

Weekly COVID-19 Epidemiological Update - Region of the Americas

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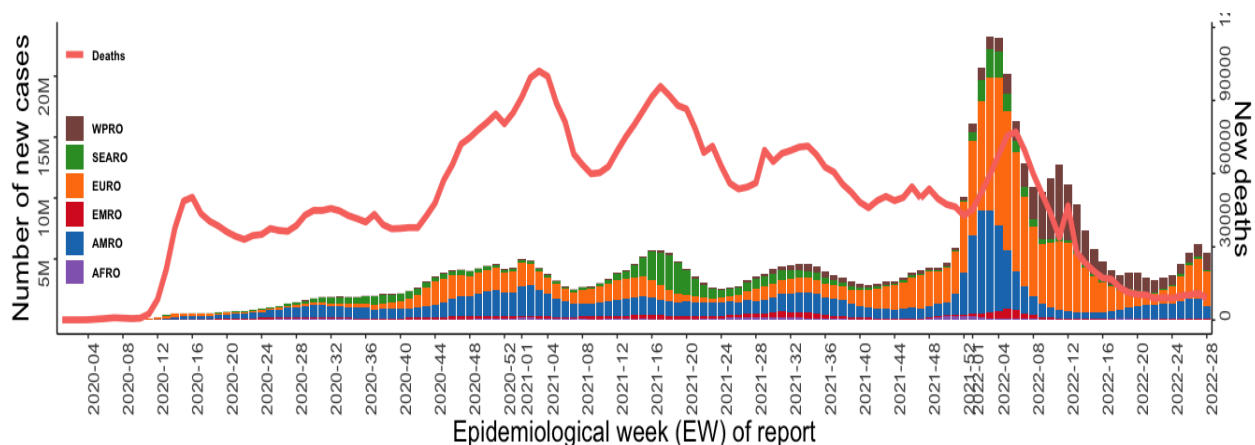
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Executive Summary

- **Since the onset of the pandemic** in 2020 and up to July 19, 2022, a cumulative total of approximately 560 million COVID-19 cases including about 6.4 million deaths were reported from all six WHO regions. During epidemiological week (EW) 28, COVID-19 cases increased in the regions of the Americas (8.7%), South-East Asia (5.2%), and Western Pacific (35.6%). COVID-19 deaths increased in three WHO regions – the regions of the Americas (7.2%), Eastern Mediterranean (14.6%), and South-East Asia (20.1%) compared to the previous week.
- **Globally**, approximately 6,291,881 new COVID-19 cases were reported in EW 28 (July 10, 2022-July 16, 2022) - a 0.2% increase compared to EW 27 (July 03, 2022-July 09, 2022) (**Figure 1**). For the same period, 10,999 new COVID-19 deaths were reported globally – a 1.3% relative decrease compared the previous week.
- **In the region of the Americas**, 1,769,105 cases and 5,495 deaths were reported in EW 28 - a 9.9% increase in cases and 7.7% increase in deaths compared to the previous week.
- At the subregional level, COVID-19 cases increased in three subregions - North America (10.5%), Central America (8.8%), and South America (11.1%) while they decreased in the Caribbean and Atlantic Ocean Islands (-17.7%). COVID-19 deaths increased in North America (8.2%) and South America (8.8%) during EW 28 compared to the previous week.
- The overall weekly case notification rate for the region of the Americas was 171.7 cases per 100,000 population during EW 28 (158 the previous week). Between EW 28 and 27, the 14-day COVID-19 death rate was 10.3 deaths per 1 million population (10 the previous two weeks).
- Among 31 countries/territories in the region with available data, **COVID-19 hospitalizations** increased in 11 countries and territories (range: 6.5% - 304.4%) during EW 28 compared to the previous week. Among 27 countries and territories with available data, COVID-19 **ICU admissions** increased in 9 countries and territories (range: 0.4% - 100%).

