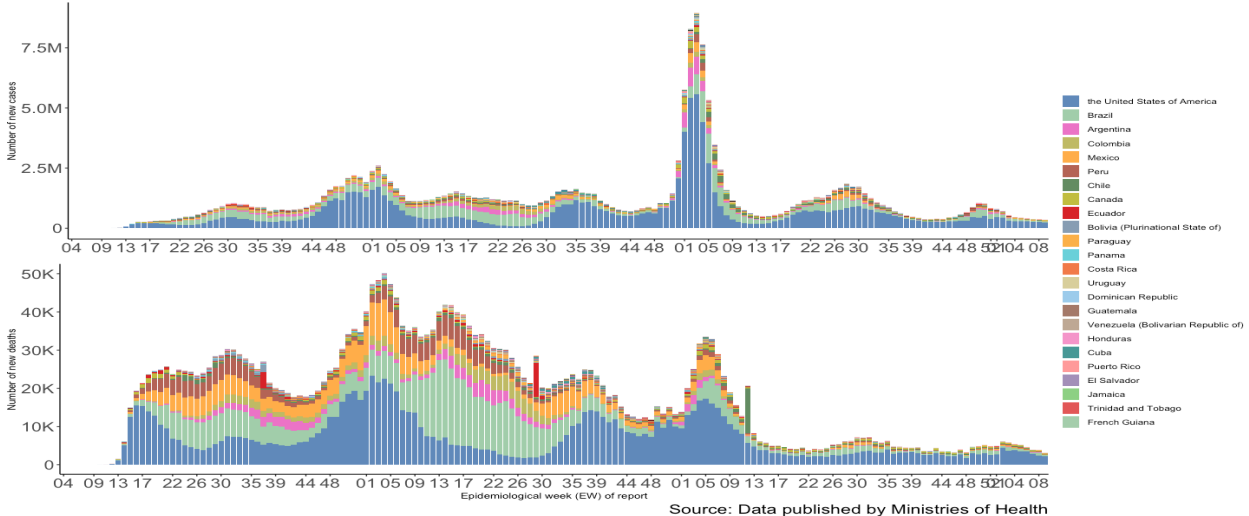


Source: Data from WHO COVID-19 Dashboard

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 - 9 2023.



During EW 9, 340,487 new **COVID-19 cases** were reported in the region of the Americas - a relative decrease of -4.9% compared to previous week (**Figure 2**). The highest number of COVID-19 cases in the last week was reported from North America (252,792 cases, -14.5% decrease) compared to the previous week. (**Table 1**). During EW 9, the highest proportion of weekly COVID-19 cases at the national level were reported by the United States of America (227,828 new cases, -14.7% decrease), Brazil (55,522 new cases, 69% increase), Chile (16,561 new cases, 22.4% increase).

Table 1: Weekly change (%) in cases and deaths between EW 8 and EW 9 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 08	Deaths EW 08	Cases EW 09	Deaths EW 09	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	4,400,629	36,319	3,661	26	3,487	40	-4.8%	53.8%
Central America	4,239,436	54,306	7,618	29	8,044	32	5.6%	10.3%
North America	114,318,660	1,495,889	295,724	2,625	252,792	2,397	-14.5%	-8.7%
South America	67,723,519	1,347,845	50,850	1,100	76,164	536	49.8%	-51.3%

