

Weekly COVID-19 Epidemiological Update - Region of the Americas

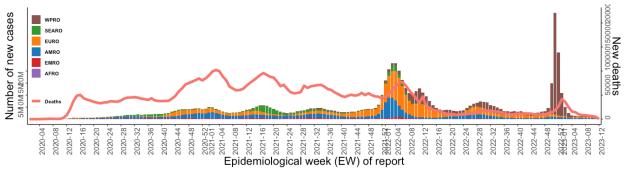
Issue 60 published 28 March 2023 **Contents:**

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Executive Summary

- Since the onset of the pandemic in 2020 and up to 28 March 2023, a cumulative total of approximately 761 million COVID-19 cases including about 6.9 million deaths were reported from all six WHO regions. During epidemiological week (EW) 12, cases and deaths decreased in all WHO regions except for the region of the Americas (cases; 5.1% & deaths; 11.3%).
- In the region of the Americas, 267,202 cases and 2,790 deaths were reported in EW 12 a 5.1% increase in cases and 11.3% increase in deaths compared to the previous week.
- At the subregional level, COVID-19 cases increased in one subregion North America (13%). Deaths increased in two subregions - North America (15.6%) and Caribbean and Atlantic Ocean Islands (11.1%).
- The overall weekly case notification rate for the region of the Americas was 26.1 cases per 100,000 population during EW 12 (24.8 the previous week). Between EW 12 and 11, the 14day COVID-19 death rate was 5.2 deaths per 1 million population (4.8 the previous two weeks).
- Among 19 countries/territories in the region with available data, COVID-19 hospitalizations increased in 5 countries and territories (range: 29% - 100%) during EW 12 compared to the previous week. Among 15 countries and territories with available data, COVID-19 ICU **admissions** increased in 2 countries and territories (range: 20% - 100%).

Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. EW 4 2020 - EW 12 2023.



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.

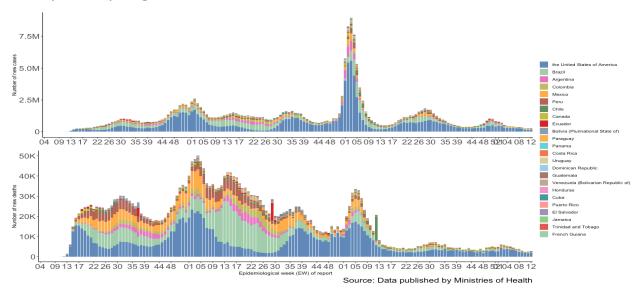
Source: Data from WHO COVID-19 Dashboard

Pan American Health Organization / World Health Organization. Washington, D.C.: PAHO/WHO; 2023 Pan American Health www.paho.org | © PAHO/WHO, 2023 **Organization** More information available at: https://paho-covid19-response-who.hub.arcgis.com/ & https://shiny.pahobra.org/wdc/



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 - 12 2023.



During EW 12, 267,202 new **COVID-19 cases** were reported in the region of the Americas - a relative increase of 5.1% compared to previous week **(Figure 2)**. The highest number of COVID-19 cases in the last week was reported from North America (172,680 cases, 13% increase) compared to the previous week. **(Table 1)**. During EW 12, the highest proportion of weekly COVID-19 cases at the national level were reported by the United States of America (152,968 new cases, 20.8% increase), Brazil (59,163 new cases, -1.4% decrease), Chile (22,644 new cases, -18.1% decrease).

Table 1: Weekly change (%) in cases and deaths between EW 11 and EW 12 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 11	Deaths EW 11	Cases EW 12	Deaths EW 12	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	4,410,352	36,411	3,139	27	2,843	30	-9.4%	11.1%
Central America	4,259,753	54,379	6,963	27	5,571	19	-20.0%	-29.6%
North America	114,850,357	1,502,427	152,858	1,958	172,680	2,264	13.0%	15.6%
South America	67,935,624	1,349,008	91,347	495	86,108	477	-5.7%	-3.6%

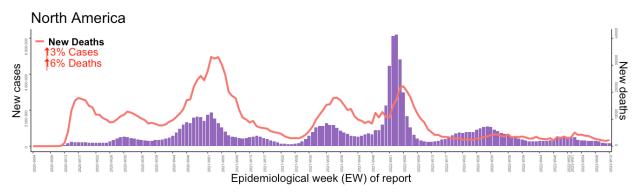
For the same period, 2,790 **COVID-19 deaths** were reported in the region of the Americas - a relative increase of 11.3% compared to previous week **(Figure 2)**. The highest number of COVID-19 deaths in the last week was reported from North America (2,264 deaths, 16% increase) **(Table 1)**. At the national level, the highest proportion of weekly COVID-19 deaths were reported by the United States of America (2,084 new deaths, 19.7% increase), Brazil (283 new deaths, -12.7% decrease), and Canada (117 new deaths, -24% decrease).