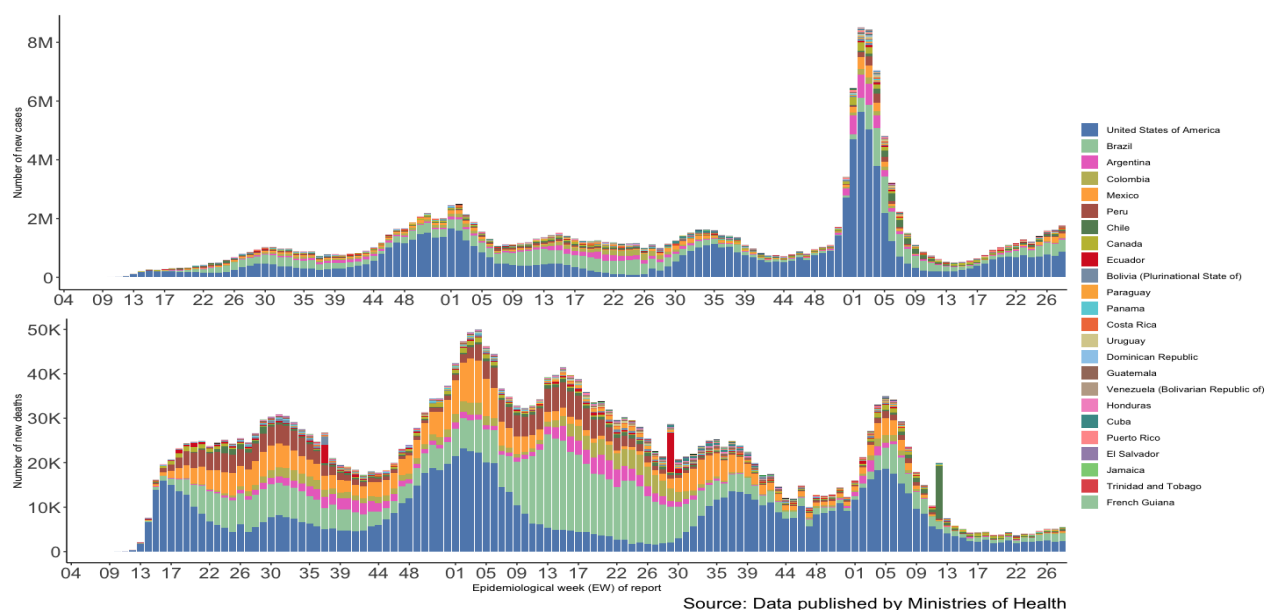
Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. EW 4, 2020 - EW 28, 2022.



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 - 28, 2022.



Overall, **COVID-19 cases** have been increasing the region of the Americas for the past five consecutive weeks, with 1,769,105 new COVID-19 cases reported during EW 28 - a relative increase of 9.9% compared to previous week (**Figure 2**). The highest number of cases was reported from the North American subregion (1,032,591 cases, 10% increase), and the South American subregion (650,453 cases, 10.7% compared to the previous week). (**Table 1**). At the country level, the highest proportion of weekly COVID-19 cases were reported by the United States of America (866,479 cases, 17.5% increase), Brazil (419,273 cases, 5.7% increase), Mexico (141,241 cases, 19.8% decrease).

Table 1: Weekly change (%) in cases and deaths between EW 27 and EW 28 by subregion. Region of the Americas

Subregion	Total Cases	Total Deaths	Cases EW 27	Deaths EW 27	Cases EW 28	Deaths EW 28	% Change Cases	% Change Deaths
Caribbean and Atlantic Ocean Islands	3,969,823	34,010	41,885	112	34,482	99	-17.7%	-11.6%
Central America	3,521,126	51,759	47,394	139	51,579	134	8.8%	-3.6%
North America	98,747,352	1,384,924	934,730	2,608	1,032,591	2,822	10.5%	8.2%
South America	60,974,128	1,307,789	585,408	2,243	650,453	2,440	11.1%	8.8%

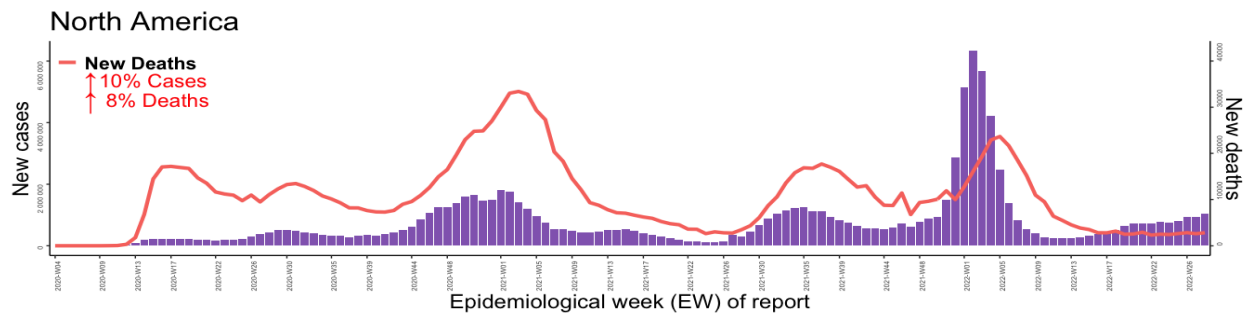
For the same period, 5,495 **COVID-19 deaths** were reported in the region of the Americas - a relative increase of 7.7% compared to previous week (**Figure 2**). The highest number of COVID-19 deaths in during EW 28 was reported from North American subregion (2,822 deaths, 8% increase) (**Table 1**). At the country level, the highest proportion of weekly COVID-19 deaths were reported from the United States of America (2,345 deaths, 4.5% increase), followed by Brazil (1,751 deaths, 6.8% increase) and Mexico (315 deaths, 32.4% increase).

A summary of the COVID-19 trends for EW 28 by subregion is presented below.

North America

The overall trends for COVID-19 cases have been increasing in North America for the past four consecutive weeks with the subregion reporting over 1 million new cases during EW 28, primarily due to a large increase reported from the United States of America. COVID-19 cases increased in the United States of America (866,479 cases, 17.5 % increase) and Canada (24,871 cases, 16.7 % increase) while they decreased in Mexico (141,241 cases, 19.8 % decrease), observed the first time after about 3 months of an increasing trend in cases.

