

Weekly COVID-19 Epidemiological Update - Region of the Americas

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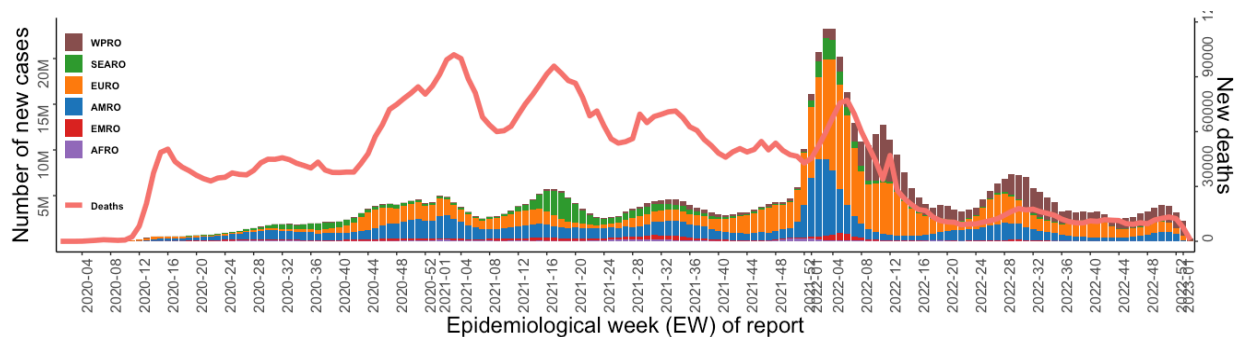
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Executive Summary

- **Since the onset of the pandemic** in 2020 and up to January 10, 2023, a cumulative total of approximately 660 million COVID-19 cases including about 6.7 million deaths were reported from all six WHO regions. During epidemiological week (EW) 1, cases decreased in all but one region – WPRO (2.4%). COVID-19 deaths decreased in four regions while they increased in WPRO (6.2%) and EMRO (31.4%).
- **Globally**, approximately 2,968,938 new COVID-19 cases were reported in EW 1 (January 01, 2023-January 07, 2023) - a -7.4% decrease compared to EW 52 (December 25, 2022-December 31, 2022) (**Figure 1**). For the same period, 11,444 new COVID-19 deaths were reported globally – a -10.3% relative decrease compared the previous week.
- **In the region of the Americas**, 771,400 cases and 4,531 deaths were reported in EW 1 - a -6.8% decrease in cases and -2.9% decrease in deaths compared to the previous week.
- At the subregional level, COVID-19 cases increased in one subregion – North America (14.3%), while they decreased in the remaining three (range: -31.5 - -19.1%). Deaths increased in three subregions (range: 2 – 18% increase) while they decreased in South America (-12.3%).
- The overall weekly case notification rate for the region of the Americas was 75.4 cases per 100,000 population during EW 1 (80.9 the previous week). Between EW 1 and 52, the 14-day COVID-19 death rate was 9 deaths per 1 million population (9.4 the previous two weeks).
- Among 19 countries/territories in the region with available data, **COVID-19 hospitalizations** increased in 10 countries and territories (range: 5.6% - 100%) during EW 1 compared to the previous week. Among 14 countries and territories with available data, COVID-19 **ICU admissions** increased in 7 countries and territories (range: 4.5% - 250%).

