

Weekly COVID-19 Epidemiological Update - Region of the Americas

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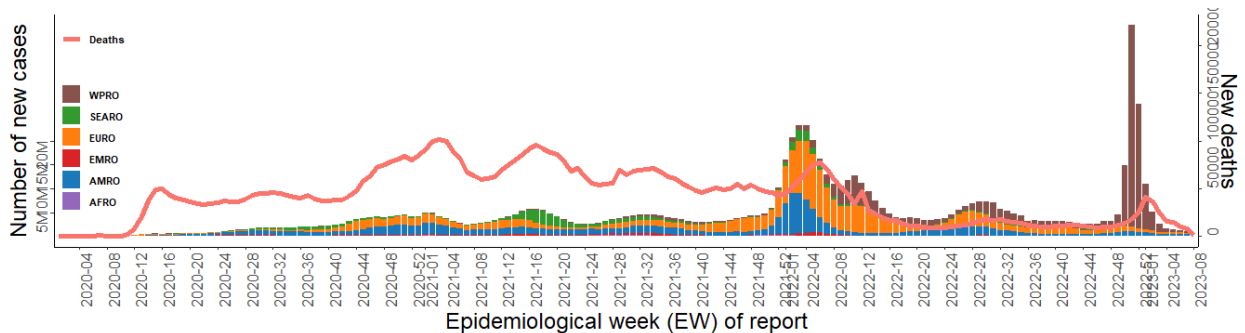
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Executive Summary

- **Since the onset of the pandemic** in 2020 and up to 28 February 2023, a cumulative total of approximately 758 million COVID-19 cases including about 6.9 million deaths were reported from all six WHO regions. During epidemiological week (EW) 8, COVID-19 cases and deaths decreased in all six WHO regions.
- **Globally**, approximately 487,864 new COVID-19 cases were reported in EW 8 (19 February 2023 – 25 February 2023) - a -55.7% decrease compared to EW 7 (12 February 2023 - 18 February 2023) (**Figure 1**). For the same period, 4,454 new COVID-19 deaths were reported globally – a -45.9% relative decrease compared the previous week.
- **In the region of the Americas**, 354,851 cases and 3,758 deaths were reported in EW 8 – a -3.6% decrease in cases and -1.5% decrease in deaths compared to the previous week.
- At the subregional level, COVID-19 cases increased in two subregions – North America (3.5%) and Central America (4.6%). Deaths increased in one subregion – South America (89.7%) while they declined in the remaining three subregions (range: -39.5 - -17.1%).
- The overall weekly case notification rate for the region of the Americas was 34.7 cases per 100,000 population during EW 8 (36 the previous week). Between EW 8 and 7, the 14-day COVID-19 death rate was 7.4 deaths per 1 million population (8.1 the previous two weeks).
- Among 18 countries/territories in the region with available data, **COVID-19 hospitalizations** increased in 2 countries and territories (range: 5.4% - 100%) during EW 8 compared to the previous week. Among 16 countries and territories with available data, **COVID-19 ICU admissions** increased in 4 countries and territories (range: 18.2% - 100%).

Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. EW 4 2020 - EW 8 2023.

