

Weekly COVID-19 Epidemiological Update - Region of the Americas

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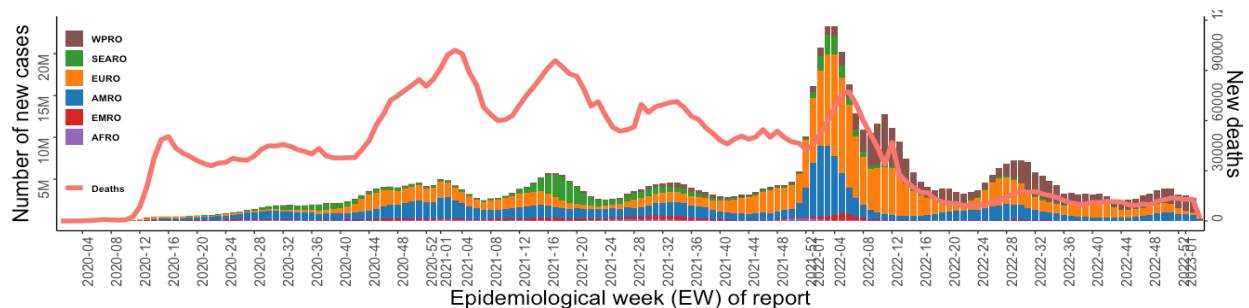
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Executive Summary

- **Since the onset of the pandemic** in 2020 and up to January 18, 2023, a cumulative total of approximately 663 million COVID-19 cases including about 6.7 million deaths were reported from all six WHO regions. During epidemiological week (EW) 2, cases increased in one region – EMRO (6.1%) while they decreased in the remaining five regions. COVID-19 deaths decreased in three regions while they increased in WPRO (42.6%), AMRO (17.6%), and EMRO (8.7%).
- **Globally**, approximately 2,738,944 new COVID-19 cases were reported in EW 2 (January 08, 2023-January 14, 2023) - a -9.8% decrease compared to EW 1 (January 01, 2023-January 07, 2023) (**Figure 1**). For the same period, 13,432 new COVID-19 deaths were reported globally – a 3.4% relative increase compared the previous week.
- **In the region of the Americas**, 657,436 cases and 5,403 deaths were reported in EW 2 - a -16.5% decrease in cases and 17.6% increase in deaths compared to the previous week.
- At the subregional level, COVID-19 cases increased in 2 subregions - Central America (27.5%) and Caribbean and Atlantic Ocean Islands (22%) while they decreased in North America (-13.2%) and South America (-27%). Deaths increased in two subregions - North America (45.3%) and Central America (8.6%).
- The overall weekly case notification rate for the region of the Americas was 64.3 cases per 100,000 population during EW 2 (77 the previous week). Between EW 2 and 1, the 14-day COVID-19 death rate was 9.8 deaths per 1 million population (9 the previous two weeks).
- Among 20 countries/territories in the region with available data, **COVID-19 hospitalizations** increased in 9 countries and territories (range: 2.6% - 250%) during EW 2 compared to the previous week. Among 17 countries and territories with available data, COVID-19 **ICU admissions** increased in 7 countries and territories (range: 2.7% - 150%).

Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. EW 4, 2020 - EW 2, 2023.

