

Weekly COVID-19 Epidemiological Update - Region of the Americas

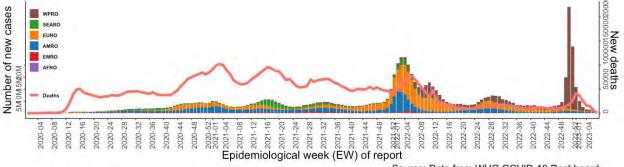
Issue 54, published 14 February 2023 Contents:

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Executive Summary

- **Since the onset of the pandemic** in 2020 and up to 14 February 2023, a cumulative total of approximately 756 million COVID-19 cases including about 6.8 million deaths were reported from all six WHO regions. During epidemiological week (EW) 6, cases decreased in five regions while they increased in SEARO (9.5%), and deaths decreased in all six WHO regions (range: -88.2 -5.7%).
- **Globally,** approximately 1,208,557 new COVID-19 cases were reported in EW 6 (05 February 2023 11 February 2023) a -13.4% decrease compared to EW 5 (29 January 2023 04 February 2023) (**Figure 1**). For the same period, 9,519 new COVID-19 deaths were reported globally a -33.6% relative decrease compared the previous week.
- In the region of the Americas, 389,391 cases and 4,468 deaths were reported in EW 6 a -8.3% decrease in cases and -12.2% decrease in deaths compared to the previous week.
- At the subregional level, COVID-19 cases and deaths decreased in all four subregions.
- The overall weekly case notification rate for the region of the Americas was 38.1 cases per 100,000 population during EW 6 (41.5 the previous week). Between EW 6 and 5, the 14-day COVID-19 death rate was 9.3 deaths per 1 million population (10.1 the previous two weeks).
- Among 20 countries/territories in the region with available data, COVID-19 hospitalizations increased in 5 countries and territories (range: 0.8% 100%) during EW 6 compared to the previous week. Among 17 countries and territories with available data, COVID-19 ICU admissions increased in 4 countries and territories (range: 2.5% 100%).

Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. EW 4 2020 - EW 6 2023.



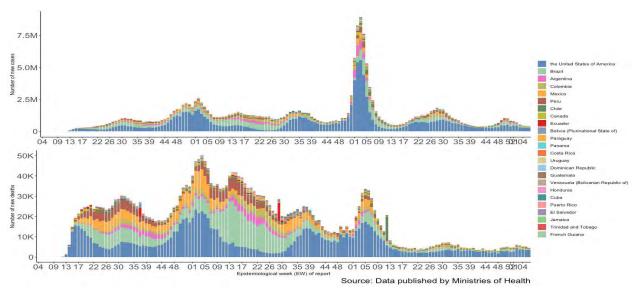
Source: Data from WHO COVID-19 Dashboard





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 3 2020 – EW 6 2023.



During EW 6, 389,391 new **COVID-19 cases** were reported in the region of the Americas - a relative decrease of -8.3% compared to previous week **(Figure 2)**. The highest number of COVID-19 cases in the last week was reported from North America (295,981 cases, -5% decrease) compared to the previous week. **(Table 1)**. During EW 6, the highest proportion of weekly COVID-19 cases at the national level were reported by the United States of America (278,154 new cases, -2.1% decrease), Brazil (63,681 new cases, -15.5% decrease), Chile (10,648 new cases, -7.6% decrease).

Table 1: Weekly change (%) in cases and deaths between EW 5 and EW 6 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 05	Deaths EW 05	Cases EW 06	Deaths EW 06	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	4,388,861	36,210	6,680	51	5,182	51	-22.4%	0.0%
Central America	4,216,530	54,214	7,815	54	7,326	40	-6.3%	-25.9%
North America	113,468,069	1,487,379	313,211	3,818	295,981	3,716	-5.5%	-2.7%
South America	67,523,993	1,345,654	96,760	1,167	80,902	661	-16.4%	-43.4%

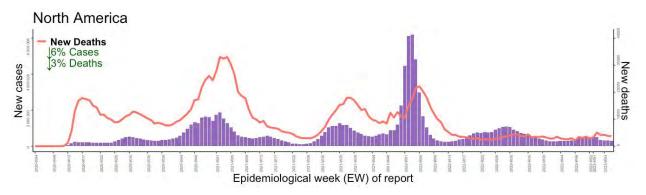
For the same period, 4,468 **COVID-19 deaths** were reported in the region of the Americas - a relative decrease of -12.2% compared to previous week **(Figure 2)**. The highest number of COVID-19 deaths in the last week was reported from North America (3,716 deaths, -3% decrease) **(Table 1)**. At the national level, the highest proportion of weekly COVID-19 deaths were reported by the United States of America (3,475 new deaths, 0.4% increase), Brazil (317 new deaths, -47.4% decrease), and Canada (188 new deaths, -7.8% decrease).