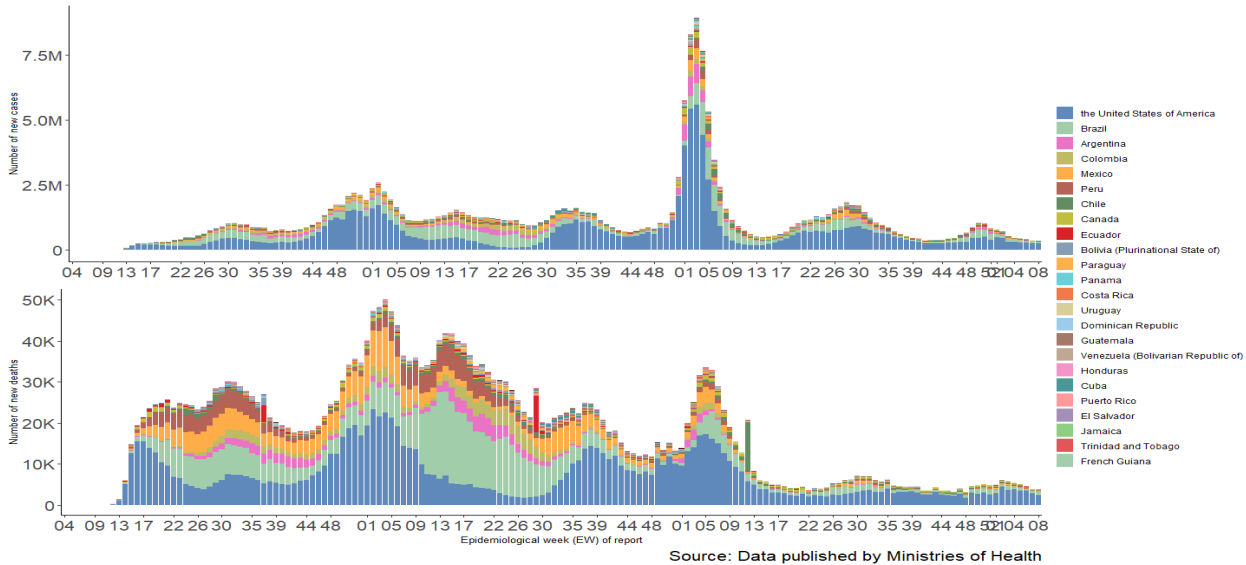


Source: Data from WHO COVID-19 Dashboard

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 - 8 2023.



During EW 8, 354,851 new **COVID-19 cases** were reported in the region of the Americas - a relative decrease of -3.6% compared to previous week (**Figure 2**). The highest number of COVID-19 cases in the last week was reported from North America (292,941 cases, 3% increase) compared to the previous week. (**Table 1**). During EW 8, the highest proportion of weekly COVID-19 cases at the national level were reported by the United States of America (267,168 new cases, 5% increase), Brazil (32,849 new cases, -42.7% decrease), Mexico (16,377 new cases, -10.2% decrease).

Table 1: Weekly change (%) in cases and deaths between EW 7 and EW 8 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 07	Deaths EW 07	Cases EW 08	Deaths EW 08	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	4,396,865	36,279	4,520	43	3,471	26	-23.2%	-39.5%
Central America	4,231,686	54,276	7,285	35	7,618	29	4.6%	-17.1%
North America	114,061,705	1,493,380	282,998	3,157	292,941	2,603	3.5%	-17.5%
South America	67,650,561	1,347,346	73,138	580	50,821	1,100	-30.5%	89.7%

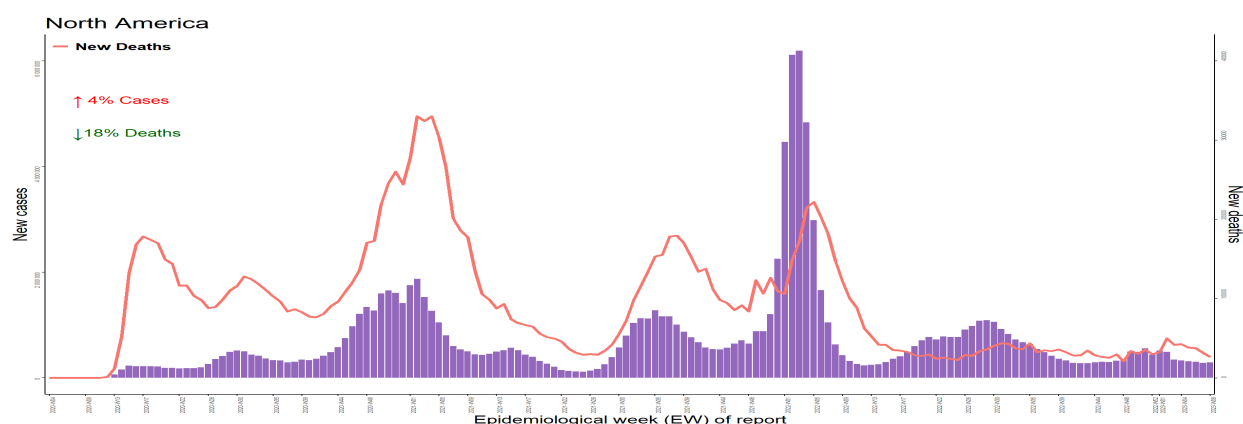
For the same period, 3,758 **COVID-19 deaths** were reported in the region of the Americas - a relative decrease of -1.5% compared to previous week (**Figure 2**). The highest number of COVID-19 deaths in the last week was reported from North America (2,603 deaths, -18% decrease) (**Table 1**). At the national level, the highest proportion of weekly COVID-19 deaths were reported by the United States of America (2,362 new deaths, -17.3% decrease), Brazil (881 new deaths, 128.8% increase), and Canada (163 new deaths, 0.6% increase).

A summary of the COVID-19 trends for EW 8 by subregion is presented below.