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

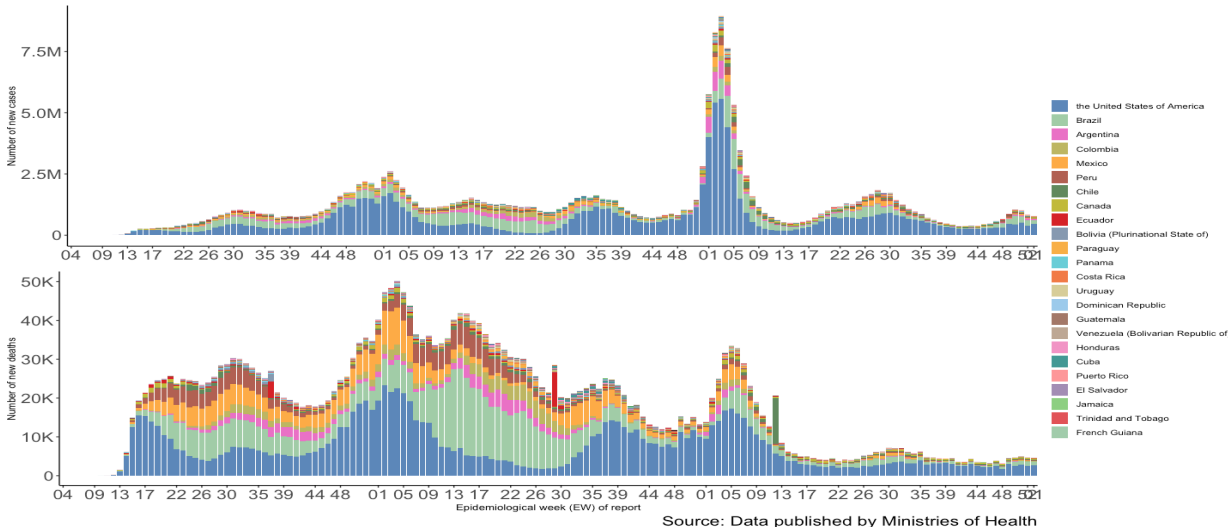


Source: Data from WHO COVID-19 Dashboard

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 - 1, 2023.



During EW 1, 771,400 new **COVID-19 cases** were reported in the region of the Americas - a relative decrease of -6.8% compared to previous week (**Figure 2**). The highest number of COVID-19 cases in the last week was reported from North America (503,702 cases, 14% increase) compared to the previous week. (**Table 1**). During EW 1, the highest proportion of weekly COVID-19 cases at the national level were reported by the United States of America (462,944 new cases, 16.9% increase), Brazil (145,933 new cases, -29.5% decrease), Argentina (40,982 new cases, -43.5% decrease).

Table 1: Weekly change (%) in cases and deaths between EW 52 and EW 1 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 52	Deaths EW 52	Cases EW 01	Deaths EW 01	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	4,349,914	35,926	10,179	49	8,237	58	-19.1%	18.4%
Central America	4,164,333	53,948	17,458	39	11,956	43	-31.5%	10.3%
North America	111,680,732	1,465,822	440,674	2,912	503,702	2,970	14.3%	2.0%
South America	66,901,072	1,340,475	359,504	1,665	247,505	1,460	-31.2%	-12.3%

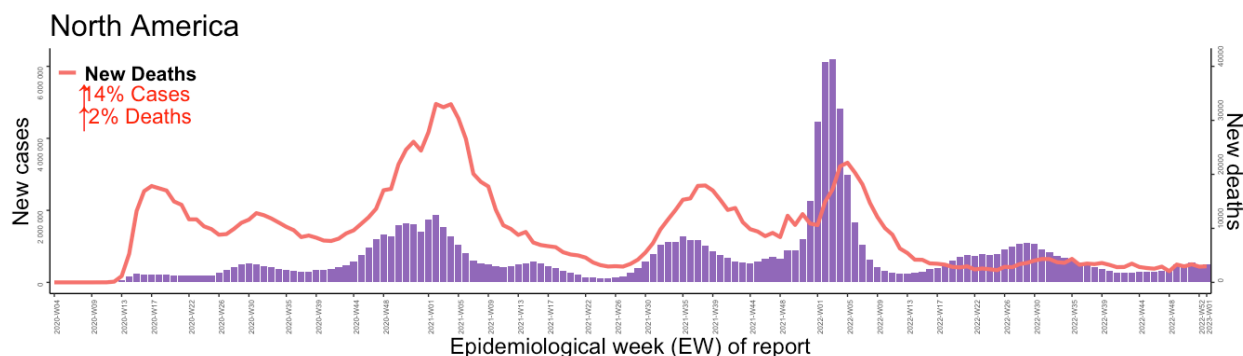
For the same period, 4,531 **COVID-19 deaths** were reported in the region of the Americas - a relative decrease of -2.9% compared to previous week (**Figure 2**). The highest number of COVID-19 deaths in the last week was reported from North America (2,970 deaths, 2% increase) (**Table 1**). At the national level, the highest proportion of weekly COVID-19 deaths were reported by the United States of America (2,695 new deaths, 8.1% increase), Brazil (926 new deaths, -16.6% decrease), and Canada (189 new deaths, -30.3% decrease).

A summary of the COVID-19 trends for EW 1 by subregion is presented below.

North America

The overall trends for **COVID-19 cases** have increased in North America as of EW 1, primarily due to an increase observed in the United States of America. During EW 1, the United States of America reported a 16.9% increase of weekly cases (462,944 cases), while the remaining two countries in the subregion reported a decline in cases – Mexico (24,561 cases, -12.2% decrease) and Canada (16,197 cases, -3% decrease).