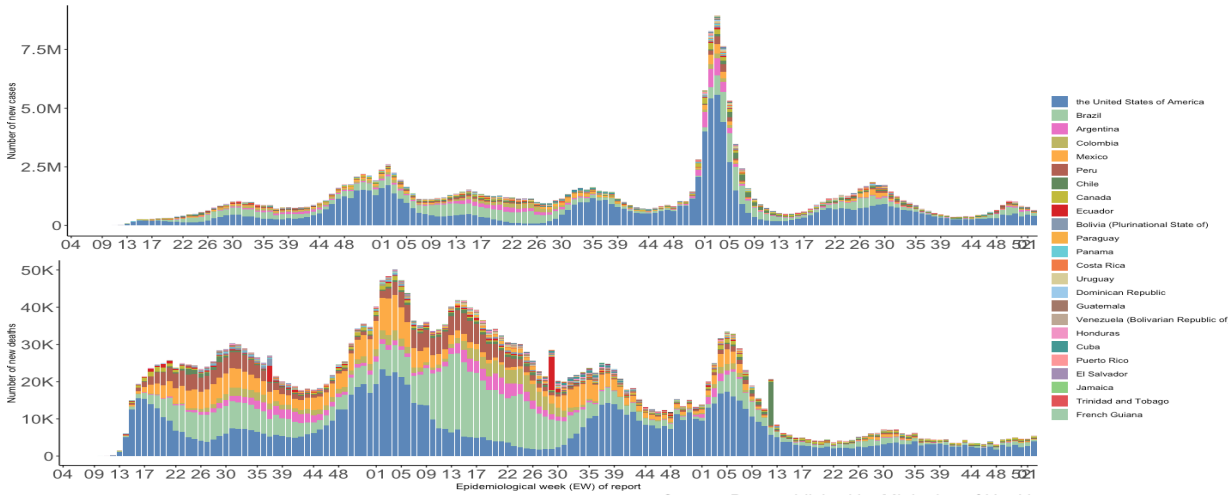


Source: Data from WHO COVID-19 Dashboard

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 - 2, 2023.



During EW 2, 657,436 new **COVID-19 cases** were reported in the region of the Americas - a relative decrease of -16.5% compared to previous week (**Figure 2**). The highest number of COVID-19 cases in the last week was reported from North America (446,930 cases, -13% decrease) compared to the previous week. (**Table 1**). During EW 2, at the national level, the highest proportion of weekly COVID-19 cases were reported by the United States of America (407,035 new cases, -13.3% decrease), Brazil (120,721 new cases, -17.3% decrease), Mexico (23,355 new cases, -20.3% decrease).

Table 1: Weekly change (%) in cases and deaths between EW 1 and EW 2 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 01	Deaths EW 01	Cases EW 02	Deaths EW 02	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	4,361,139	35,999	8,517	58	10,392	52	22.0%	-10.3%
Central America	4,181,925	54,029	13,655	58	17,412	63	27.5%	8.6%
North America	112,144,145	1,470,320	514,944	3,019	446,930	4,388	-13.2%	45.3%
South America	67,076,473	1,341,381	250,380	1,460	182,702	900	-27.0%	-38.4%

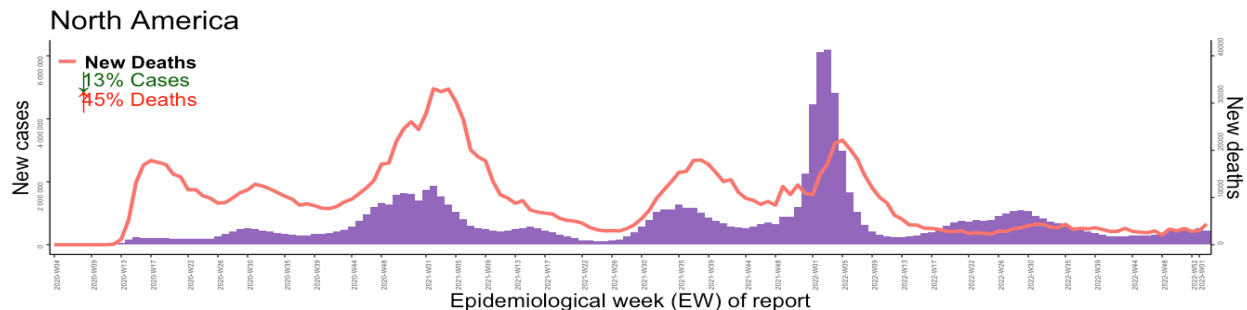
For the same period, 5,403 **COVID-19 deaths** were reported in the region of the Americas - a relative increase of 17.6% compared to previous week (**Figure 2**). The highest number of COVID-19 deaths in the last week was reported from North America (4,388 deaths, 45% increase) (**Table 1**). At the national level, the highest proportion of weekly COVID-19 deaths were reported by the United States of America (3,950 new deaths, 48% increase), Brazil (457 new deaths, -50.6% decrease), and Canada (279 new deaths, 43.8% increase).

A summary of the COVID-19 trends for EW 2 by subregion is presented below.