North America

The overall trends for **COVID-19 cases** have slightly increased in North America as of EW 8. During EW 8, two countries in the subregion reported a decline – Mexico (16,377 cases, -10.2% decrease) and Canada (9,396 cases, -9.5% decrease), while the United States of America reported a 5% increase in weekly cases (n=267,168) 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 8 2023.



For the same period, **weekly COVID-19 deaths** decreased by -17.5% in North America during EW 8 relative to the previous week. Two countries in the subregion reported a decline in weekly deaths - the largest decline in deaths being reported by Mexico (78 new deaths, -43.5% decrease), followed by the United States of America (2,362 new deaths, -17.3% decrease). Canada did not report any substantial changes in weekly deaths (163 new deaths, 0.6% increase).

During EW 8, 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 both weekly COVID-19 hospitalizations (n=27,557, -5.4% decrease) and weekly ICU admissions (n=3,453, -1.3% decrease). Similarly in Canada, its weekly hospitalizations and its weekly ICU admissions decreased during EW 8 compared to the previous week - (3,590 hospitalizations, -4.5% decrease & 194 ICU admissions, -2.5% decrease).

The Omicron lineages BA.5 and XBB are circulating in all three countries in the subregion. In the United States of America, the proportions of the BA.5 subvariant and its sub-lineages, BQ.1 and BQ.1.1, have been gradually decreasing over the past three months, while the estimated proportions of XBB sub-lineages have been rapidly increasing since mid-December 2022 – accounting for 86.2% (including 85% of XBB.1.5) of sequences for the week ending on 25 February 2023¹. The sub-lineages of BA.5 and XBB.1.5 made up about 57.3% and about 37% respectively, in EW 6 in Canada². The sub-lineages of BA.5 and XBB made up about 50% and 44% of sequences in EW 4 in Mexico, respectively.

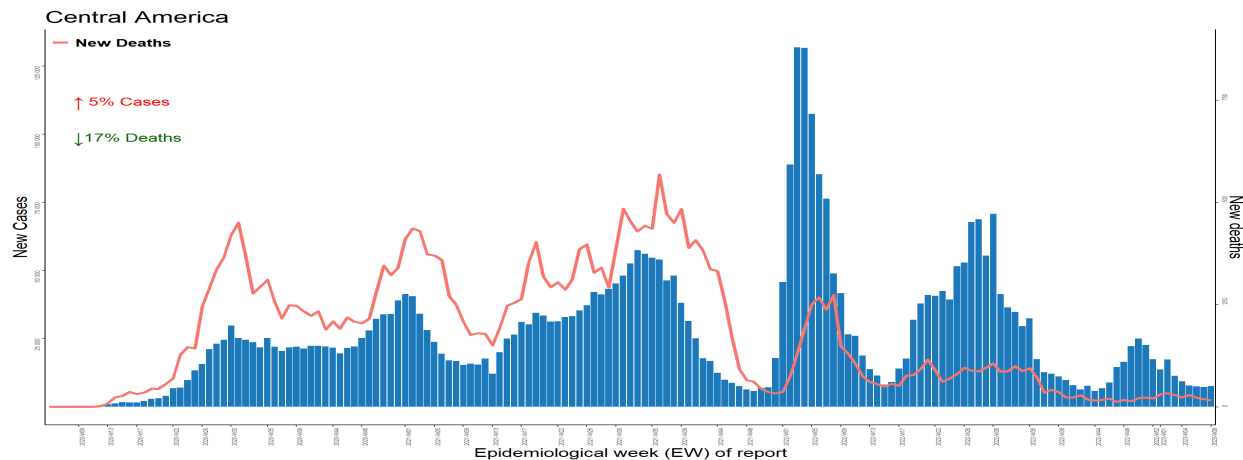
1 The United States Centers for Disease Control and Prevention (CDC). Variant Proportions. Accessed 28 February 2023. Available at: <https://bit.ly/3Obz8cT>

2 Public Health Agency of Canada (PHAC). COVID-19 Variants in Canada. Accessed 28 February 2023. Available at: <https://bit.ly/3bbFRFR>

Central America

In Central America, the overall **COVID-19 incidence** for the sub-region has slightly increased with 7,618 new cases being reported during EW 8 – a 4.6% 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 8 2023.