Figure 3: COVID-19 cases and deaths by epidemiological week (EW). North America. Region of the Americas. EW 3, 2020 - EW 1, 2023.



For the same period, **weekly COVID-19 deaths** increased by 2% in North America during EW 1 relative to the previous week. Similar to weekly cases, the United States of America reported a slight increase in deaths (2,695 new deaths, 8.1% increase), while the remaining two countries reported a large decrease in weekly deaths as compared to the previous week – Canada (189 new deaths, -30.3% decrease) and Mexico (86 new deaths, -41.9% decrease).

During 1, among the two countries in North America with available data for **COVID-19 weekly hospitalizations and ICU admissions**, the United States of America continued to report an increase in weekly hospitalizations (n=47,859, 9.6% increase) and ICU admissions (n=5,706, 8.3% increase) for the sixth consecutive week. In Canada, weekly hospitalizations remained stable after a peak observed in early-November 2022 (4,761 hospitalizations, - 7.4% decrease) while ICU admissions slightly increased (277 ICU admissions, 4.5% increase) during EW 1 compared to the previous week.

The Omicron **variant of concerns** (VOC) of BA.5 are predominant in all three countries in the subregion. In the United States of America, the proportion of the BA.5 subvariant has been gradually decreasing over the past three months – accounting for 3.7%, while the estimated proportions of BA.5 sub-lineages, BQ.1 and BQ.1.1, and XBB sub-lineages have been increasing over the past few weeks – accounting for 55.8% and 32.5% (including 27.6% of XBB.1.5), respectively of sequences for the week ending on 7 January 2023¹. The BA.5 sub-lineages made up about 93.7% (including 9.3% of BQ.1 and 30.9% of BQ.1.1) in the week of 18 December 2022 in Canada² and 89.2% as of EW 48 in Mexico, respectively.

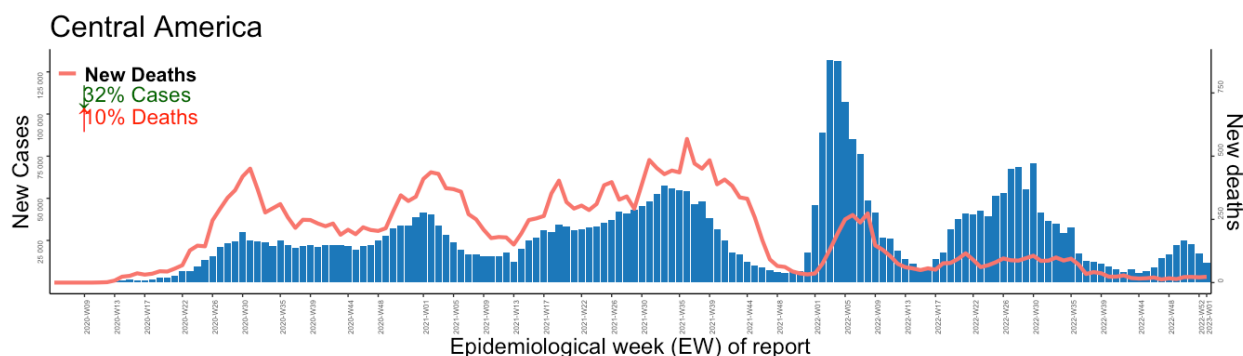
1 The United States Centers for Disease Control and Prevention (CDC). Variant Proportions. Accessed 10 January 2023. Available at: <https://bit.ly/3Obz8cT>

2 Public Health Agency of Canada (PHAC). COVID-19 Variants in Canada. Accessed 10 January 2023. Available at: <https://bit.ly/3bbFRFR>

Central America

In Central America, the overall **COVID-19 incidence** for the sub-region has decreased for the third consecutive week 11,956 new cases being reported during EW 1 – a -31.5% decrease compared to the previous week (**Figure 4**). Please note that data for EW 1 for Panama was not publicly available, resulting in a data artifact in percent changes in the subregion.

Figure 4: COVID-19 cases and deaths by epidemiological week (EW). **Central America.** Region of the Americas. EW 6, 2020 - EW 1, 2023.