A summary of the COVID-19 trends for EW 6 by subregion is presented below.

North America

The overall trends for COVID-19 cases have been decreasing in North America as of EW 6. During EW 6, the largest decline in cases were reported by Mexico (7,729 cases, -58.9% decrease), followed by Canada (10,098 cases, -2.5% decrease), and the United States of America (278,154 cases, -2.1% decrease).

Figure 3: COVID-19 cases and deaths by epidemiological week (EW). **North America.** Region of the Americas. EW 3 2020 - EW 6 2023.



For the same period, **weekly COVID-19 deaths** decreased by -2.7% in North America during EW 6 relative to the previous week. The largest decline in deaths were reported by Mexico (53 new deaths, -65.1% decrease), followed by Canada (188 new deaths, -7.8% decrease), and the United States of America (3,475 new deaths, 0.4% increase).

During EW 6, 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=29,040, -5.4% decrease) and ICU admissions (n=3,611, -7.7% decrease) for the fifth consecutive week. In Canada, weekly hospitalizations decreased while weekly ICU admissions increased during EW 6 compared to the previous week (3,966 hospitalizations, -5.2% decrease & 203 ICU admissions, 2.5% increase).

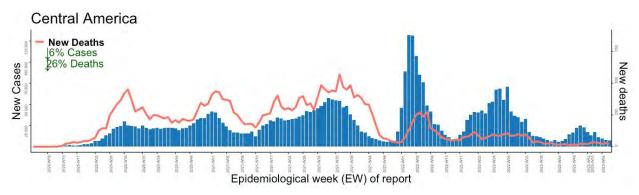
The Omicron lineages BA.5 and XBB are circulating in all three countries in the subregion. In the United States of America, the proportions of the BA.5 subvariant have been gradually decreasing over the past three months and its sub-lineages, BQ.1 and BQ.1.1, have been decreasing in the last month, while the estimated proportions of XBB sub-lineages have been rapidly increasing since mid-December – accounting for 76.6% (including 74.7% of XBB.1.5) of sequences for the week ending on 11 February 2023¹. The sub-lineages of BA.5 and XBB.1.5 made up about 81.7% (including 5.1% of BQ.1 and 32.7% of BQ.1.1) and about 19.9% in EW 4, respectively in Canada². The sub-lineages of BA.5 and XBB made up about 62.3% and 34% of sequences in EW 3 in Mexico, respectively.

¹ The United States Centers for Disease Control and Prevention (CDC). Variant Proportions. Accessed 14 February 2023. Available at: https://bit.ly/30bz8cT

² Public Health Agency of Canada (PHAC). COVID-19 Variants in Canada. Accessed 14 February 2023. Available at: https://bit.ly/3bbFRFr

Central America

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



In Central America, the overall **COVID-19 incidence** for the sub-region is on a downward trend with 7,326 new cases being reported during EW 6 - a -6.3% decrease compared to the previous week **(Figure 4)**.

During EW 5, **COVID-19 weekly cases** decreased in all countries and territories (range: -26 -11.7%) except for Costa Rica, reporting no substantial changes in cases (4,207 new cases, 0.1% increase). The countries with the largest decline in **weekly cases** included Honduras (284 new cases, -26% decrease), Belize (37 new cases, -26% decrease), and Panama (444 new cases, -13.5% decrease).

During EW 6, **weekly deaths** decreased by approximately -25.9% relative to the previous week **(Figure 4)**, with one country out of the seven countries and territories reporting an increase – Honduras (3 deaths, 100% increase). The remaining countries did not report any deaths (n=3) or reported a decline in deaths (n=3, range: -66.7 - -21.4% decrease).

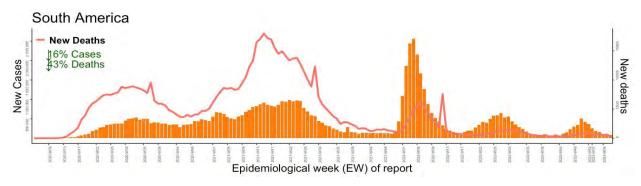
Among four countries with available data for **weekly COVID-19 hospitalizations** in the Central American subregion, Panama and Costa Rica reported an increase in their weekly COVID-19 hospitalizations (range: 3.7 - 3.8%). Among three countries with available data for **weekly COVID-19 ICU admissions**, Panama reported an increase in the weekly COVID-19 ICU admissions (2 ICU admissions, 100% increase).

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

South America

In South America, the overall **COVID-19 incidence** for the subregion has decreased by -16.4%, with a total of 80,902 new COVID-19 cases being reported during EW 6 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 6 2023.