During EW 8, **COVID-19 weekly cases** increased in two countries – Costa Rica (5,109 new cases, 14.3% increase) and Honduras (352 new cases, 1.4% increase). The remaining countries/territories in the subregion reported a decline – the largest decline in weekly cases being observed in Nicaragua (11 new cases, -26.7% decrease), followed by Belize (19 new cases, -20.8% decrease), and Panama (259 new cases, -27.2% decrease). One country – El Salvador – did not report any cases during EW 8.

During EW 8, **weekly deaths** decreased by approximately -17.1% relative to the previous week (**Figure 4**) with one country – Honduras – reporting an increase (2 deaths, 100% increase). The remaining countries/territories either did not report any deaths (n=3) or reported a decline (n=3, range: -66.7 - -15.8% decrease).

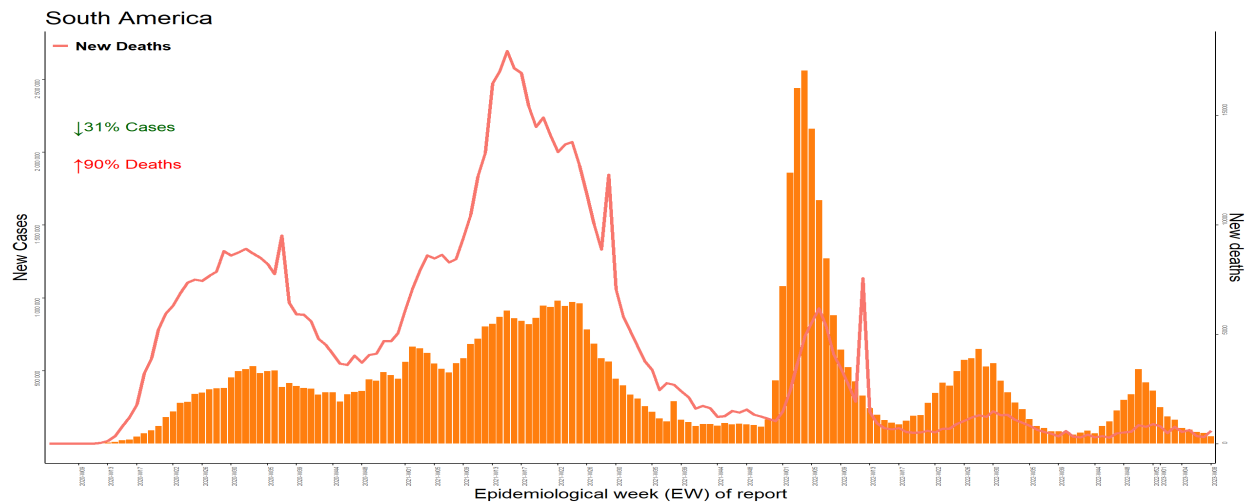
Among the three countries/territories with available data for **weekly COVID-19 hospitalizations** in the Central American subregion, Costa Rica reported a slight increase in their weekly COVID-19 hospitalizations (n=194, 5.4% increase). Among three countries and territories with available data for **weekly COVID-19 ICU admissions**, Costa Rica reported an increase in their weekly COVID-19 ICU admissions (n=13, 18.2% increase) while the remaining two reported either no change or a decline (-100% decrease).

To date, the Omicron lineages BA.5 and XBB have been reported from six and five of the seven countries and territories in the subregion, respectively – Costa Rica, Panama, Guatemala, El Salvador, and Belize. Nicaragua reported BA.5 only as of EW 8.

South America

In South America, the overall **COVID-19 incidence** for the subregion has decreased by -30.5%, with a total of 50,821 new COVID-19 cases being reported during EW 8 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 8 2023.



Out of the 10 countries and territories the sub-region, two experienced an increase in **weekly cases** during EW 8 – Chile (13,526 new cases, 30.3% increase) and Paraguay (824 new cases, 38.3% increase). The largest decline in cases was reported by Brazil (32,849 new cases, -42.7% decrease), followed by Peru (751 new cases, -31% decrease), and Argentina (817 new cases, -31% decrease).