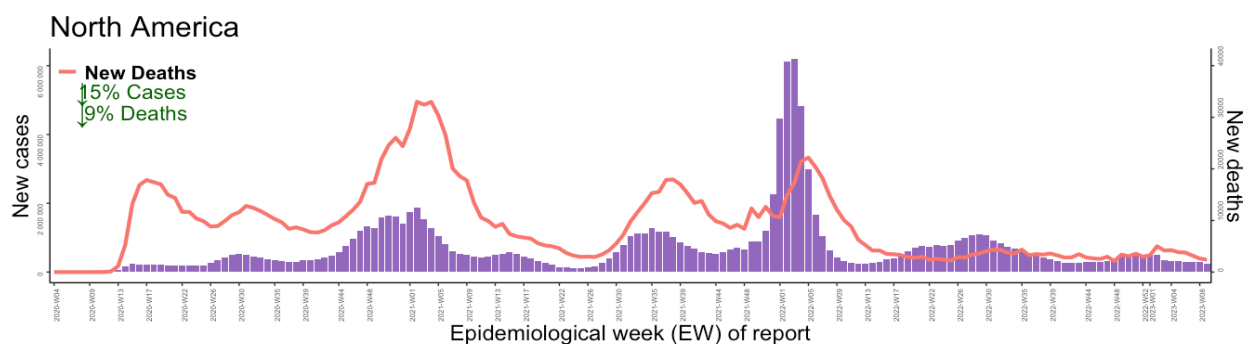
For the same period, 3,005 **COVID-19 deaths** were reported in the region of the Americas - a relative decrease of -20.5% compared to previous week (**Figure 2**). The highest number of COVID-19 deaths in the last week was reported from North America (2,397 deaths, -8.7% decrease) (**Table 1**). At the national level, the highest proportion of weekly COVID-19 deaths were reported by the United States of America (2,197 new deaths, -7% decrease), Brazil (348 new deaths, -60.5% decrease), and Canada (141 new deaths, -15.6% decrease).

A summary of the COVID-19 trends for EW 9 by subregion is presented below.

North America

During EW 9, COVID-19 cases decreased in North America, with the largest decline in cases were reported by Mexico (15,758 cases, -16.6% decrease), followed by the United States of America (227,828 cases, -14.7% decrease), and Canada (9,206 cases, -4.7% decrease).

Figure 3: COVID-19 cases and deaths by epidemiological week (EW). **North America.** Region of the Americas. EW 3 2020 - EW 9 2023.



For the same period, **weekly COVID-19 deaths** decreased by -8.7% in North America during EW 9 relative to the previous week. All three countries in the subregion reported a decline in deaths – the largest decline in deaths reported by Mexico (59 new deaths, -38.5% decrease), followed by Canada (141 new deaths, -15.6% decrease), and the United States of America (2,197 new deaths, -7% decrease).

During EW 9, among the two countries in North America with available data for **COVID-19 weekly hospitalizations and ICU admissions**, the United States of America reported a decrease in its weekly COVID-19 hospitalizations (n=26,282, -4.6%) and a decrease in its weekly ICU admissions (n=3,308, -4.2%). In Canada, weekly hospitalizations and ICU admissions decreased during EW 9 compared to the previous week - (3,512 hospitalizations, -2.2% & 183 ICU admissions, -5.7%).

Omicron lineages BA.5 and XBB are circulating in all three countries in the subregion. In the United States of America, the proportions of BA.5 subvariant and its sublineages, BQ.1 and BQ.1.1 continue to decrease over the past three months, replaced by circulation of XBB sublineages that have been rapidly increasing since mid-December 2022. XBB.1.5 sublineage account for 89.6% of sequences for the week ending on 4 March 2023¹. In Canada, the sublineages of BA.5 and XBB.1.5 made up about 48.3% and about 42.6% respectively, in EW 7².