North America

The overall trends for **COVID-19 cases** have been decreasing in North America as of EW 2. During EW 2, two countries in the subregion observed a decrease in weekly cases – the largest decline in cases were reported by Mexico (23,355 cases, -20.3% decrease), followed by the United States of America (407,035 cases, -13.3% decrease). During EW 2, Canada reported no substantial changes compared to the previous week (16,540 cases, 2.2% increase).

Figure 3: COVID-19 cases and deaths by epidemiological week (EW). North America. Region of the Americas. EW 3, 2020 - EW 2, 2023.



For the same period, **weekly COVID-19 deaths** increased by 45.3% in North America, primarily due to an increase observed in the United States of America relative to the previous week. However, all three countries in the subregion reported an increase in weekly deaths during EW 2, with the largest proportion of reported deaths being reported by the United States of America (3,950 new deaths, 48% increase), followed by Canada (279 new deaths, 43.8% increase), and Mexico (159 new deaths, 1.9% increase).

During 2, 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 hospitalizations (n=43,894, -8.3% decrease) and ICU admissions (n=5,377, -5.8% decrease) after seven weeks of an increasing trend. Similarly in Canada, weekly hospitalizations and ICU admissions remained stable after a peak observed in early-November 2022 – reporting a 1.5% decrease in weekly hospitalizations (n=4,689) and a 4% decrease in ICU admissions (n=266) during EW 2 compared to the previous week.

The Omicron lineages BA.5 and XBB are circulating 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 2.6%, 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 44.7% and 46.9% (including 43% of XBB.1.5), respectively of sequences for the week ending on 14 January 2023¹. The sub-lineages of BA.5 and XBB made up about 91.3% (including 8.3% of BQ.1 and 29.5% of BQ.1.1) and about 3% in EW 52, 2022, respectively in Canada². The sub-lineages of BA.5 and XBB made up about 90% and 9% of sequences in EW 52, 2022 in Mexico, respectively.

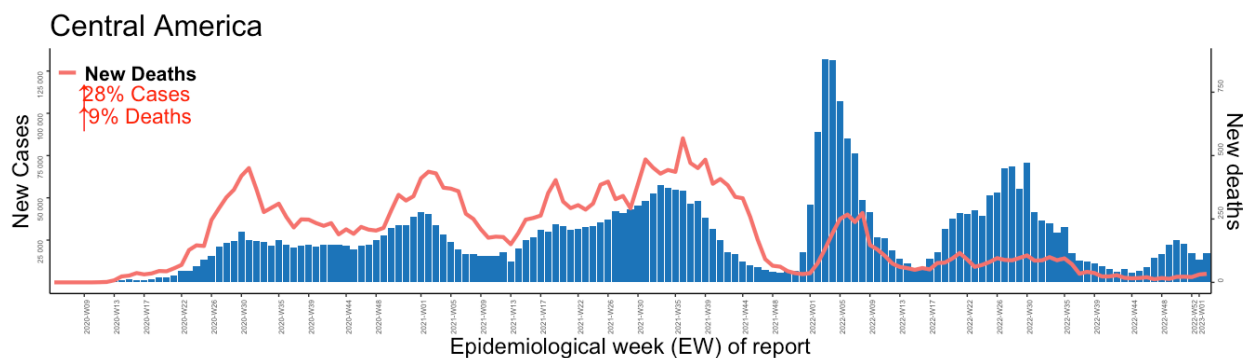
1 The United States Centers for Disease Control and Prevention (CDC). Variant Proportions. Accessed 18 January 2023. Available at: <https://bit.ly/3Obz8cT>

2 Public Health Agency of Canada (PHAC). COVID-19 Variants in Canada. Accessed 18 January 2023. Available at: <https://bit.ly/3bbFRFr>

Central America

In Central America, the overall **COVID-19 incidence** for the sub-region has increased, primarily due to an increase observed in Guatemala, with 17,412 new cases being reported in the subregion during EW 2 – a 27.5% 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 2, 2023.



During EW 2, **COVID-19 weekly cases** increased in two countries in the subregion – Guatemala (9,525 new cases, 110.1% increase) and Costa Rica (5,712 new cases, 15.2% increase). The remaining four countries and territories reported a decrease in weekly cases (range: -63.5 - -2.2% decrease) and one country – El Salvador – did not report any cases during EW 2. The countries with the largest decline in cases this week included Honduras (886 new cases, -63.5% decrease), Nicaragua (41 new cases, -59.4% decrease), and Panama (1,025 new cases, -26.9% decrease).