Figure 3: COVID-19 cases and deaths by epidemiological week (EW). North America. Region of the Americas. EW 3, 2020 - EW 28, 2022.



During the same period, weekly COVID-19 deaths increased by 8.2% (2,822 deaths) in the North American subregion relative to the previous week. All three countries in the subregion reported an increase in weekly deaths, the largest proportion of deaths being reported by the United States of America (2,345 new deaths, 4.5% increase), followed by Mexico (315 new deaths, 32.4% increase), and Canada (162 new deaths, 27.6% increase).

Among two countries with data available for **COVID-19 hospitalizations and ICU admissions**, the United States of America observed a large increase in their weekly COVID-19 hospitalizations (41,136 hospitalizations; 22.2% increase and ICU admissions (4,547 ICU admissions; 19.5% increase) during EW 28 compared to the previous week. Similarly in Canada, hospitalizations and ICU admissions have increased for the third consecutive week – a 16.7% increase in hospitalizations (n=4,584) and 0.4% increase in ICU admissions (n=251) during EW 28 compared to the previous week.

In the United States of America, the proportion of Omicron variant of concern (VOC) lineages BA.4 and BA.5 was estimated to make up about 90% of the total weekly sequenced samples – 78% and 13% of the total variant proportion respectively – as of the week of July 16, 2022 – which accounted for about 1% of cases in the United States in early-May.¹ COVID-19 hospitalizations in the United States of America has been steadily increasing since early-May, 2022.

Similarly in Canada, the proportion of BA.4 and BA.5 sub-variants of Omicron have been increasing for the past six weeks, making up about 67.5% – 13.7% and 53.8% respectively – of the sequenced data within the country as of the week of June 25, 2022.² The total number of hospital beds occupied by COVID-19 patients in the country increased by about 35% (n=4,584 hospitalizations) during EW 28 compared to the previous week.

Mexico has been observing an increase in deaths for the past four weeks with a 32.4% increase observed during EW 28 compared to the previous week. The national COVID-19 hospital occupancy of Mexico increased from 4% on mid-June 2022 to 16% on 11 July 2022.³ In Mexico, the proportion of Omicron VOC – BA.4 and BA.5 lineages made up 8.9% and 41% of the weekly sequenced samples respectively as of EW 26.

¹ United States Centers for Disease Control and Prevention (CDC). Variant Proportions. Accessed 19 July 2022. Available at: <https://bit.ly/3Obz8cT>

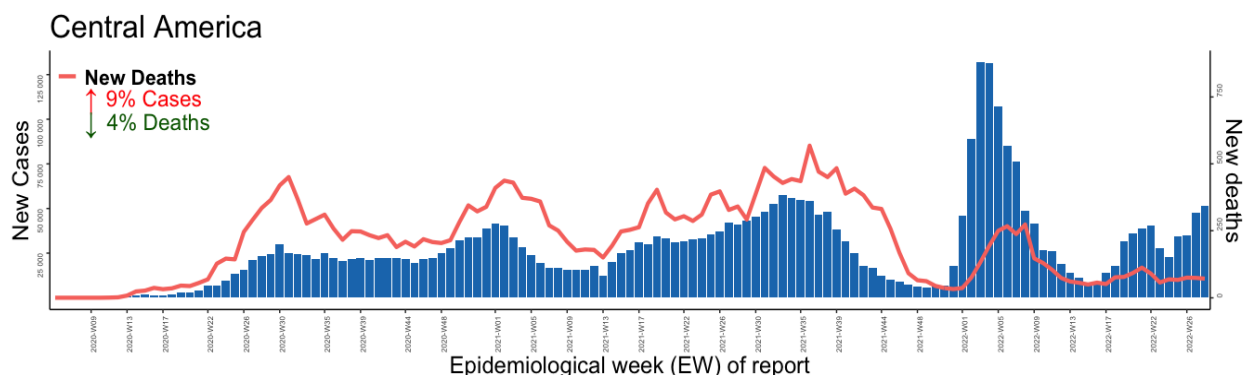
² Public Health Agency of Canada (PHAC). COVID-19 Epidemiological Update. Accessed 19 July 2022. Available at: <https://bit.ly/3bbFRFr>

³ Secretaría de Salud de México. COVID-19 Technical Statement. 19 July 2022. Available at: <https://bit.ly/3aWSBps>

Central America

In Central America, COVID-19 incidence for the sub-region has risen again with 51,579 new cases reported during EW 28 – a 9.4% increase compared to the previous week (**Figure 4**). Please note that data from EW 23 to EW 28 for Costa Rica were not publicly available, resulting in a data artifact in percent change of COVID-19 cases and deaths for the subregion.

Figure 4: COVID-19 cases and deaths by epidemiological week (EW). **Central America. Region of the Americas. EW 6, 2020 - EW 28, 2022.**



During EW 28, four countries/territories reporting an increase in **weekly cases** - Guatemala (38,239 new cases, 59.5% increase), Belize (1,046 new cases, 29.1%), Panama (9,973 new cases, 9.4% increase), and Honduras (2,291 new cases, 7.6% increase). The remaining two countries/territories in the subregion observed a decline - Nicaragua (30 new cases, 3.2% decrease) and El Salvador (0 new cases, 100% decrease). The percent change in cases of El Salvador is a result of data artifact since no cases had been reported during EW 28.