During EW 5, all countries in the subregion reported a decline in **COVID-19 weekly cases** with the largest decrease reported by Paraguay (68 new cases, -74.7% decrease), followed by Venezuela (Bolivarian Republic of) (79 new cases, -58% decrease), and Argentina (1,807 new cases, -43.4% decrease).

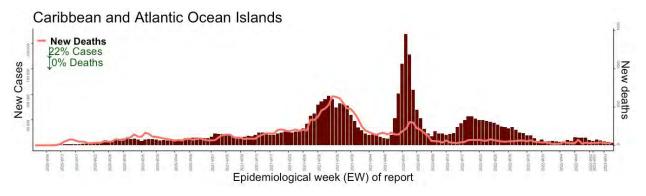
During EW 6, a total of 661 **COVID-19 deaths** were reported in South America – a -43.4% decrease compared to the previous week. Paraguay, Venezuela, and Ecuador reported an increase in deaths compared to the previous week (range: 2-13 deaths, 30-100% increase). The largest proportion of deaths during EW 6 were reported by Brazil (317 new deaths, -47.4% decrease), Peru (165 new deaths, -53.7% decrease), and Chile (110, -1% decrease).

Among the four countries in the subregion with data available for **COVID-19 weekly hospitalizations**, Peru reported a 0.8% increase in their weekly COVID-19 hospitalizations (n=124), while the remaining three reported a decline (range: -5.9 - -4.9% decrease). For the same period, **COVID-19 ICU admissions** decreased for all five countries with available data (range: -53.8 - -2.7% decrease) compared to the previous week.

To date, the Omicron lineages BA.5 and XBB have been reported from ten and eight out of the 10 countries 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 6 2023.



In the Caribbean and Atlantic Ocean Islands sub-region, **COVID-19 weekly cases** decreased by -22.4% (5,182 new cases) compared to the previous week **(Figure 6)**. At the national level, cases increased in four out of the 34 countries and territories in the subregion (range: 24.3% - 180%). Twenty countries/territories in the subregion reported no new cases during EW 6. Notable increases in weekly cases in the subregion during EW 6 were observed in Bermuda (14 cases, 180% increase), followed by Jamaica (276 cases, 24.3% increase).

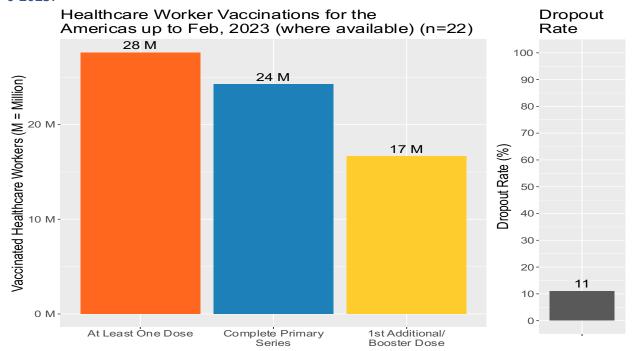
For the same period, **COVID-19 weekly deaths** remained stable (51 deaths, 0% change) in the subregion. Four countries and territories observed a relative increase in their weekly deaths in EW 6 compared to the previous week (range: 27 - 100% increase). Weekly deaths either remained the same, declined, or no cases were reported in the remaining countries and territories of the subregion (range: -100 - -28.6% decrease).

During EW 6, among the 10 countries and territories with available data for **weekly COVID-19 hospitalizations**, two countries and territories reported an increase in their weekly COVID-19 hospitalizations – the Dominican Republic (n=1, 100% increase) and Trinidad and Tobago (n=49, 8.9% increase). Among the 7 countries and territories with data available for **COVID-19 ICU admissions**, Guadeloupe and Puerto Rico reported an increase in their weekly COVID-19 ICU admissions (range: 64.3 - 100%).

To date, the Omicron lineages BA.5 and XBB have been reported from 21 and 14 countries and 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: Healthcare worker COVID-19 vaccinations. Region of the Americas (n=22). As of EW 6 2023.



COVID-19 vaccinations for healthcare workers (HCW) are shown in **Figure 7**. It is important to note that this comprises data for 22 countries and territories that have reported HCW vaccination information. This represents only 43% of the countries and territories in the Region. Additionally, the number of vaccinated HCW is shown, instead of a coverage percentage, as the denominator for this population group is not sufficiently reliable. On the other hand, it is important to mention that the definition of healthcare worker may vary from one country to another, as well as the groups prioritized for vaccination in this specific population*.

Genomic surveillance

Through PAHO's Genomic Surveillance Regional Network and the work from the Member States, 533,972 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 13 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 (a single Delta sequence was detected in North America during that period).