During EW 1, **COVID-19 weekly cases** decreased in four in the subregion (range: -100 - -3.8% decrease). One country – Nicaragua – reported a 100% increase (101 new cases) during EW 1, however, the percent change in cases for Nicaragua is a result of a data artifact since data for EW 52, 2022 was not available. The countries with the largest decline in cases this week included Guatemala (4,534 new cases, -41.4% decrease), Belize (228 new cases, -15.9% decrease), and Honduras (2,133 new cases, -4.3% decrease) compared to the previous week.

For the same period, **weekly deaths** increased by approximately 10.3% (n=43) relative to the previous week (**Figure 4**) with two out of the seven countries and territories reporting an increase – Honduras (17 deaths, 112.5% increase) and Costa Rica (19 deaths, 46.2% increase). please note the percent change in deaths for Honduras might be a result of a data artifact due to lack of publicly available data for the complete weeks between EW 52, 2022 and EW 1, 2023. The remaining five countries and territories either reported a decline – Guatemala (7 deaths, -30% decrease) – or did not report any deaths during EW 1.

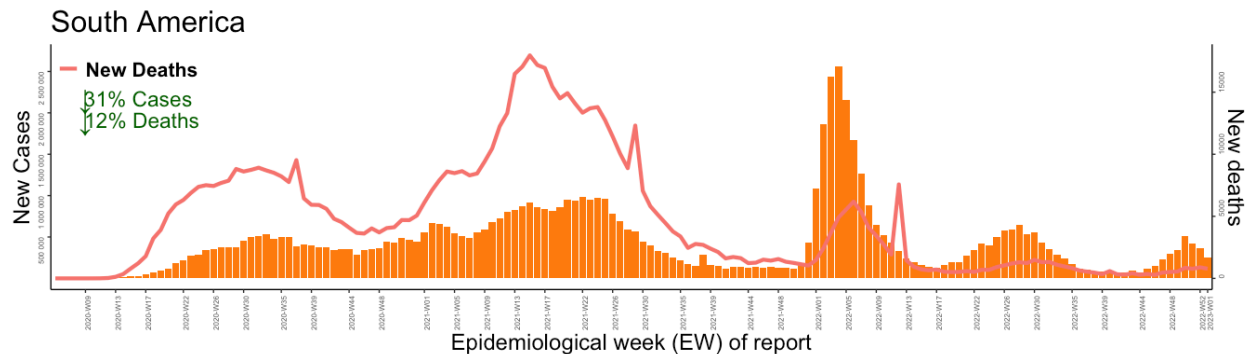
Among three countries/territories with available data for **weekly COVID-19 hospitalizations** in the Central American subregion, one country – Costa Rica – reported an increase in weekly COVID-19 hospitalizations (143 hospitalizations, 10.9% increase) while the remaining two did not observe any substantial changes (range: -1.7 – 0%) relative to the previous week. Similarly, all two countries and territories with available data for **weekly COVID-19 ICU admissions** reported a decline in their weekly COVID-19 ICU admissions (range: -42.9 - -6.3% decrease) relative to the previous week.

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

South America

In South America, the overall **COVID-19 incidence** for the subregion has decreased by -31.2%, with a total of 247,505 new COVID-19 cases being reported during EW 1 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 1, 2023.



During EW 1, nine out of the 10 countries and territories in the sub-region reported a decrease in cases (range: - 43.5 - -1% decrease). The largest decline in cases reported by Venezuela (Bolivarian Republic of) (194 new cases, -71.4% decrease), followed by Argentina (40,982 new cases, -43.5% decrease), and Bolivia (Plurinational State of) (9,349 new cases, -34.5% decrease). Please note that data for EW 1 for Ecuador was not publicly available, resulting in a data artifact in percent changes in the subregion.

During EW 1, a total of 1,460 **COVID-19 deaths** were reported in South America – a -12.3% decrease compared to the previous week. Three countries/territories in the subregion reported an increase in weekly deaths (range: 27.3 – 100% increase), with the largest increase being observed in Uruguay (16 deaths, 100% increase), followed by Argentina (78 deaths, 66% increase). The remaining countries/territories either reported a decline (n=5, range: -100 - -1.3% decrease) or remained the same – Bolivia (Plurinational State of) (19 deaths, 0% change). The largest decline in deaths were reported by Venezuela (Bolivarian Republic of) (0 new deaths, -100% decrease), followed by Colombia (80 new deaths, -22.3% decrease), and Peru (155 new deaths, -20.1% decrease).