During EW 2, **weekly deaths** increased by approximately 8.6% relative to the previous week (**Figure 4**) with one country – Guatemala - out of the seven countries and territories reporting an increase (38 new deaths, 442.9% increase). The remaining countries and territories either did not report any changes (n=4) or reported a decline (n=2, range: -95.7 - -44.4% decrease) as compared to the previous week.

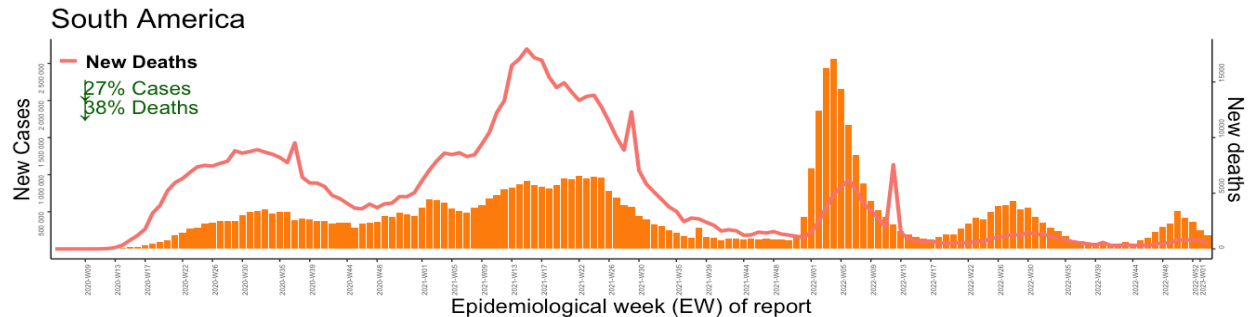
Among four countries/territories with available data for **weekly COVID-19 hospitalizations** in the Central American subregion, Belize reported an increase in their weekly COVID-19 hospitalizations (3 hospitalizations, 50% increase) while the remaining three either reported a decline – Honduras (45 hospitalizations, -23.7% decrease) and Panama (86 hospitalizations, -15.7% decrease) – or did not report any substantial changes – Costa Rica (143 hospitalizations, 0% change). Among three countries and territories with available data for **weekly COVID-19 ICU admissions**, Panama reported an increase of 33.3% in ICU admissions (4 ICU admissions) relative to the previous week.

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 -27.0%, with a total of 182,702 new COVID-19 cases being reported during EW 2 compared to the previous week (**Figure 5**). Please note that data for EW 2 for two countries in the subregion – Ecuador and Colombia – was not publicly available, could result in a data artifact in percent changes in cases and deaths.

Figure 5: COVID-19 cases and deaths by epidemiological week (EW). South America. Region of the Americas. EW 3, 2020 - EW 2, 2023.



During EW 2, all countries and territories reported a decline in cases (range: -76 - -11.8% decrease) with the largest decline in cases being reported by Paraguay (779 new cases, -76% decrease), followed by Argentina (19,416 new cases, -52.6% decrease), and Peru (7,490 new cases, -38.1% decrease). These trends need to be interpreted with caution due to possible delays in reporting/testing in many countries during the year-end holiday season.

During EW 2, a total of 900 **COVID-19 deaths** were reported in South America – a -38.4% decrease compared to the previous week. Four countries and territories in the subregion reported an increase in weekly deaths (range: 5.1 – 100% increase), with the largest increase being observed in Venezuela (Bolivarian Republic of) (2 new deaths, 100% increase), followed by Argentina (89 new deaths, 14.1% increase). The largest decline in deaths were reported by Brazil (457 new deaths, -50.6% decrease), followed by Bolivia (Plurinational State of) (11 new deaths, -42.1% decrease), and Uruguay (11 new deaths, -31.2% decrease).