A summary of the COVID-19 trends for EW 12 by subregion is presented below.

North America

The overall trends for **COVID-19 cases** have increased in North America, primarily due to an increase observed in the United States of America (152,968 cases, 20.8% increase). The remaining two countries in the subregion reported a decline in cases – Mexico (11,967 cases, -32.5% decrease), and Canada (7,745 cases, -9.2% decrease).

Figure 3: COVID-19 cases and deaths by epidemiological week (EW). **North America.** Region of the Americas. EW 3 2020 - EW 12 2023.

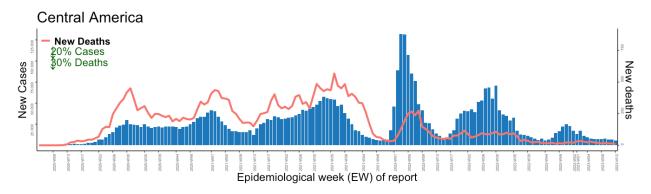


For the same period, **weekly COVID-19 deaths** increased by 15.6% in North America during EW 12 relative to the previous week. While the United States of America reported a 19.7% increase in weekly deaths (n=2,084), Canada reported a decline (117 new deaths, -24% decrease), and Mexico reported no changes in deaths (63 new deaths, 0% change).

During EW 12, both two countries in North America with available data for **COVID-19 weekly hospitalizations and ICU admissions**, continued to report a decline compared to the previous week. The United States of America reported a decrease in both weekly COVID-19 hospitalizations (n=20,469, -7.3%) and in weekly ICU admissions (n=2,130, -24.5%). Similarly in Canada, weekly hospitalizations and weekly ICU admissions decreased during EW 12 compared to the previous week - (2,611 hospitalizations, -24.9% & 145 ICU admissions, -16.2%).

Central America

Figure 4: COVID-19 cases and deaths by epidemiological week (EW). **Central America. Region of the Americas.** EW 6 2020 - EW 12 2023.



In Central America, the overall **COVID-19 incidence** for the sub-region has decreased with 5,571 new cases being reported during EW 12 - a 20.0% decrease compared to the previous week **(Figure 4)**. Please note that data for Panama was not publicly available for EW 12, resulting in a data artifact in percent changes in the subregion.

The countries with the largest decline in cases this week included Nicaragua (3 new cases, -80% decrease) and Costa Rica (3,587 new cases, -18.9% decrease).

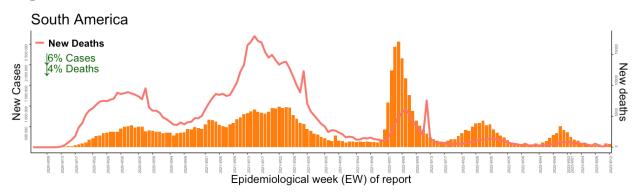
During EW 12, **weekly deaths** decreased by approximately -29.6% relative to the previous week **(Figure 4)**. All countries and territories in the subregion reported either no changes or a decrease in deaths (n=2, range: -100 - -28% decrease).

All four countries/territories with available data for **weekly COVID-19 hospitalizations** in the Central American subregion reported a decrease. 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%).

South America

In South America, the overall **COVID-19 incidence** for the subregion has decreased by -5.7%, with a total of 86,108 new COVID-19 cases being reported during EW 12 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 12 2023.



Out of the 10 countries and territories the sub-region, four experienced an increase in cases during EW 12 (range: 0.8 – 49.8% increase). The largest decline in cases in the subregion was reported by Venezuela (Bolivarian Republic of) (47 new cases, -46.6% decrease), followed by Bolivia (Plurinational State of) (457 new cases, -32.5% decrease), and Chile (22,644 new cases, -18.1% decrease).

During EW 12, a total of 477 **COVID-19 deaths** were reported in South America – a -3.6% decrease compared to the previous week. The largest decline in deaths were reported by Brazil (283 new deaths, -12.7% decrease), and followed by Peru (72 new deaths, -4% decrease).

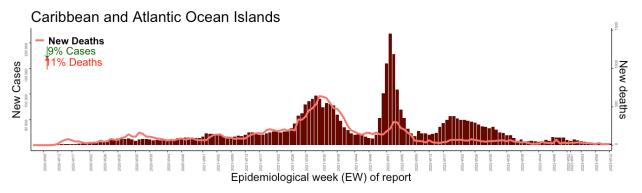
Among the four countries and territories in the subregion with data available for **COVID-19 weekly hospitalizations**, one country – Colombia – reported an increase in their weekly COVID-19 hospitalizations (n=496, 32.3% increase). For the same period, one country – Uruguay – out

of five with data available for **COVID-19 ICU admissions** reported an increase in their weekly COVID-19 ICU admissions (n=6, 20% increase).