For the same period, **weekly deaths** decreased by 3.6% relative to the previous week (**Figure 4**) with two out of the seven countries and territories reporting an increase – Honduras (7 deaths, 16.7% increase) and El Salvador (11 deaths, 10% increase). On the other hand, weekly deaths decreased in Panama and Guatemala during EW 28 by approximately 31.3% and 1.9% respectively, compared to the previous week.

Among three countries/territories with available data for **weekly COVID-19 hospitalizations** in this subregion, Honduras is the only country reporting an increase in weekly COVID-19 hospitalizations (76 hospitalizations, 2.7% increase), while the other two reported a decline – Panama (183 hospitalizations, -21.5% decrease) and Belize (2 hospitalizations, -75% decrease) during EW 28 compared to the previous week. Similarly, among two countries/territories with available data for **weekly COVID-19 ICU admissions**, Honduras reported a 33.3% increase in ICU admissions (n=4) while Panama reported a 14.7% (n=29 ICU admissions) decline during EW 28 compared to the previous week.

In Guatemala, although there were no substantial increases in weekly deaths observed for the past five weeks – an average of 102 deaths a week – COVID-19 cases have been increasing again since end of May 2022, reaching over 38,000 cases in the most recent week – the highest number ever since the onset of the pandemic. The current national hospital occupancy in the country is about 20% as of EW 27, 2022.⁴

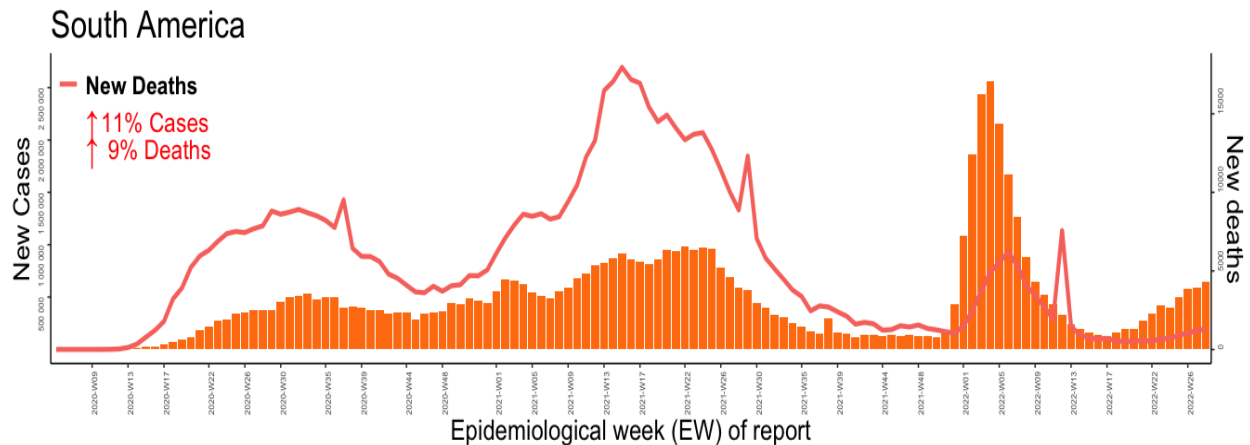
To date, the Omicron lineages BA.4 and BA.5 have been reported from four and three out of seven countries/territories in the subregion – Costa Rica, Panama, El Salvador (BA.4 only) and Guatemala.

⁴ Conferencia de Prensa Semanal | Recursos para Prensa - Gobierno de Guatemala. Accessed 19 July. Available at : <https://bit.ly/3yYVIAN>

South America

In South America, **COVID-19 cases** have increased for the fourth consecutive week, with a total of 650,453 new COVID-19 cases being reported during EW 28 – a 11% increase 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 28, 2022.**



During EW 28, eight out of ten countries/territories in the sub-region experienced an increase in cases (range: 3.4 - 104.3% increase) with the largest relative increases being observed in Peru (67,194 new cases, 104.3% increase), followed by Ecuador (11,636 new cases, 59.5% increase) and Argentina (39,656 new cases, 24.5% increase). The remaining two countries reported a decline in cases – Chile (54,699 new cases, 11.2% decrease) and Uruguay (2,438 new cases, 21.8% decrease) during EW 28 compared to the previous week.

For the same period, a total of 2,440 **COVID-19 deaths** were reported in South America – a 8.8% increase compared to the previous week. Similar to weekly cases, eight out of ten countries/territories reported an increase in weekly deaths (range: 6.8 - 150% increase), while two reported a decline – Peru (117 new deaths, 7.1% decrease) and Uruguay (14 new deaths, 36.4% decrease) during EW 28 relative to the previous week. The largest proportion of reported deaths during EW 28 were reported by Brazil (1,751 new deaths, 6.8% increase), followed by Chile (252 new deaths, 12.5% increase), and Colombia (163 new deaths, 23.5% increase).