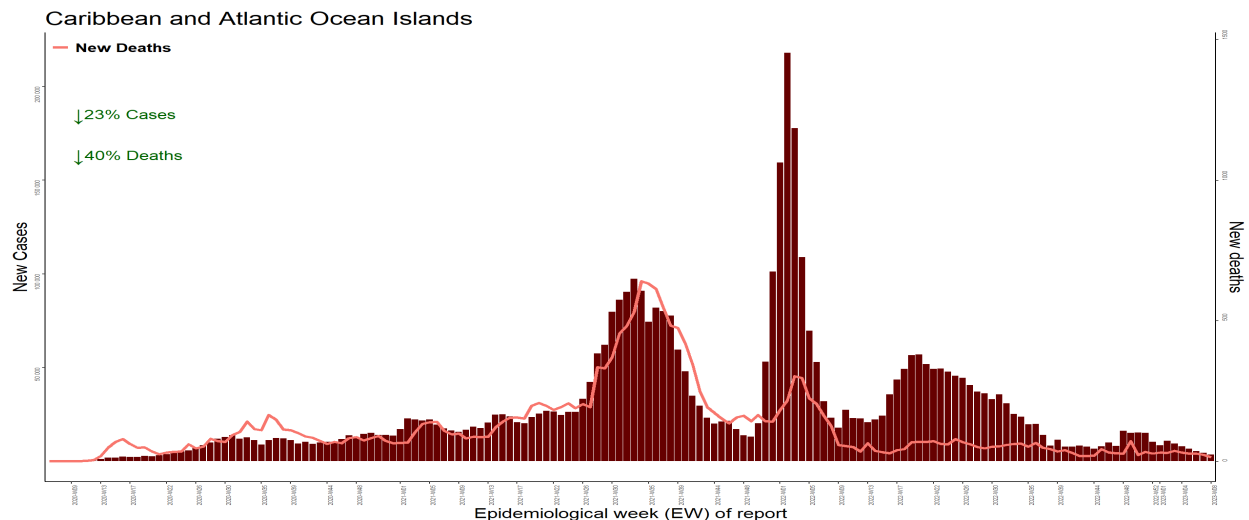
During EW 8, a total of 1,100 **COVID-19 deaths** were reported in South America – a 89.7% increase compared to the previous week, primarily due to an increase observed in Brazil. Four countries reported an increase in weekly deaths – the largest proportion of reported deaths being reported by Brazil (881 new deaths, 128.8% increase), followed by Chile (91 new deaths, 11% increase), and Peru (77 new deaths, 13.2% increase). The remaining countries/territories reported a decline (n=4, range: -100 - -5% decrease) or remained the same (n=1).

All four countries and territories in the subregion with data available for **COVID-19 weekly hospitalizations** reported a decline in their weekly COVID-19 hospitalizations (range: -17.5 - -10.8% decrease). Similarly for the same period, all five countries/territories with data available for **COVID-19 ICU admissions** reported a decline/no change in their weekly COVID-19 ICU admissions (range: -26.9 decrease – 0% change).

To date, the Omicron lineages BA.5 and XBB have been reported from ten and eight of the 10 countries and territories in the subregion, respectively – Argentina, Bolivia (Plurinational State of) (BA.5 only), Brazil, Chile, Colombia, Ecuador, Paraguay (BA.5 only), Peru, Uruguay, 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 8 2023.



In the Caribbean and Atlantic Ocean Islands sub-region, **COVID-19 weekly cases** decreased by -23.2% (3,471 new cases) compared to the previous week (**Figure 6**). At the national level, cases increased in 6 out of the 34 countries and territories in the subregion (range: 16.7% - 400%) while they declined in 15 countries and territories (range: -100% - -15.6%). The remaining countries/territories did not report new cases during EW 8. Notable increases in weekly cases were observed in Curacao (5 new cases, 400% increase), the United States Virgin Islands (51 new cases, 54.5% increase), Bermuda (8 new cases, 33.3% increase), and Cuba (35 new cases, 16.7% increase).

For the same period, **COVID-19 weekly deaths** decreased by -39.5% (26 deaths) in the Caribbean and Atlantic Ocean Islands subregion. There were no increases observed in all countries/territories in the subregion. Weekly deaths either remained the same (Bermuda, 0% change) or declined in six countries and territories of the subregion (range: -100 - -4.8%).

During EW 8, among the 10 countries and territories with available data for **weekly COVID-19 hospitalizations**, the Dominican Republic reported a 100% increase in its weekly hospitalizations (n=1) while the remaining nine countries/territories reported a decline (range: -50 - -5.3% decrease) or remained the same. Among nine countries and territories with data available for **COVID-19 ICU admissions**, three reported an increase in their weekly COVID-19 ICU admissions – the Dominican Republic (n=1, 100% increase), Trinidad and Tobago (n=6, 100% increase), and Cuba (n=1, 100% increase).

To date, the Omicron lineages BA.5 and XBB have been reported from 22 and 15 countries/territories in the subregion, respectively. 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: COVID-19 vaccination coverage rate for complete primary series vs. Number of countries and territories that report national vaccination data, per epidemiological week. Region of the Americas. As of EW 8 2023.