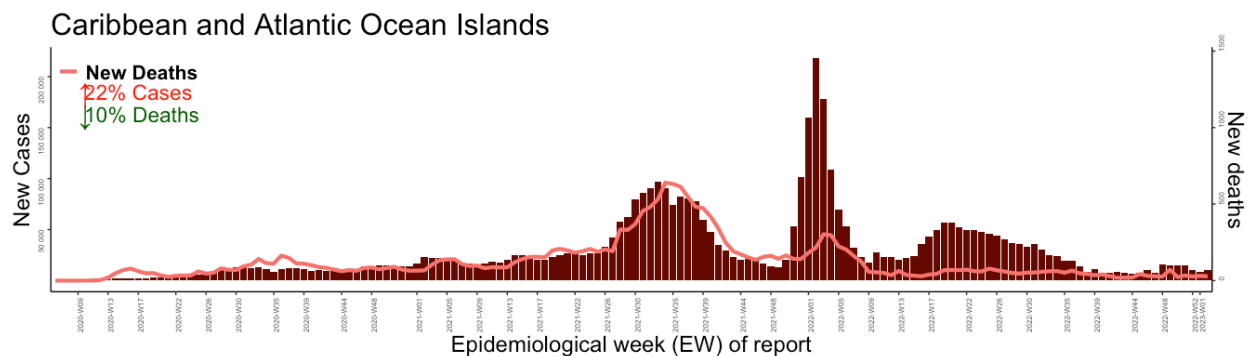
Among three countries and territories in the subregion with data available for **COVID-19 weekly hospitalizations**, two countries and territories reported an increase in their weekly COVID-19 hospitalizations – Venezuela (Bolivarian Republic of) (134 hospitalizations, 28.8% increase) and Chile (1,093 hospitalizations, -11.8% decrease), while Peru observed a 23.5% decrease in hospitalizations (n=270). For the same period, two countries and territories out of four with data available for **COVID-19 ICU admissions** reported an increase in their weekly COVID-19 ICU admissions – Chile (119 ICU admissions, 11.2% increase) and Argentina (413 ICU admissions, 2.7% increase).

To date, the Omicron lineages BA.5 and XBB have been reported from nine and eight out of the 10 countries in the subregion, respectively – Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay (BA.5 only), 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** increased by 22.0% compared to the previous week (**Figure 6**). At the national level, cases increased in eight countries and territories in the subregion (range: 3% - 302%) while it declined in the remaining 18 countries and territories (range: -100% - -8.5%). However, these trends need to be interpreted with caution due to possible delays in reporting/testing in many countries/territories during the year-end holiday season.

Figure 6: COVID-19 cases and deaths by epidemiological week (EW). **Caribbean and Atlantic Ocean Islands.** Region of the Americas. EW 6, 2020 - EW 2, 2023.



For the same period, **COVID-19 weekly deaths** decreased by -10.3% (52 deaths) in the Caribbean and Atlantic Ocean Islands subregion. Five countries and territories observed a relative increase in their weekly deaths in EW 2 compared to the previous week (range: 1 - 36 deaths, 5.9 – 100% increase). Weekly deaths either remained the same – Bermuda (1 death, 0% change) – or declined in seven countries and territories of the subregion (range: 0-3 deaths, -100 – -25% decrease).