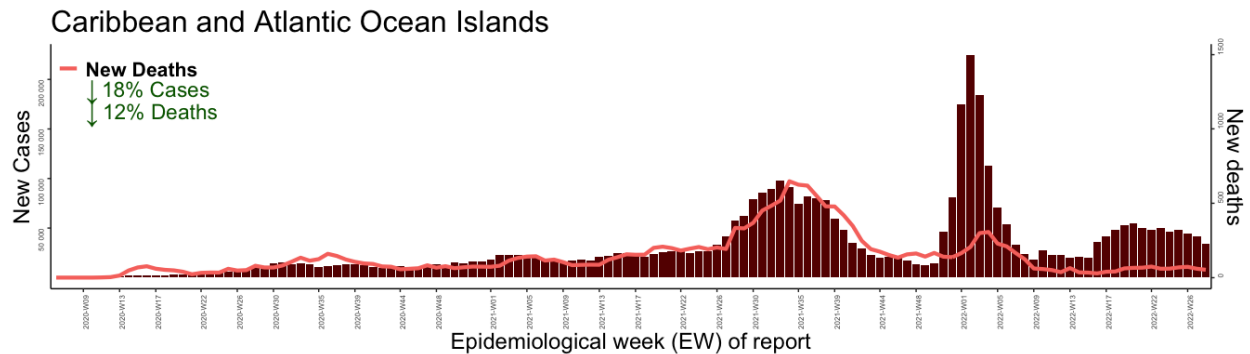
For the same period, among five countries/territories with available data for **COVID-19 weekly hospitalizations**, four reported an increase in their weekly COVID-19 hospitalizations (range: 4.5 – 36.4% increase), while one – Chile – reported an 8% decline as compared to the previous week. In terms of **COVID-19 ICU admissions** with available data, four out of seven countries/territories reported an increase (range: 2.3 – 88.5% increase), and two reported a decline – Colombia (378 ICU admissions, 4.1% decrease) and Ecuador (35 ICU admissions, 10.3% decrease).

Increases in severity trends during EW 28 were observed in Peru where there has been a sustained increase observed in hospitalizations and ICU admissions for the last eight and three consecutive weeks respectively, with a 9.3% and 88.5% increase reported during EW 28 relative to the previous week. COVID-19 cases in Peru have been increasing since end of April 2022 with the highest weekly cases observed since mid-February 2022 – a 104.3% increase during EW 28 compared to the previous week.

To date, Omicron lineages BA.4 and BA.5 have been reported from seven out of the 10 countries in the subregion – Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, and Peru.

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 28, 2022.



In the Caribbean and Atlantic Ocean Islands sub-region, **COVID-19 weekly cases** have decreased over the past four consecutive weeks, with an 17.7% decrease (34,482 new cases) observed during EW 28 compared to the previous week. Similarly, weekly deaths have decreased for the third consecutive week, with an 11.6% decrease observed during EW 28 compared to the previous week (**Figure 6**). At the national level, cases increased in 19 out of the 34 countries and territories in the subregion (range: 0.5% - 283.3%) while they declined in the 13 countries and territories (range: -100% - -2.1%).

During EW 28, a total of 99 **weekly deaths** were reported in the Caribbean and Atlantic Ocean Islands subregion – 11.6% decrease compared to the previous week. Of the total, seven countries/territories observed a relative increase in their weekly deaths in EW 28 compared to the previous week (range: 19.5 – 100% increase). Weekly deaths either remained the same in three countries/territories - Trinidad and Tobago (12 deaths), Barbados (1 death), United States Virgin Islands (1 death) - or declined in the remaining 10 countries and territories of the subregion (range: -100 – -28.6% decrease).

Among 21 countries and territories with available data, five reported an increase in their weekly **COVID-19 hospitalizations** (range: 7.3 – 233.3% increase). The largest relative increase in weekly hospitalizations were observed in United States Virgin Island (10 hospitalizations, 233.3% increase), followed by Curaçao (9 hospitalizations, 80% increase), and Cuba (268 hospitalizations, 44.1% increase). Among 16 countries/territories with data available for **COVID-19 ICU admissions**, three reported a relative increase – Curaçao (2 ICU admissions, 100% increase), Aruba (1 ICU admission, 100% increase), and Guyana (5 ICU admissions, 66.7% increase), while the remaining countries/territories either reported a decline (n=8) (range: -100 - -18.2% decrease) or remained the same (n=5).