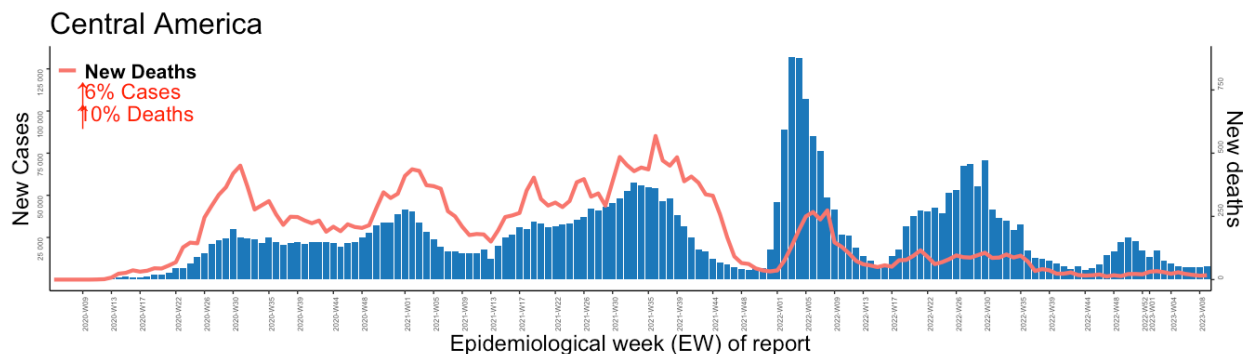
Central America

In Central America, the overall **COVID-19 incidence** for the sub-region is on an upward trend with 8,044 new cases reported during EW 9 – a 5.6% increase compared to the previous week (**Figure 4**).

1 The United States Centers for Disease Control and Prevention (CDC). Variant Proportions. Accessed 7 March 2023. Available at: <https://bit.ly/3Obz8cT>

2 Public Health Agency of Canada (PHAC). COVID-19 Variants in Canada. Accessed 7 March 2023. Available at: <https://bit.ly/3bbFRFR>

Figure 4: COVID-19 cases and deaths by epidemiological week (EW). Central America. Region of the Americas. EW 6 2020 - EW 9 2023.



During EW 9, four countries and territories reported an increase in weekly cases. The countries with the largest proportion of reported cases this week included Costa Rica (5,561 new cases, 8.8% increase), Guatemala (1,888 new cases, 1.1% increase), and Panama (458 new cases, 76.8% increase). Belize and Honduras reported a decline in weekly cases (range: -70.7 - -10.5% decrease).

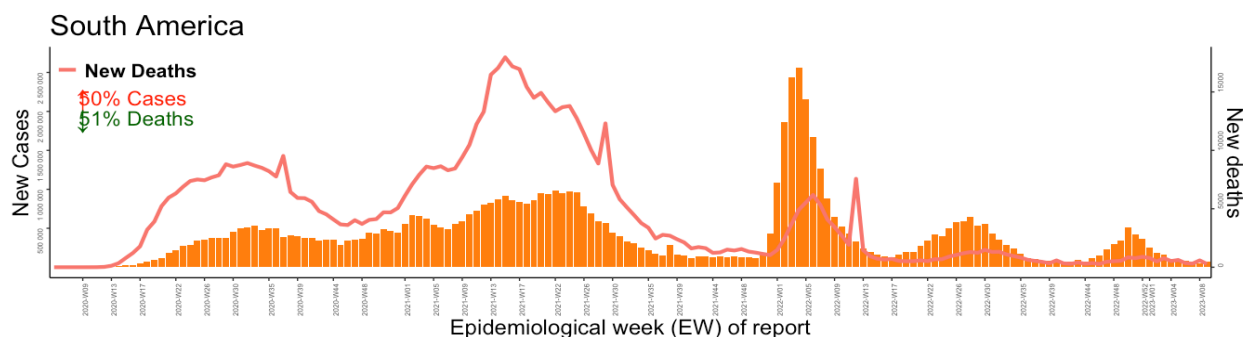
During EW 9, **weekly deaths** increased by approximately 10.3% relative to the previous week (**Figure 4**) with Guatemala (12 new deaths, 20% increase) and Panama (5 new deaths, 400% increase) reporting an increase.

Among four countries with available data for **weekly COVID-19 hospitalizations** in the Central American subregion, Costa Rica and Panama countries reported an increase in their weekly COVID-19 hospitalizations (range: 2.1 - 25%). Among three countries and territories with available data for **weekly COVID-19 ICU admissions**, Panama reported an increase in their weekly COVID-19 ICU admissions (n=2, 100% increase).

To date, the Omicron lineages XBB have been reported from six countries in the subregion: Belize, Costa Rica, El Salvador, Guatemala, Nicaragua, and Panama.

South America

Figure 5: COVID-19 cases and deaths by epidemiological week (EW). South America. Region of the Americas. EW 3 2020 - EW 9 2023.



In South America, the overall **COVID-19 incidence** for the subregion has increased by 49.8%, with a total of 76,164 new COVID-19 cases being reported during EW 9 compared to the previous week (**Figure 5**).