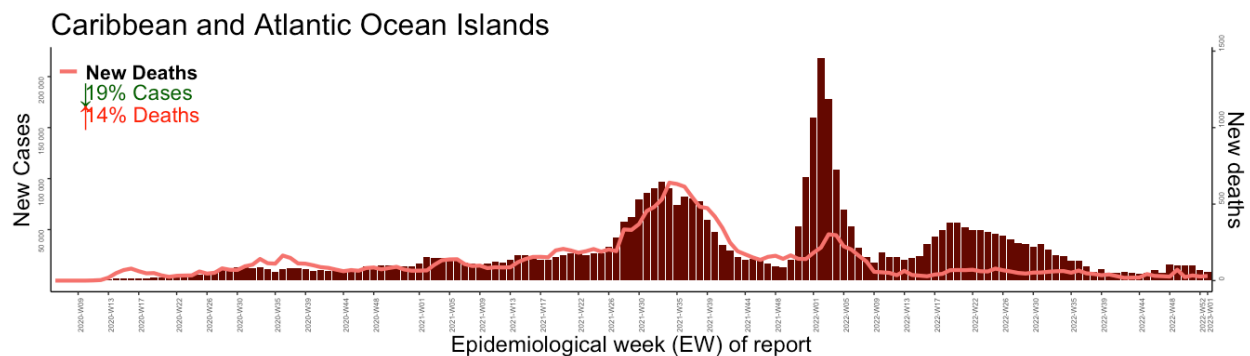
During EW 1, all three countries and territories in the subregion with data available for **COVID-19 weekly hospitalizations** reported a decline in their weekly COVID-19 hospitalizations (range: -23 - -0.2% decrease). For the same period, one – Uruguay – out of four countries and territories with data available for **COVID-19 ICU admissions** reported an increase (52 ICU admissions, 30% increase) in weekly COVID-19 ICU admissions while the remaining three observed a decline (range: -11.7 - -0.9% decrease).

To date, Omicron lineage BA.5 have been reported from nine out of the 10 countries in the subregion – Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela (Bolivarian Republic of).

Caribbean and Atlantic Ocean Islands

In the Caribbean and Atlantic Ocean Islands sub-region, **COVID-19 weekly cases** decreased by -19.1% compared to the previous week (**Figure 6**). At the national level, cases increased in 12 countries/territories in the subregion (range: 6.4% - 100%) while they declined in 13 countries/territories (range: -100% - -4.6%). Please note that an increase observed from seven out of 12 countries/territories in the subregion is possibly due to lack of data in EW 52, 2022 or inconsistent reporting.

Figure 6: COVID-19 cases and deaths by epidemiological week (EW). Caribbean and Atlantic Ocean Islands. Region of the Americas. EW 6, 2020 - EW 1, 2023.



For the same period, **COVID-19 weekly deaths** increased by 18% (58 deaths) in the Caribbean and Atlantic Ocean Islands subregion. Seven observed a relative increase in their weekly deaths in EW 1 compared to the previous week (range: 100 – 200% increase). Weekly deaths either remained the same - Trinidad and Tobago and Bermuda - or declined in three countries/territories (range: -100 – -2.9% decrease). The remaining countries/territories did not report any deaths during EW 1.