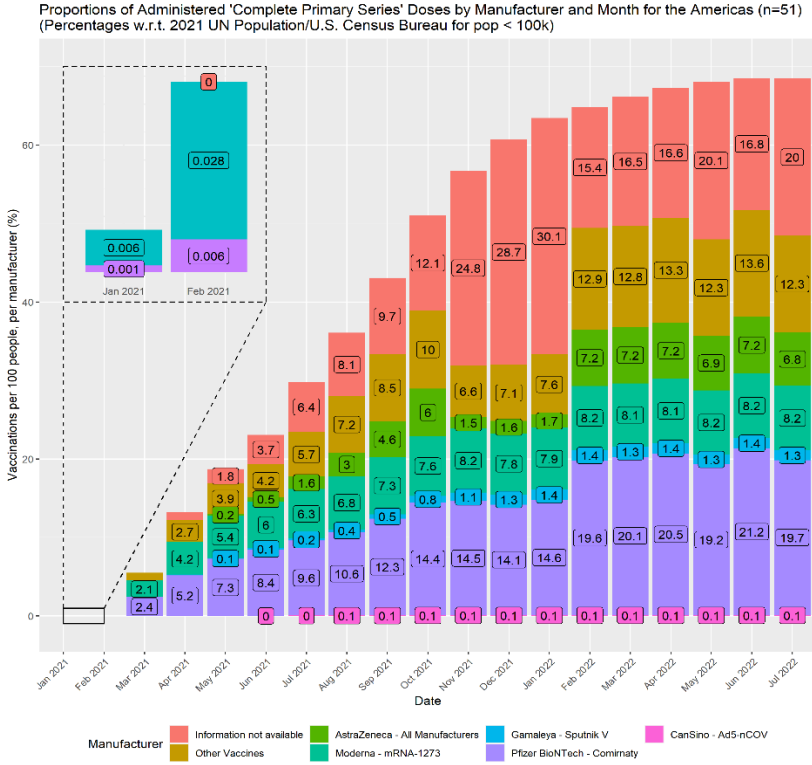
Significant increases in weekly cases in the subregion during EW 28 was observed in St. Eustatius (57 new cases, 283.3% increase), Saint Vincent and the Grenadines (114 new cases, 103.6% increase), British Virgin Islands (190 new cases, 100% increase), and Barbados (1,784 new cases, 59.7% increase).

For the same period, **notable increases in severity trends** were observed in Cuba where there has been a sustained increasing trend in weekly hospitalizations for the past five consecutive weeks (268 hospitalizations, 44.1% increase) along with an upward trend in cases for the past four consecutive weeks (365 cases, 31.3% increase) although there were no deaths reported since early-May 2022.

To date, the Omicron lineages BA.4 and BA.5 have been reported from eight and 12 out of 34 countries/territories in the subregion, respectively, including the territories of France, the Netherlands, the United Kingdom, and the United States of America. However, these trends should be interpreted with caution due to presence in differences in sequencing capacity and sampling strategies between countries/territories.

Immunization

Figure 7. The Proportions of Administered 'Complete Primary Series' Doses by COVID-19 vaccine manufacturer and by month. The region of the Americas (n=51). As of EW 28, 2022.



COVID-19 vaccinations disaggregated by manufacturer are shown in Figure 7, focusing specifically on complete primary series vaccinations. Based on the number of reported doses, the Pfizer BioNTech - Comirnaty vaccine has been the most used vaccine product for primary series completion since March 2021.

Of the 68.5% regional coverage achieved in June 2022, 21.2%* was achieved using the Pfizer BioNTech - Comirnaty vaccine, while the Gamaleya - Sputnik V, Moderna - mRNA-1273 and AstraZeneca - All Manufacturers** vaccines represented 1.4%, 8.2% and 7.2% of the regional coverage*, respectively. Vaccines included in the Other Vaccines category*** represented 13.6%* for the same month.

Use of the Gamaleya - Sputnik V vaccine dominated the months of January and February 2021, but its share of vaccination operations declined quickly compared to the use of vaccines from other manufacturers.

Use of AstraZeneca - All Manufacturers vaccines visibly declined between November 2021 and January 2022 due to export restrictions.

Behaviors in the proportions of vaccines used are determined by the number of doses applied in the Region, where countries with large populations (e.g. Brazil, United States of America) weigh the most.

* This percentage may vary, as a significant proportion of the reported coverage is not disaggregated by vaccine manufacturer (as noted in the "Information not available" category).

** Which includes both the 'AstraZeneca - Vaxzevria' and 'SII - Covishield' vaccines.

*** Including: 'Beijing CNBG - BBIBP-CorV', 'Janssen - Ad26.COV 2.5', 'Sinovac - CoronaVac', 'Gamaleya - Sputnik-Light', 'Finlay - Soberana-02', 'BioCubaFarma - Abdala' and 'Bharat - Covaxin'.