During EW 9, six countries and territories reported an increase in cases with the largest proportion cases reported by Brazil (55,522 new cases, 69% increase), followed by Chile (16,561 new cases, 22.4% increase), and Peru (1,383 new cases, 84.2% increase).

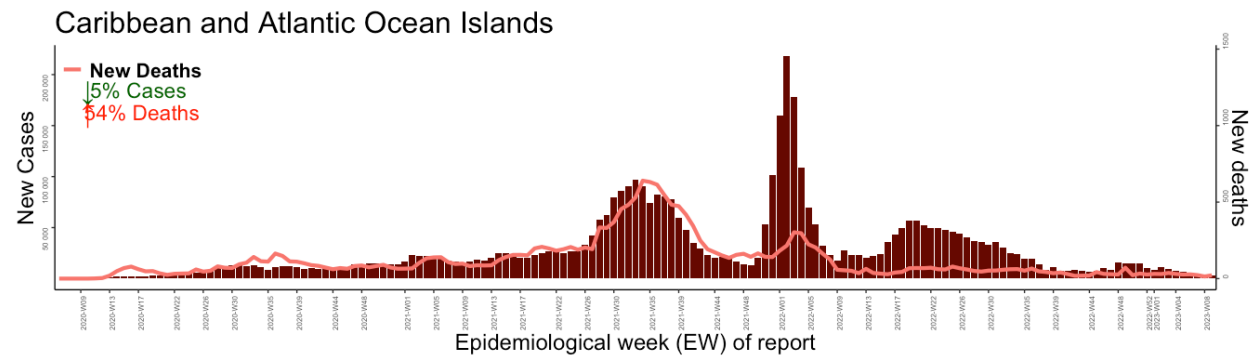
For the same period, a total of 536 **COVID-19 deaths** were reported in South America – a -51.3% decrease compared to the previous week. Two countries in the subregion reported an increase in weekly deaths – Peru (90 new deaths, 16.9% increase) and Argentina (9 new deaths, 80% increase), while the remaining countries and territories reported a decline in deaths (range: -100 - -26.3% decrease) compared to the previous week.

Among four countries and territories in the subregion with data available for **COVID-19 weekly hospitalizations**, Colombia and Peru reported an increase in their weekly COVID-19 hospitalizations – Colombia (n=405, 2.5% increase) and Peru (n=99, 12.5% increase). For the same period, Chile reported an increase in their weekly COVID-19 ICU admissions (n=82, 3.8% increase) out of five countries with COVID-19 ICU admissions data available.

To date, eight countries in the subregion continue to report XBB sublineages: Argentina, Brazil, Chile, Colombia, Ecuador, Peru, Uruguay, and Venezuela (Bolivarian Republic of).

Caribbean and Atlantic Ocean Islands

Figure 6: COVID-19 cases and deaths by epidemiological week (EW). **Caribbean and Atlantic Ocean Islands.** Region of the Americas. EW 6 2020 - EW 9 2023.



In the Caribbean and Atlantic Ocean Islands sub-region, **COVID-19 weekly cases** decreased by -4.8% (3,487 weekly cases) compared to the previous week (**Figure 6**). Eight countries/territories reported an increase in weekly cases – with the highest relative increase reported from Trinidad and Tobago (559 new cases, 147.3% increase), followed by Bermuda (15 new cases, 87.5% increase), and Guadeloupe (26.7% increase) relative to the previous week.

For the same period, **COVID-19 weekly deaths** increased by 53.8% (40 deaths) in the Caribbean and Atlantic Ocean Islands subregion. Three countries/territories reported an increase in deaths (range: 100-350% increase). Jamaica reported a 350% increase in deaths due to the inclusion of historical deaths occurred between 2021 and 2023.

During EW 9, among the nine countries and territories with available data for **weekly COVID-19 hospitalizations**, Cuba, Martinique, Guadeloupe, and Trinidad and Tobago an increase in their weekly COVID-19 hospitalizations (range: 33.3 - 68.4%). Among six countries and territories with data available for **COVID-19 ICU admissions**, Puerto Rico and Guadeloupe reported an increase in their weekly COVID-19 ICU admissions.