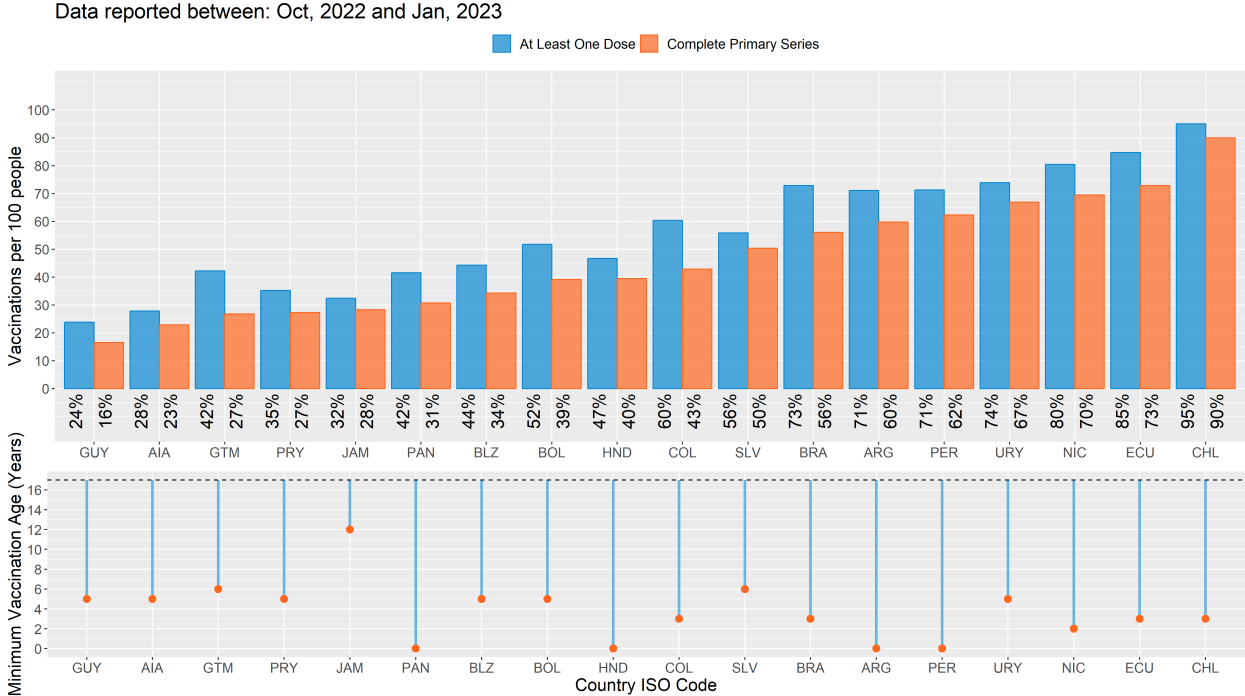
During EW 1, among 11 countries and territories with available data for **weekly COVID-19 hospitalizations**, six countries and territories reported an increase in their weekly COVID-19 hospitalizations (range: 5.6 – 100% increase), with the highest increase observed in Sint Maarten (3 hospitalizations, 100% increase), followed by French Guiana (14 hospitalizations, 55% increase), and Trinidad and Tobago (40 hospitalizations, 37.9% increase). Among eight countries and territories with data available for **COVID-19 ICU admissions**, four reported an increase in their weekly COVID-19 ICU admissions (range: 3-14 ICU admissions, 27.3 – 250% increase).

Notable increases in weekly cases in the subregion during EW 1 were Saint Barthélemy (10 new cases, 66.7% increase), Trinidad and Tobago (246 new cases, 62.9% increase), Guyana (234 new cases, 47.2% increase) relative to the previous week.

To date, Omicron lineages BA.5 have been reported from 18 out of 34 countries and territories in the subregion, including the overseas territories of France, the Netherlands, the United Kingdom, and the United States of America. 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. Vaccination coverage* (top) and Minimum vaccination age (bottom) for children and adolescents younger than 18 years in the Region of the Americas. As of EW 1, 2023.



COVID-19 vaccination coverage for children and adolescents in the Americas is shown in **Figure 7**, in conjunction with the reported minimum vaccination age for this group. From the 18 countries and territories that report the number of doses administered to children and adolescents in the previous 3 months, the following can be noted:

- Six countries reached 60% coverage for the Complete primary series, while eight remain below the 40% target.
- Four countries begun vaccinating children aged 6 months and older. Of these, two are above 60% coverage for the Complete primary series, while two remain below 40%.
- The most common minimum vaccination age is 5 years old.

* 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. Please note that coverages are calculated for each country or territory, based on the reported target population.

Genomic surveillance

Through PAHO's Genomic Surveillance Regional Network and the work from the Member States, 514,394 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 11 January 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: one in North America and one in South America; and two Lambda sequences in South 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 the genomic profile. These sublineages of BA.1 to BA.5 include those denominated as BC.x to DT.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: 42.3% of BA.1 (and BA.1 sublineages), 23.9% of BA.2 (and sublineages), <0.1% of BA.3 (and sublineages), 4.2% of BA.4 (and BA.4 sublineages), 28.9% BA.5 (and BA.5 sublineages), and 0.6% 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, the BA.5 proportions have continued to increase, while BA.4 proportions have decreased. Moreover, BA.2 sublineages have increased again in the same period, with the circulation of BA.2.75 sublineages. Finally, the proportion of recombinant lineages has been increasing since week 41, driven by increases circulation of XBB (and sublineages), a recombinant between two BA.2 sublineages.

In the past eight weeks, BA.5 and its sublineages, in particular BQ.1, represented 85.6%, 71.8%, 64.4%, and 79.1% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively (**Figure 8**). During the same period, recombinant lineages represented 6.9%, 22.6%, 31.6% and 14.1% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively.