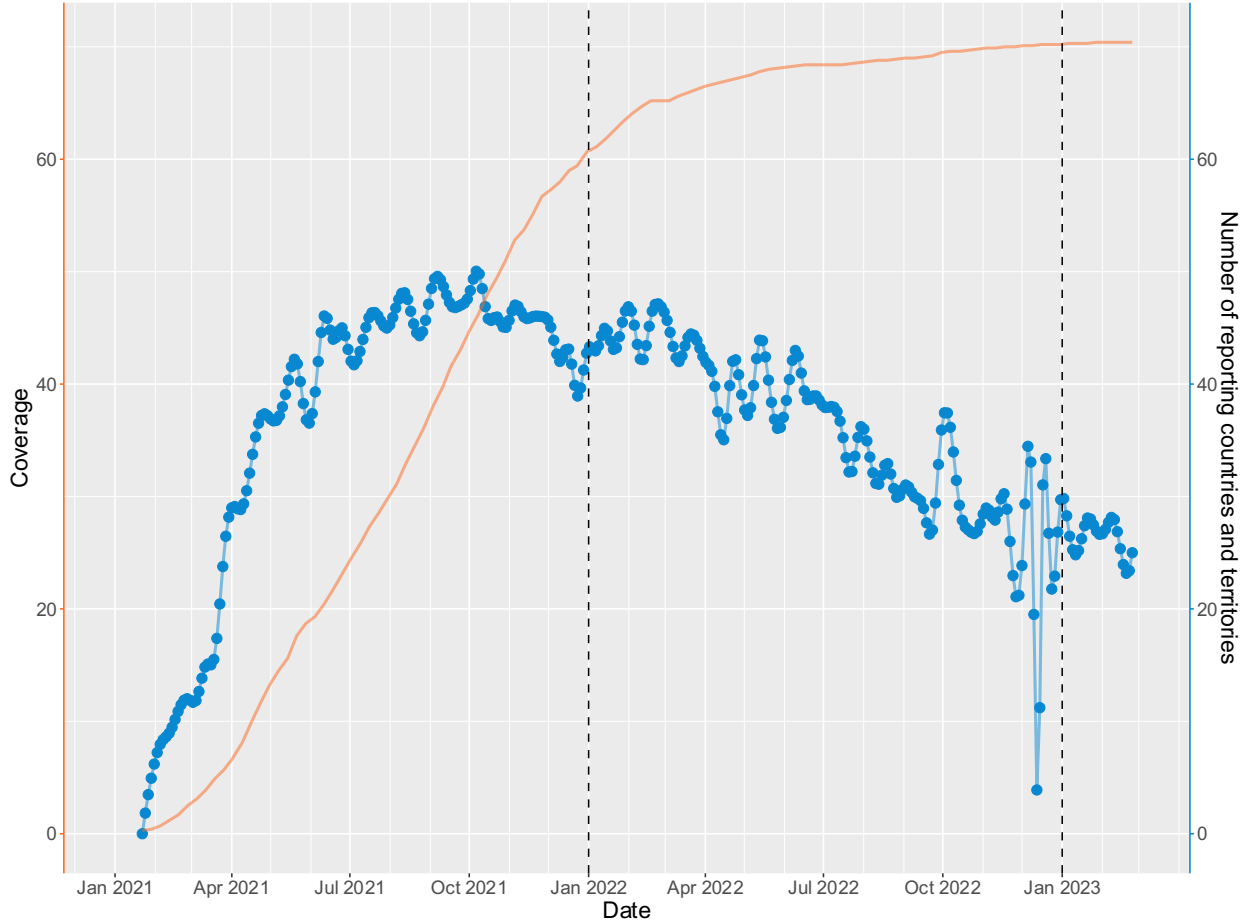


Figure 7 describes the relationship between the historical increase in COVID-19 vaccination coverage rate, by epidemiological week, and the number of countries and territories that report their national data during the same period. Although a multitude of factors influence coverage increase, such as vaccination hesitancy and vaccine availability, declines in reporting rates also negatively impact coverage estimations. Indeed, underestimation occurs when fewer countries update and report their data. During 2022, PAHO recorded a strong decrease in COVID-19 vaccine uptake, accompanied by a steady decrease in the number of countries that reported their data weekly. As fewer data points become available, the regional coverage will continue to trend towards a plateau.

Genomic surveillance

Through PAHO's Genomic Surveillance Regional Network and the work from the Member States, 546,594 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 28 February 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, very few sequences from "previously circulating" VOCs have been detected in the Region (two Delta sequences in North America).