To date, XBB sublineages have been reported from 18 countries and territories in the subregion. However, these trends should be interpreted with caution due to the presence of differences in sequencing capacity and sampling strategies between countries and territories.

Immunization

Figure 7: The COVID-19 Vaccination coverage and reporting rate by country/territory. Region of the Americas. As of EW 9 2023.

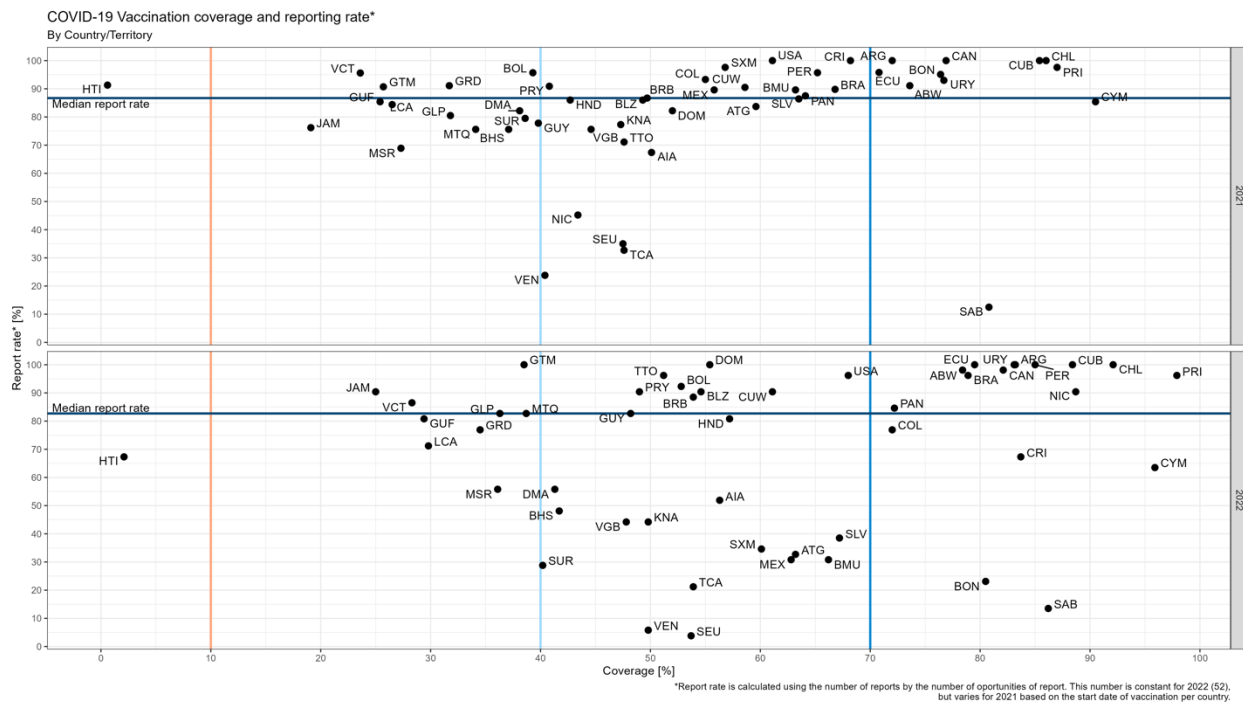


Figure 7 compares the national COVID-19 vaccination coverage rate (defined as the application of two vaccine doses) with the weekly data reporting rate for each country and territory. In 2021, national coverage rates had a wide dispersion, with countries distributed along the 10%, 40% and 70% targets. The median report rate for 2021 was 87%, while the mean was 82%, with a standard deviation of 20%. However, in 2022, the distribution of reporting rates becomes more disperse and negatively skewed: the mean fell significantly to 70% and the standard deviation grew to 29%; the median remained relatively unchanged at 83%. Furthermore, the trend on the horizontal axis continues from 2021 to 2022: the coverage rates report high dispersion, with most countries advancing only small percentages. Therefore, as the national reporting rate declined in 2022, so did the vaccination coverage rate.