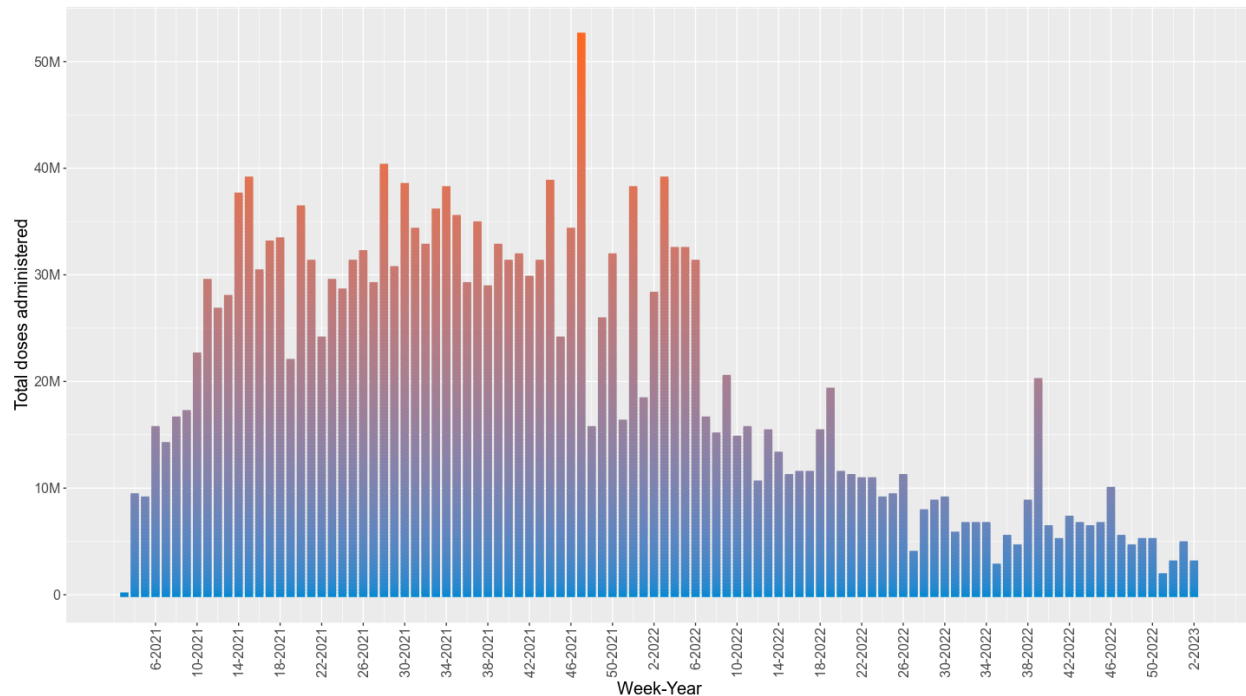
During EW 2, among 11 countries and territories with available data for **weekly COVID-19 hospitalizations**, five reported an increase in their weekly COVID-19 hospitalizations (range: 2.6 – 250% increase), with the highest increase observed in Bermuda (7 hospitalizations, 250% increase), followed by Trinidad and Tobago (47 hospitalizations, 17.5% 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: 21.4 – 150% increase), with the highest relative increase observed in French Guiana (5 ICU admissions, 150% increase), followed by Guadeloupe (7 ICU admissions, 133.3% increase).

Notable increases in weekly cases in the subregion during EW 2 were Virgin Islands (U.S.) (201 new cases, 302% increase), Jamaica (141 new cases, 291.7% increase), and Trinidad and Tobago (406 new cases, 65% increase) relative to the previous week.

To date, the Omicron lineages BA.5 and XBB have been reported from 18 and nine out of 34 countries and territories in the subregion respectively, 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: Total COVID-19 vaccine doses administered per epidemiological week. Region of the Americas. As of EW 2, 2023.



The number of vaccine doses administered against COVID-19 (**Figure 7**) that have been administered each week since December 2020 reached a maximum of approximately 52 million doses in week 47 of 2021. Since then, the overall trend has been decreasing, with week 51 of 2022 registering the lowest number of vaccine doses applied since the start of COVID-19 vaccination operations. Also, the number of vaccine doses administered has not surpassed 10 million weekly doses in the past 15 weeks. It is important to note that, even though vaccination rate has declined throughout the region, so has the data reporting rate. It becomes more difficult to discern the state of COVID-19 vaccinations in the region with fewer data points available each month.

Genomic surveillance

Through PAHO's Genomic Surveillance Regional Network and the work from the Member States, 518,881 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 17 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).

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 DV.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: 42.1% of BA.1 (and BA.1 sublineages), 23.8% of BA.2 (and sublineages), <0.1% of BA.3 (and sublineages), 4.2% of BA.4 (and BA.4 sublineages), 29.1% 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 85.3%, 70.7%, 58.1%, and 76.1% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively (**Figure 8**). During the same period, recombinant lineages represented 7.6%, 22.9%, 38.1% and 17.7% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively.