Omicron comprises the BA.1 to BA.5 sublineages (or subvariants), which are in turn subdivided into diverse sublineages based on additional mutations that slightly change their genomic profile. Several sublineages arising from recombinations involving Omicron viruses have also been described. BA.1 to BA.5 sublineages as well as recombinant sublineages include those denominated as BC.x to EP.x. The cumulative proportion of Omicron sequences collected in the Americas from November 2021 to date are: 39.7% of BA.1 (and BA.1 sublineages), 22.9% of BA.2 (and sublineages), <0.1% of BA.3 (and sublineages), 4.1% of BA.4 (and BA.4 sublineages), 31.1% BA.5 (and BA.5 sublineages), and 2.2% recombinant sublineages. Although BA.1 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), a recombinant between two BA.2 sublineages.

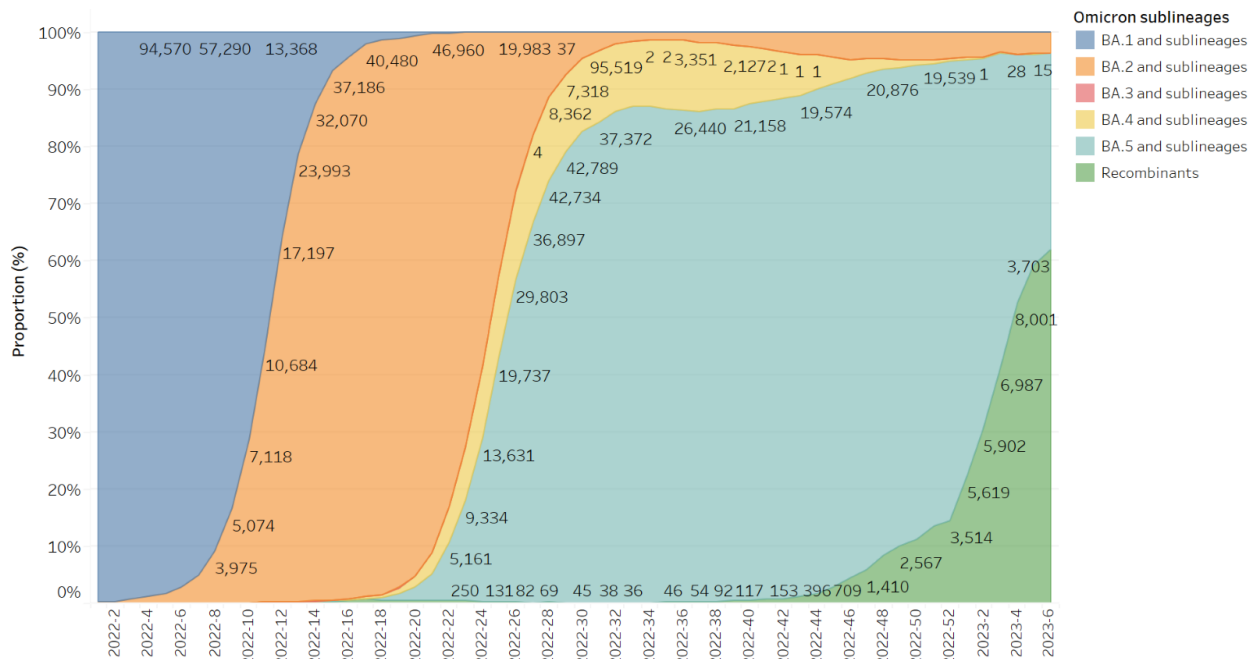
Most viruses currently circulating in the Americas correspond to BA.5 and XBB sublineages, and to a lesser extent BA.2.75 sublineages (in particular CH.1.1 and BN.1.2). In the past eight weeks, BA.5 and its sublineages, in particular BQ.1, represented 56.1%, 43.3%, 35.4%, and 62.4% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively. During the same period, recombinant lineages represented 38.9%, 45.5%, 62.9% and 33.3% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively. In particular, the XBB recombinant has been detected in 31 countries and territories (across all subregions). Countries reporting the highest prevalence of XBB sequences in the past eight weeks are Guatemala (84.7%), Peru (82.6%), and Dominican Republic (80.7%). 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 projections estimate it accounts for 85.0% (95% CI: 79.8-89.1%) of the US sequences in EW8 2023¹. Overall, XBB.1.5 has been detected in 26 countries and territories of the Americas.