Genomic surveillance

Through PAHO's Genomic Surveillance Regional Network and the work from the Member States, 549,692 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 7 March 2023.

The Omicron variant of concern (VOC) was introduced in the Americas at the end of 2021, and it rapidly replaced Delta VOC and other lineages throughout the Region. Omicron has been predominant in all PAHO countries since the beginning of 2022. In the past two months, a single sequence from "previously circulating" VOCs has been detected in the Region (one Delta sequence in North America).

SARS-CoV-2 Omicron sublineage classification and nomenclature

Omicron sublineages are usually defined using the Pango Network nomenclature which is solely based on the analysis of the genetic composition of the virus (phylogenetics). This nomenclature assigns a letter or combination of letters followed by up to three numbers to each lineage. For instance, lineage B.1.1.529, is the 529th descendant identified of lineage B.1.1, which is the first descendant of B.1, which is the first descendant of B, one of the two original lineages of SARS-CoV-2. To avoid long strings, aliases are used when more than three numbers are needed. For example, BA.1 is the alias for B.1.1.529.1, the first descendant of B.1.1.529. The combination BA was used as it was the first available letter (after BA came BB then BC, etc.). Using this nomenclature, five main sublineages of Omicron (B.1.1.529) have been designated, BA.1 to BA.5. Each of these sublineages have diversified further generating other sublineages that may carry a different combination of letters (for instance, BQ.1 is an alias for BA.5.3.1.1.1.1.1). Moreover, several sublineages arising from recombinations involving Omicron viruses have also been described. In the Pango nomenclature, these recombinants are initially named using a combination of letters starting with X (eg, XBB). However, as recombinants diversify, additional sublineages are designated using the same combination of letters (eg, XBB.1.5) or a new one when more than three numbers are needed (eg, EM.1, alias of XBB.1.5.7.1). Up to 5 March 2023, 2,631 SARS-CoV-2 lineages, including 157 recombinant lineages, have been designated.

In parallel, the WHO nomenclature established to address the potential public health impacts of variants is based on Greek letters as designated based on risk assessments conducted by the WHO Technical Advisory Group on SARS-CoV-2 virus evolution (TAG-VE)¹ This classification includes the variants of concern (VOC) and of interest (VOI). Currently, there is no circulating VOI reported and the only circulating VOC is Omicron. Additionally, a new category named "Omicron subvariants under monitoring" was established by the TAG-VE to identify lineages that may require prioritized monitoring because they carry additional mutations that might confer some fitness advantage¹. Currently, this category includes:

¹ WHO. Tracking SARS-CoV-2 variants. Available at: <https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/>

- Two BA.5 sublineages: BF.7 and BQ.1
- Two BA.2 sublineages: BA.2.75 and CH.1
- Three recombinants: XBB, XBB.1.5, and XBF

The inclusion of a particular subvariant in the “Omicron subvariants under monitoring” category does not necessarily mean that the subvariant poses an additional public health threat. In fact, the latest risk assessment of XBB.1.5, updated on 24 February², is that available information does not suggest that XBB.1.5 has additional public health risks relative to the other currently circulating Omicron descendent lineages. Risk assessments of this and newly emerging sublineages are updated periodically and new VOIs or VOCs might be designated.

To facilitate the reporting of Omicron sublineage circulation in the Americas (see next paragraph), circulating viruses are grouped according to the ancestral sublineage (BA.1 to BA.5) or in the recombinant group. Data for specific subvariants under monitoring might also be reported separately to track their spread at the regional level.

Distribution of Omicron sublineages in the Americas

The cumulative proportion of Omicron sequences collected in the Americas from November 2021 to date are: 39.6% of BA.1 (and BA.1 sublineages), 22.7% of BA.2 (and sublineages), <0.1% of BA.3 (and sublineages), 4.1% of BA.4 (and BA.4 sublineages), 31.2% BA.5 (and BA.5 sublineages), and 2.5% recombinant sublineages. Although BA.1 still accounts for the majority of cumulative sequences, BA.2 became predominant in all subregions between weeks 12 and 15 of 2022, and BA.4 and BA.5 became predominant between weeks 25 and 34 (**Figure 8**). Since then, BA.5 proportion has continued to increase, BA.4 proportion has significantly decreased, and BA.2 proportion has remained stable, owing to the circulation of several BA.2.75 sublineages. The proportion of recombinant lineages has also been increasing since week 41, driven by increased circulation of XBB (and sublineages).