Spotlight on the Omicron subvariants under monitoring, including XBB recombinant and its sublineages

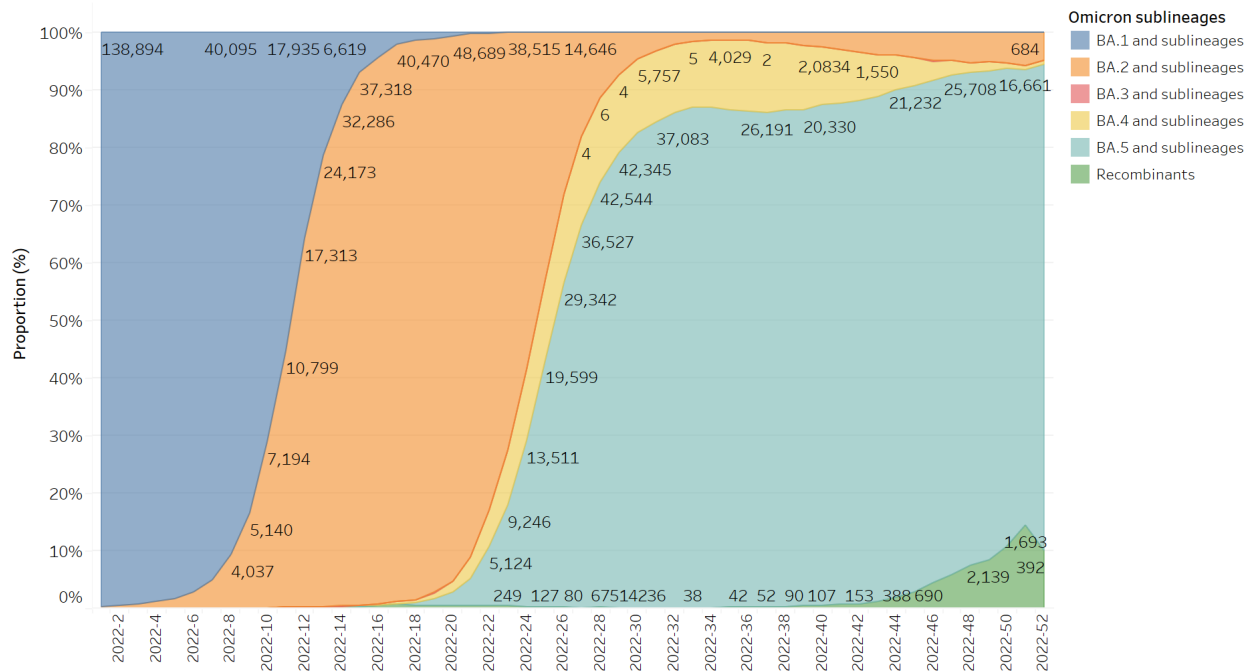
The WHO Technical Advisory Group on SARS-CoV-2 virus evolution (TAG-VE) regularly assesses new Omicron sublineages including recombinants. Some have been classified as “Omicron subvariants under monitoring” as they carry additional mutations that might confer some fitness advantage. The list, updated on 13 January 2023, includes BQ.1 and BF.7 (two BA.5 sublineages), BA.2.75, and XBB¹. Most viruses currently circulating in the Americas correspond to BA.5 and XBB sublineages, and to a lesser extent BA.2.75. In particular, the XBB recombinant has been detected in 23 countries and territories (across all subregions). Countries reporting the highest prevalence of XBB sequences in the past 4 weeks are Guatemala (21.5%), Dominican Republic (21.4%), and Bonaire (6.0%). 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 is estimated to represent 43.0% (95% CI: 26.4-61.1%) of the US sequences for the second week of January 2023². XBB.1.5 has also been detected in 10 additional countries and territories of the Americas (Aruba, Brazil, Canada, Chile, Costa Rica, Curacao, Dominican Republic, Mexico, Puerto Rico, and Trinidad and Tobago).