Spotlight on the XBB recombinant and its sub-lineages

The WHO Technical Advisory Group on SARS-CoV-2 virus evolution (TAG-VE) regularly assesses new Omicron sublineages including recombinants. Some have been classified as "Omicron subvariants under monitoring" as they carry additional mutations that might confer some fitness advantage. They include BA.5 sublineages with specific mutations, BA.2.75, BA.4.6, BA.2.30, and XBB¹. As mentioned above, most viruses currently circulating in the Americas correspond to BA.5 and XBB sublineages. In particular, XBB has been detected in 23 countries and territories (across all subregions). Countries reporting the highest prevalence of XBB sequences in the past 4 weeks

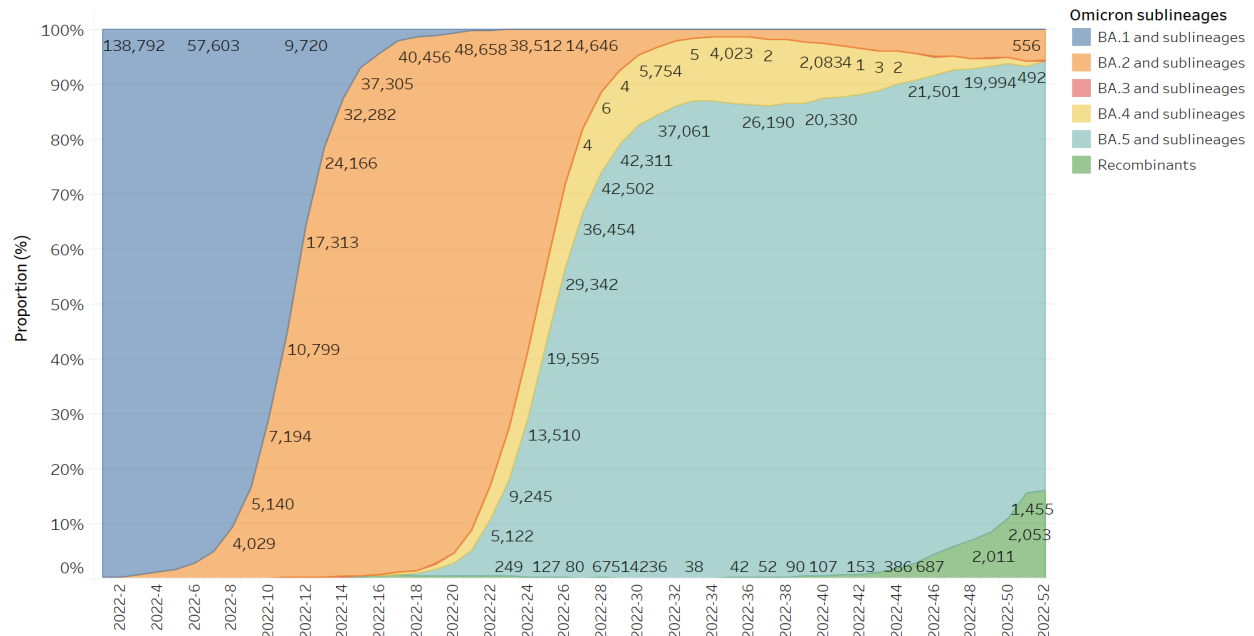
¹ WHO. Tracking SARS-CoV-2 variants. Available at: <https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/>

are Guatemala (85.2%), Dominican Republic (80.8%), and Peru (72.7%). Among XBB sublineages, XBB.1.5 is the most prevalent. XBB.1.5 was first detected in the USA at the end of October 2022 and is estimated to represent 27.6% (95% CI: 14.0-46.5%) of the US sequences for the first week of January 2023². XBB.1.5 has also been detected in 7 additional countries and territories of the Americas (Brazil, Canada, Chile, Costa Rica, Dominican Republic, Puerto Rico, and Trinidad and Tobago). Beyond the USA, countries/territories reporting the highest prevalence of XBB.1.5 sequences in the past four weeks are Trinidad and Tobago (14.7%) and Puerto Rico (12.2%).

Current evidence suggests that XBB.1.5 is highly transmissible; however, there is no indication at the moment that it is otherwise different than other Omicron sublineages. Therefore, PAHO/WHO recommends the same precautions for XBB.1.5 as for other Omicron variants, including vaccination and boosters. The TAG-VE is conducting a risk assessment of XBB.1.5, beyond the previous statement on XBB and BQ.1³.