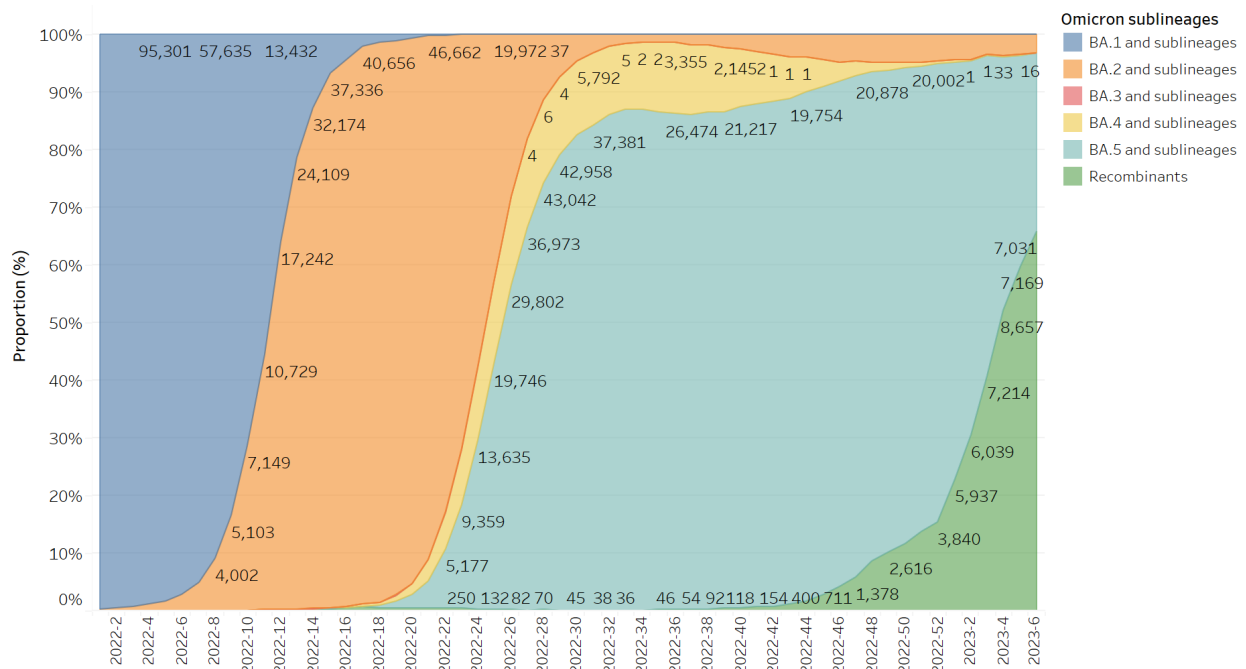
Most viruses currently circulating in the Americas correspond to BA.5 and XBB sublineages, and to a lesser extent BA.2.75 sublineages (in particular CH.1.1 and BN.1.2). In the past eight weeks, BA.5 and its sublineages, in particular BQ.1, represented 47.0%, 41.1%, 30.5%, and 59.1% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively. During the same period, recombinant lineages represented 48.3%, 50.0%, 66.7% and 36.5% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively. In particular, the XBB recombinant has been detected in 35 countries and territories (across all subregions). Countries reporting the highest prevalence of XBB sequences in the past eight weeks are Guatemala (84.2%), Peru (83.8%), and Dominican Republic (81.5%). Among XBB sublineages, XBB.1.5 continues to be the most prevalent at the regional level. XBB.1.5 was first detected in the USA at the end of October 2022 and model-based

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>

projections estimate it accounts for 89.6% (95% CI: 85.6-92.6%) of the US sequences in EW9 2023³. Overall, XBB.1.5 has been detected in 28 countries and territories of the Americas.