1 WHO. Tracking SARS-CoV-2 variants. Available at: <https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/>
2 US CDC. COVID Data Tracker - Variant Proportions. Available at: <https://covid.cdc.gov/covid-data-tracker/#variant-proportions>

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 sublineages³. 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.**

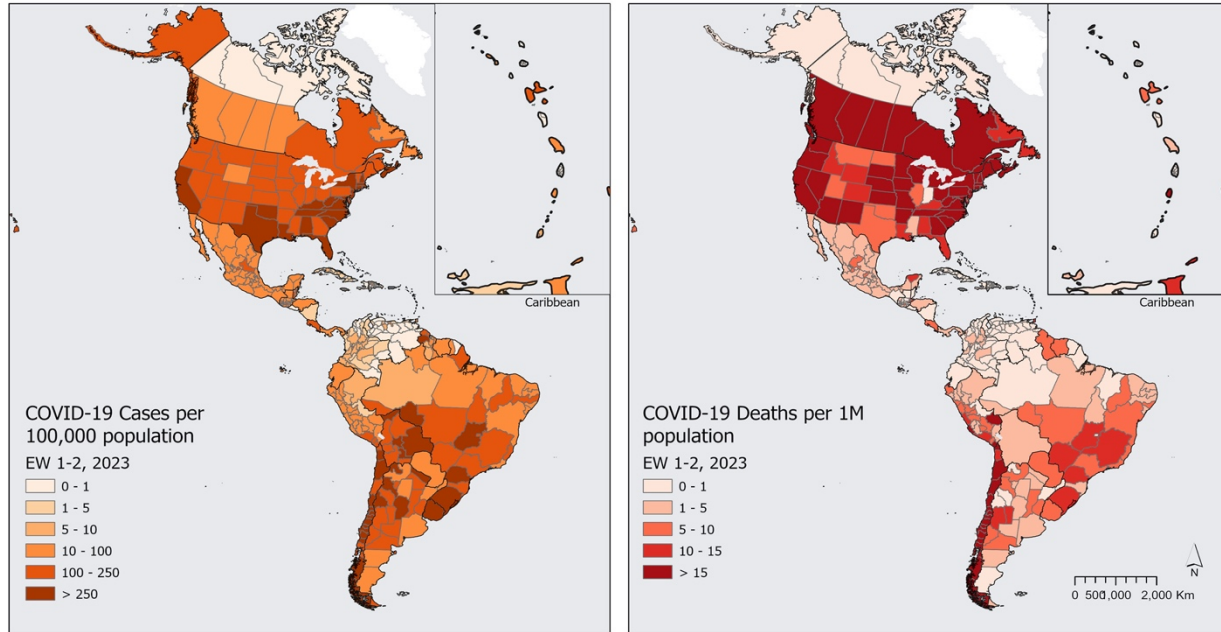
Figure 8. Proportions of VOC Omicron sublineages identified by the countries in the Region of the Americas (January 2022 - January 2023)



Source: GISAID

³ WHO. XBB.1.5 Rapid Risk Assessment, 11 January 2023. Available at: https://www.who.int/docs/default-source/coronaviruse/11jan2023_xbb15_rapid_risk_assessment.pdf

Annex 1. COVID-19 incidence rate per 100,000 population and COVID-19 mortality rate from per 1 million population. Region of the Americas. Between EW 1 and 2, 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 1 and 2, 2023.

The highest case incidence was observed in the USA, Canada, Brazil, Uruguay, Bolivia, Chile, Argentina, Guyana, Puerto Rico, and US Virgin Islands, while the highest mortality was seen in the USA, Canada, Chile, Peru, Puerto Rico, and St Vincent and the Grenadines.

In North America, a third of the states in the US and parts of Canada (Prince Edward Island and Nova Scotia) presented the highest incidence rates, while high mortality rates were observed in almost half of the states in the US, and the majority of Canada.

In Central America, incidence and mortality rates continue to be low in the sub-region. Meanwhile, in South America, in most regions of Chile, some of the northern provinces in Argentina (Jujuy, Formosa, Catamarca, Córdoba, and San Juan), Uruguay, some parts of Bolivia (Pando, Cochabamba, Chuquisaca, and Santa Cruz), and some states of Brazil (Rio Grande do Sul, Parana, Goiás, and Rondônia) reported high incidence rates. At the same time, most regions of Chile and some regions of Peru (Tumbes, Madre de Dios, Tacna, and Ica) showed the highest mortality rates in the sub-region.

In the Caribbean territories, Puerto Rico, US Virgin Islands and the region 7 in Guyana reported the highest incidence rates, and Puerto Rico, and St Vincent and the Grenadines reported the highest mortality rates in the sub-region.

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