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. These sublineages of BA.1 to BA.5 include those denominated as BC.x to EF.x. Several sublineages arising from recombinations involving Omicron viruses have also been described. The cumulative proportion of Omicron sequences collected in the Americas from November 2021 to date are: 39.9% of BA.1 (and BA.1 sublineages), 23.0% of BA.2 (and sublineages), <0.1% of BA.3 (and sublineages), 4.1% of BA.4 (and BA.4 sublineages), 31.3% BA.5 (and BA.5 sublineages), and 1.8% 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 increased again, 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 69.7%, 56.8%, 29.8%, and 64.8% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively. During the same period, recombinant lineages represented 24.8%, 31.8%, 68.3% and 30.6% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively. In particular, the XBB recombinant has been detected in 28 countries

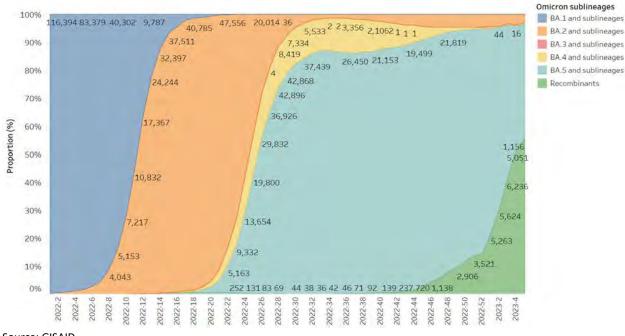
^{*} Pan American Health Organization. (2022, November). Análisis de la Vacunación contra la covid-19 en la Región de las Américas. desglose por sexo y edad y en subpoblaciones seleccionadas. IRIS PAHO Home. Retrieved February 14, 2023, from https://iris.paho.org/handle/10665.2/56734

and territories (across all subregions). Countries reporting the highest prevalence of XBB sequences in the past eight weeks are Guatemala (88.4%), Peru (77.2%), and Dominican Republic (67.7%). Among XBB sublineages, XBB.1.5 is 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 74.7% (95% CI: 67.0-81.2%) of the US sequences in EW6 2023¹. In addition to the USA, XBB.1.5 has also been detected in 23 countries and territories of the Americas.

An update rapid risk assessment for XBB.1.5 was published by WHO on 25 January². There is moderate-strength evidence for increased risk of transmission and immune escape but no early signals of increases in severity have been observed. Overall, 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)

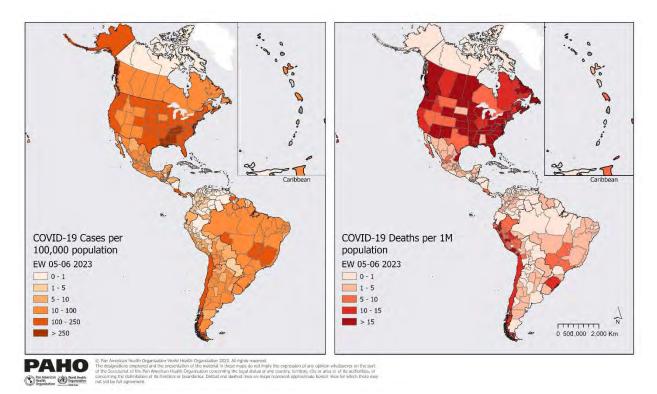


Source: GISAID

¹ US CDC. COVID Data Tracker - Variant Proportions. Available at: https://covid.cdc.gov/covid-data-tracker/#variant-proportions 2 WHO. XBB.1.5 Updated Rapid Risk Assessment, 25 January 2023. Available at: https://www.who.int/docs/default-source/coronaviruse/25012023xbb.1.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 5 and 6 in 2023



These maps (**Annex 1**) depict the COVID-19 case incidence and mortality rates in the Americas in during EW 5 and 6 in 2023.

The highest case incidence was observed in the USA, Brazil, and some parts of Chile, while the highest mortality was seen in the USA, Canada, Chile, some parts of Brazil and Mexico.

In North America, the highest incidence rates with over 250 cases per 100,000 pop were observed in some southeastern parts (Louisiana, Mississippi, Alabama, Tennessee, Kentucky) and New Jersey in the US. Most provinces/states of Canada and Mexico observed moderate incidence rates (5-10 cases per 100,000 pop). The highest mortality rates in the subregion were observed in most territories of the US and Canada.

In Central America, the largest number of reported cases was observed in Costa Rica, while in South America, some parts of Brazil and Chile reported moderately high incidence rates with over 100 cases per 100,000 populations. The highest mortality rates in South America were observed in Chile, Peru (Lambayeque, Amazonas, Ancash, Arequipa, Tacna) and some parts of Brazil (Rio Grande do Sul).

In the Caribbean islands, United States Virgin Islands and Puerto Rico reported the highest incidence rates in the past two weeks, while the highest mortality rates were reported from some parts of Puerto Rico, followed by Martinique and Trinidad and Tobago reporting moderate mortality rates.

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.