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. 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.**

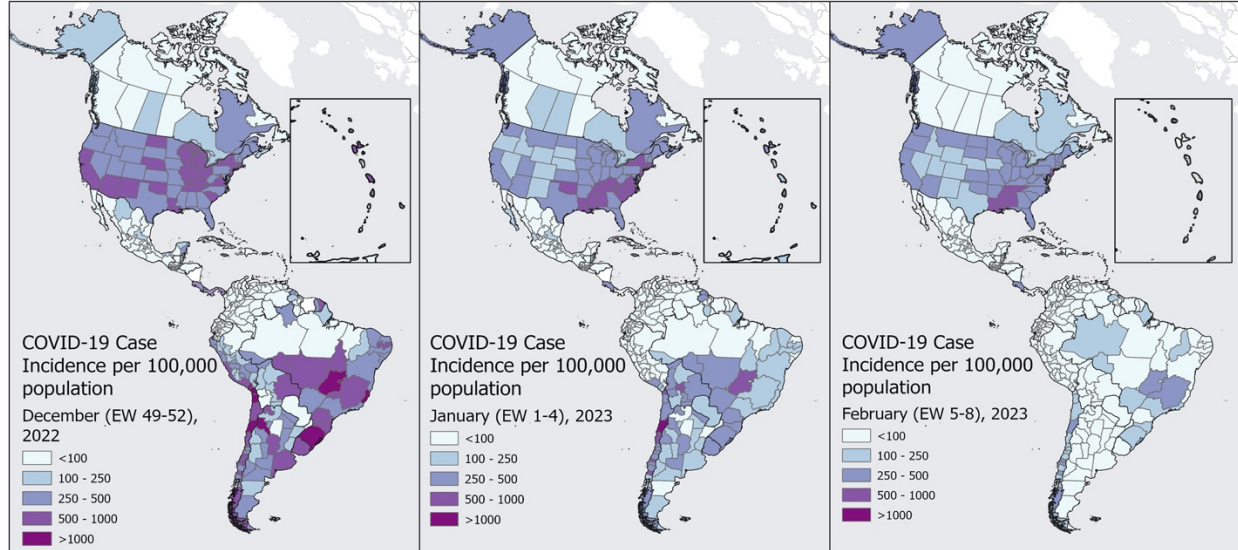
Figure 8. Proportions of VOC Omicron sublineages identified by the countries in the Region of the Americas (January 2022 - February 2023)



Source: GISAID

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

Annex 1. The maps of monthly COVID-19 case incidence rates per 100,000 population. The region of the Americas. From December 2022 to February 2023.



This map (**Annex 1**) represents the COVID-19 case incidence per 100,000 population in the region of the Americas from December 2022 to February 2023.

In December 2022, an important increase in new cases was observed in most countries and territories of the Americas compared to the previous month. In North America, the largest relative increase was observed in Mexico followed by the US. In Central America, Panama, Costa Rica, Belize, and Guatemala presented the highest case incidence rates. Most countries in South America presented an increase in incidence rates, the largest relative increase was observed in Bolivia, Paraguay, and Argentina. In the Caribbean and Atlantic Ocean islands and territories the highest case incidence rates were observed in Puerto Rico and the French Guiana.

In January, all subregions showed a relative decline in incidence rate compared to the previous month. In North America, the US and Canada presented the largest relative decrease in incidence rates. In Central America, only Nicaragua and Costa Rica presented an increase in incidence rates compared to the previous month. South America was the subregion with the largest decrease in incident rates in the Americas, all countries and territories presented a decline except Paraguay. In the Caribbean and Atlantic Ocean subregion incidence rates declined in most islands and territories.

In February, incident rates continued declining in most countries and territories of the Americas. South America presented the largest relative decrease in the region. Incident rates with over 250 cases per 100,000 populations were only observed in some states in the US, some regions of Puerto Rico, Chile, and Brazil, and in Costa Rica.

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.