Caribbean and Atlantic Ocean Islands

In the Caribbean and Atlantic Ocean Islands sub-region, **COVID-19 weekly cases** decreased by -9.4% (2,843 cases) compared to the previous week **(Figure 6)**. At the national level, cases increased in five out of the 34 countries and territories in the subregion (range: 21.8% - 200%).

Figure 6: COVID-19 cases and deaths by epidemiological week (EW). **Caribbean and Atlantic Ocean Islands.** Region of the Americas. EW 6 2020 - EW 12 2023.



For the same period, **COVID-19 weekly deaths** increased by 11.1% (30 deaths) in the Caribbean and Atlantic Ocean Islands subregion. Bermuda, Trinidad and Tobago, and Puerto Rico 3 observed a relative increase in their weekly deaths (range: 16.7 - 100% increase) in EW 12 compared to the previous week.

During EW 12, among the nine countries and territories with available data for **weekly COVID-19 hospitalizations**, four countries and territories reported an increase in their weekly COVID-19 hospitalizations (range: 29 - 100%). Among five countries and territories with data available for **COVID-19 ICU admissions**, four reported a decrease in their weekly COVID-19 ICU admissions (range: -100 - -33.3% decrease).

Immunization

Figure 7: COVID-19 complete primary series coverage by Income Group for the Region of the Americas. As of EW 12 2023.

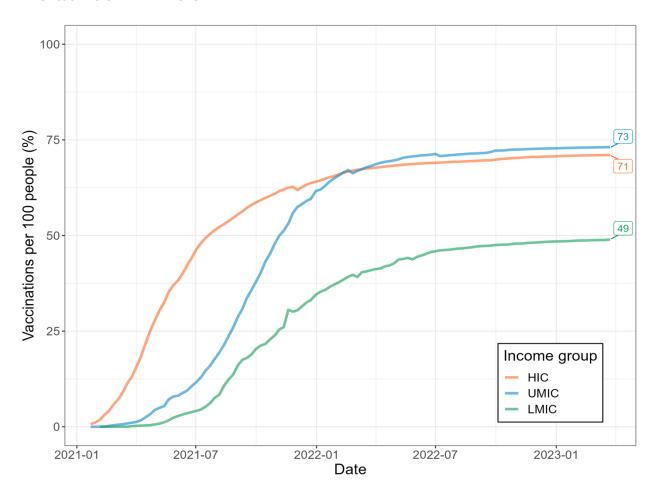


Figure 7 shows complete primary series vaccination coverage* by income group** for the Region of the Americas. Although coverage for the LMIC group is significantly below the HIC and UMIC groups, the overall uptake trend can be seen to have reached a similar plateau for all. Among these groups, the LMIC group grew the most during 2022, with a 13% uptake with a 13% uptake during the year, whereas the UMIC and HIC groups had an 11% and 6% uptake in 2022, respectively.

- * 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.
- ** As per the World Bank 2021-2022 Income Group Classification. Note that HIC, UMIC and LMIC refer to the High Income, Upper Middle Income and Lower Middle Income groups, respectively. The countries in each group are outlined below:
 - High Income: Aruba, Antigua and Barbuda, Bermuda, Bahamas, Barbados, Canada, Chile, Curacao, Cayman Islands, Saint Kitts and Nevis, Puerto Rico, Sint Maarten, Turks and Caicos, Trinidad and Tobago, Uruguay, United States of America, British Virgin Islands

- Upper Middle Income: Argentina, Brazil, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, Grenada, Guatemala, Guyana, Jamaica, Saint Lucia, Mexico, Panama, Peru, Paraguay, Suriname, Saint Vincent and the Grenadines
- Lower Middle Income: Belize, Bolivia, Haiti, Honduras, Nicaragua, El Salvador

Genomic surveillance

Through PAHO's Genomic Surveillance Regional Network and the work of Member States, 555,134 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 March 2023.

The vast majority of SARS-CoV-2 viruses circulating globally are 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. Several sublineages arising from recombinations involving Omicron viruses have also been described. Since 15 March 2023, the WHO variant tracking system considers the classification of Omicron sublineages independently as variants under monitoring (VUMs), variants of interest (VOIs), or variants of concern (VOCs)¹. With these changes, the recombinant sublineage XBB.1.5 is now classified as a currently circulating VOI. Additionally, BQ.1 (a BA.5 sublineage), BA.2.75 and CH.1.1 (two BA.2 sublineages), and XBB, XBB.1.16 and XBF recombinants are classified as currently circulating VUMs. Finally, no lineage is classified as currently circulating VOC².