¹ US CDC. COVID Data Tracker - Variant Proportions. Available at: <https://covid.cdc.gov/covid-data-tracker/#variant-proportions>

The WHO risk assessment for XBB.1.5 has been updated on 24 February² with no major changes in the assessment. Available evidence shows increased growth advantage and immune escape but no increased severity. The overall assessment continues to be that available information does not suggest that XBB.1.5 has additional public health risks relative to the other currently circulating Omicron descendent lineages. Therefore, PAHO/WHO recommends the same precautions for XBB.1.5 as for other Omicron variants, including primary vaccination and boosters.

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.**

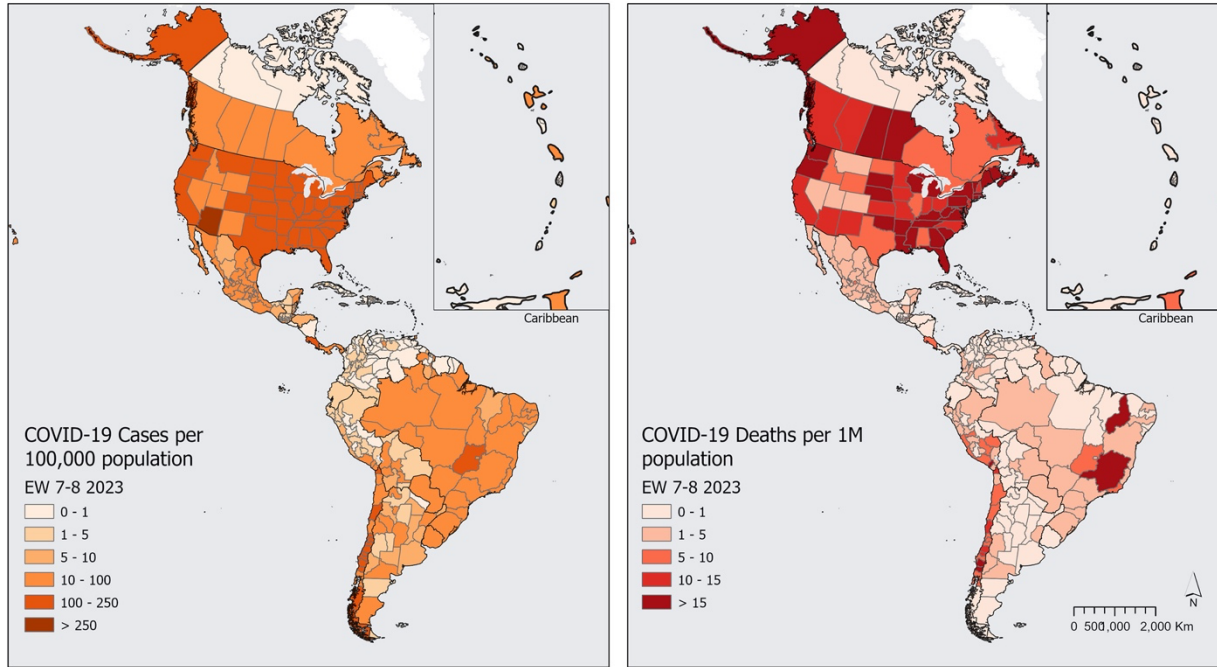
Figure 8. Proportions of VOC Omicron sublineages identified by the countries in the Region of the Americas (January 2022 - February 2023)



Source: GISAID

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

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 7 and 8 in 2023.



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The maps (**Annex 1**) represent the COVID-19 incidence rates per 100,000 population and the mortality rates from COVID-19 per 1 million population in the Region of the Americas reported in EW 7 and 8 in 2023.

The highest case incidence was observed in the USA, while the highest mortality was seen in the USA, Canada, Peru, Chile, Brazil, Puerto Rico, and the US Virgin Islands.

In North America, the highest incidence rates with over 250 cases per 100,000 pop was observed in the state of Arizona in the US. While the highest mortality rates with over 15 deaths per 1 million populations were observed in most states of the US, and some parts of Canada (Saskatchewan, Manitoba).

In Central America, the highest incidence and mortality rates was reported in Costa Rica. Meanwhile, in South America, in most regions of Chile, and the state of Goiás in Brazil reported the highest incidence rates in the subregion. At the same time, some regions of Chile (Ríos, and Araucanía), Moquegua in Peru, and some states of Brazil (Minas Gerais, Piauí) showed the highest mortality rates in the subregion.

In the Caribbean territories, Puerto Rico reported the highest incidence rates, while Puerto Rico and the US Virgin Islands reported the highest mortality rates in the subregion.

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