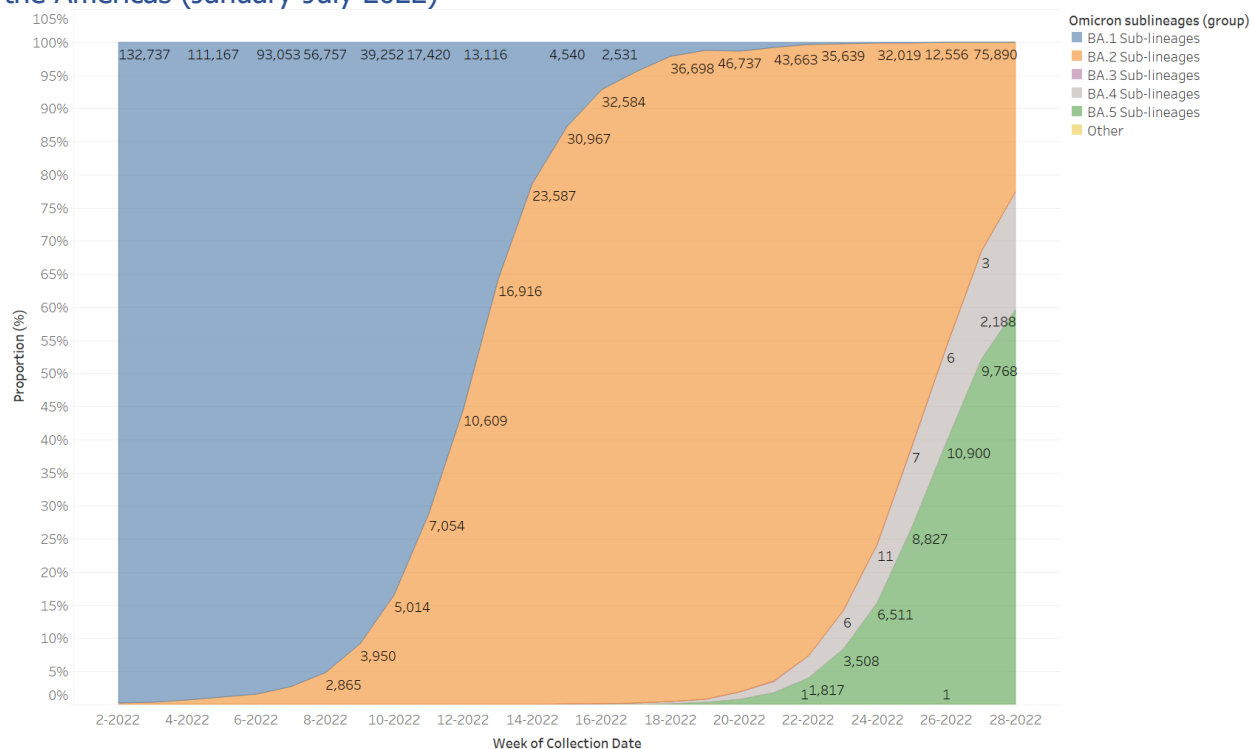
Genomic Surveillance

Through PAHO's Genomic Surveillance Regional Network and the work from the Member States, 390,298 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 18 July 2022.

After the introduction of the Omicron VOC in the Americas at the end of 2021, it has rapidly increased in prevalence and has been officially reported by 54 countries or territories. Omicron is now predominant in all PAHO countries and few other lineages are currently detected in the Region. Omicron comprises the BA.1 to BA.5 sublineages, which are also subdivided into additional sublineages. The cumulative proportion of sequences collected in the Americas from November 2021 to date are: 64.9% of BA.1 (and BA.1 sublineages), 30.9% of BA.2 (and sublineages), 0.01% of BA.3 (and sublineages), 1.3% of BA.4 (and BA.4 sublineages), and 2.8% BA.5 (and BA.5 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 few BA.1 sequences have been identified since week 22 (**Figure 8**). At the same time, the proportion of BA.4 and in particular BA.5 have been increasing throughout the Region. Notably, in the past four weeks, the BA.4 and BA.5 combined represent 51%, 55.3%, 30.5% and 59.5% of the characterized samples in North America, the Caribbean, Central America, and South America, respectively.

On the other hand, a new sublineage (subvariant) has been recently described in India (mid-May) and has been classified as BA.2.75 (according to the Pangolin algorithm). This sublineage has all the BA.2 mutations, plus 9 additional substitutions, most of them in the Spike protein. So far, around 82% of the BA.2.75 available sequences are from India, and sporadic cases have been reported in 12 additional countries, including USA and Canada at PAHO Region. Although the mutation profile is associated with increased capacity to evade immune response and transmission (as most of the sublineages of the Omicron VOC), no significant changes have been demonstrated regarding severity or virulence.