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 BA.5 sublineages, with some circulation of BA.2 sublineages (Figure X1). In fact, in the past eight weeks, recombinant lineages represented 63.3%, 68.8%, 80.1%, and 53.4% of the characterized samples in North America, the Caribbean, Central America, respectively. During the same period, BA.5 sublineages represented 32.9%, 24.9%, 18.4% and 43.9% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively.

Within these main sublineages, most viruses currently circulating in the Americas correspond to VOI XBB.1.5 (recombinant) and VUMs BQ.1 (BA.5 sublineage). In particular, XBB.1.5, first identified in the USA at the end of October 2022, has been detected in 28 countries and territories of the Americas. In the past eight weeks, XBB.1.5 (and sublineages) represented 59.2%, 65.7%, 63.5%, and 37.7% of the characterized samples in North America, the Caribbean, Central

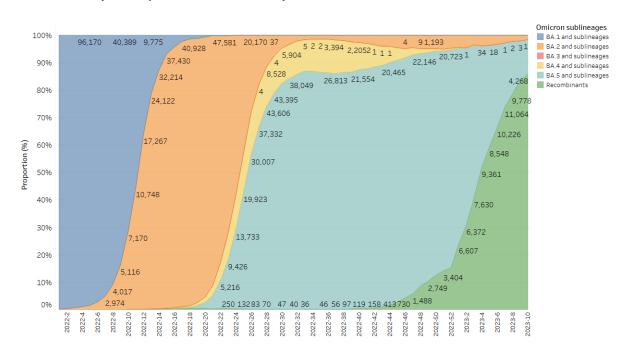
¹ WHO. Statement on the update of WHO's working definitions and tracking system for SARS-CoV-2 variants of concern and variants of interest. 16 March 2023. Available at: https://www.who.int/news/item/16-03-2023-statement-on-the-update-of-who-s-working-definitions-and-tracking-system-for-sars-cov-2-variants-of-concern-and-variants-of-interest

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

America, and South America, respectively. Moreover, model-based projections estimate that XBB.1.5 and sublineages account for 92.6% of the US sequences in week 12 of 2023³. The XBB.1.9.1 recombinant has also been increasing in the past few weeks in North America and model-based projections estimate it accounts for 2.5% (95%CI: 1.8-3.5) of the US sequences3.

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 - March 2023)

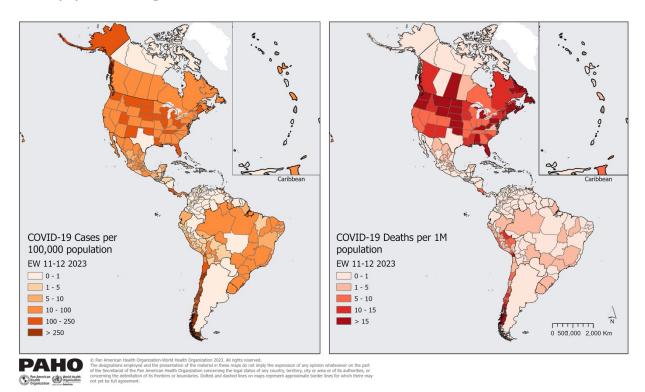


Source: GISAID

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



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 11 and 12 in 2023.



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 11 and 12, 2023.

The highest case incidence was observed in Chile, while the highest mortality was seen in the USA, Canada, and Chile.

In North America, most states in the US observed the highest incidence rates in the subregion with over 100 cases per 100,000 population. While the highest mortality rates with over 15 deaths per 1 million population were observed in some states of the US, and some parts of Canada (Saskatchewan, Newfoundland, New Brunswick, Nova Scotia, and Prince Edward Island).

In Central America, the highest incidence and mortality rates was reported in Costa Rica, followed by Panama. In South America, most regions of Chile and Brazil reported over 100 cases and between 10-100 cases per 100,000 population, respectively. At the same time, some regions of Chile (Aysén, Lagos, Ríos, Araucanía, Maule, Ñuble, and Arica and Parinacota), and Ucayali and Tacna in Peru reported the highest mortality rates in the subregion with over 10 deaths per 1M population.

In the Caribbean territories, the overall incidence rate was relatively low. Puerto Rico reported the highest incidence rates, while Trinidad and Tobago and some parts of Puerto Rico presented the highest mortality rates in the subregion.