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 - January 2023)

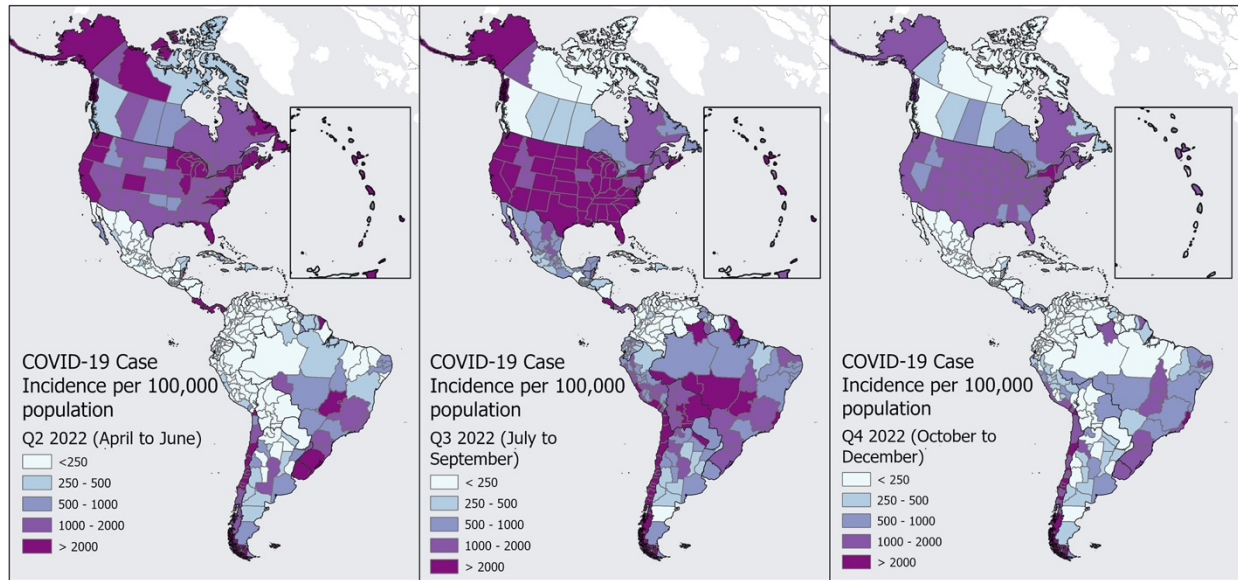


Source: GISAID

² US CDC. COVID Data Tracker - Variant Proportions. Available at: <https://covid.cdc.gov/covid-data-tracker/#variant-proportions>

³ WHO. TAG-VE statement on Omicron sublineages BQ.1 and XBB. 27 October 2022. Available at: <https://www.who.int/news/item/27-10-2022-tag-ve-statement-on-omicron-sublineages-bq.1-and-xbb>

Annex 1. The maps of quarterly COVID-19 case incidence rates per 100,000 population. The region of the Americas. From Q2 (April to June) to Q4 (October to December) 2022.



The maps (**Annex 1**) compare the quarterly COVID-19 incidence rates per 100,000 population in the region of the Americas for the last quarters of 2022 (Q2: April – June 2022, Q3: July – September 2022, Q4: October – December 2022).

Overall, regionally higher incidence rates were observed in the third quarter of 2022, compared to incidence in second and fourth quarters of 2022.

Highest incidence rates in the second quarter of 2022 (April – June 2022) were found in Canada, the United States, Panama, Costa Rica, Chile, Brazil, and Uruguay as well as most of the Caribbean Islands and territories.

During the third quarter of 2022 (July – September 2022), most subregions presented an increase in incidence rates compared to the previous quarter. The highest incidence rates were found in the United States, Canada, Panama, Chile, Peru, Argentina, Bolivia, and Brazil as well as in several Caribbean Islands and territories including Puerto Rico, US Virgin Islands, Anguilla, Monserrat, Guadeloupe, Martinique, Barbados and French Guiana.

In the last quarter of 2022 (October – December 2022), rates were relatively lower compared to the previous quarter mostly showing less than 2000 cases per 100,000 population. Rates over 2000 cases per 100,000 population were only found in some states in the United States (New Jersey, New York, and Vermont), in Moquegua in Peru, some areas of Chile, in the state of Espirito Santo in Brazil and in Puerto Rico.