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



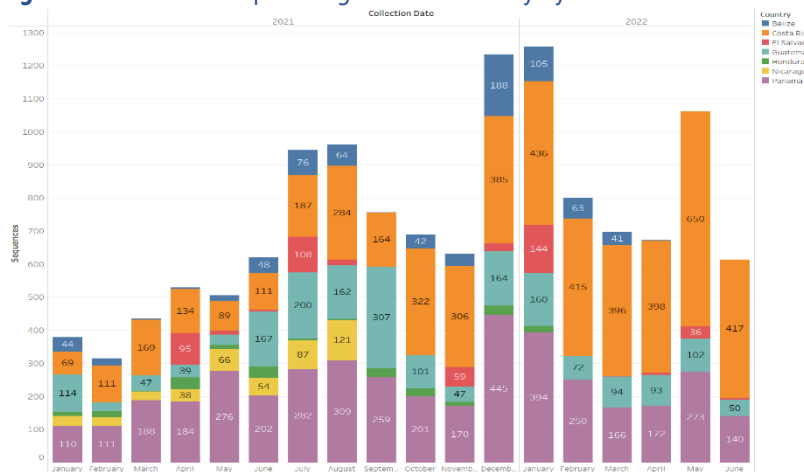
Source: GISAID

Spotlight: Sequencing and genomic surveillance in Central America

During the last 19 months (January 2021 to 9 July 2022), 13,107 whole genome sequences from Central American countries have been generated as part of the genomic surveillance systems (**Figure 9**). As in other subregions, Omicron is vastly predominant with no other “previously circulating” VOC/VOI detected in the past 12 weeks (**Figure 10**). Since Omicron’s first detection, BA.1 and BA.1 sublineages represent the majority (50.5%) of cumulative sequences, while BA.2 and BA.2 sublineages represent 39.6% of the cumulative sequences, and BA.3, BA.4, and BA.5 (with their respective sublineages) represent 0.4%, 2.1%, and 0.5% of cumulative sequences, respectively (**Figure 11**). However, BA.1 was progressively replaced by BA.2 in weeks 10 to 19, and the proportion of BA.4 and BA.5 have been increasing since week 19 (**Figure 12**). When focusing on the past four weeks (11 June to 9 July), BA.2 is the predominant sublineage (69.1%) while BA.4 and BA.5 account for 25% and 5.5% of the sequences, respectively. It is important to note that the majority of sequences for the 4-week period was contributed by Costa Rica.

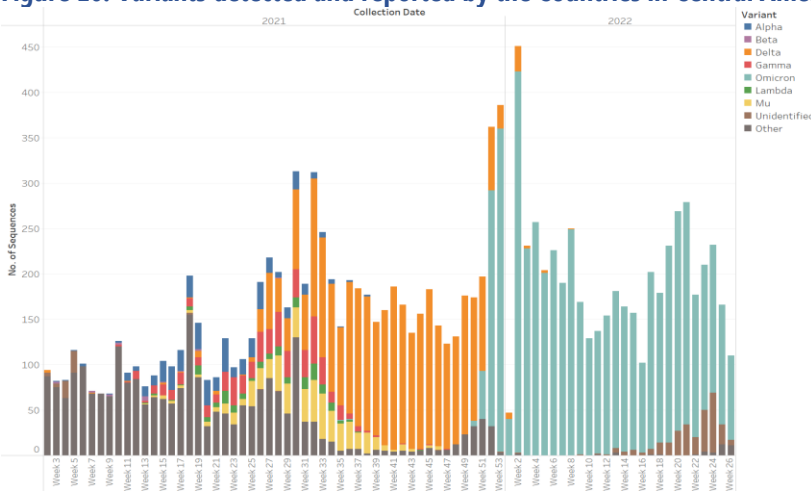
It is important that all countries at PAHO region continue the collection of representative samples for sequencing and to maintain COVID-19 appropriate genomic surveillance.

Figure 9. Number of sequences generated monthly by countries in Central America (January 2021-July 2022)



Source: GISAID

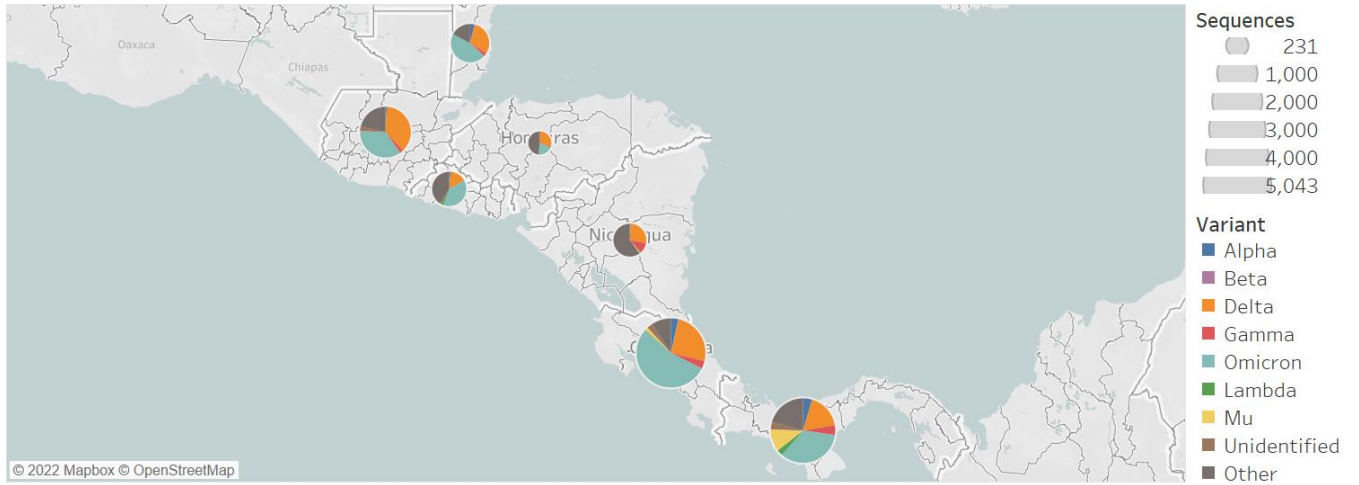
Figure 10. Variants detected and reported by the Countries in Central America (January 2021-July 2022)



Source: GISAID

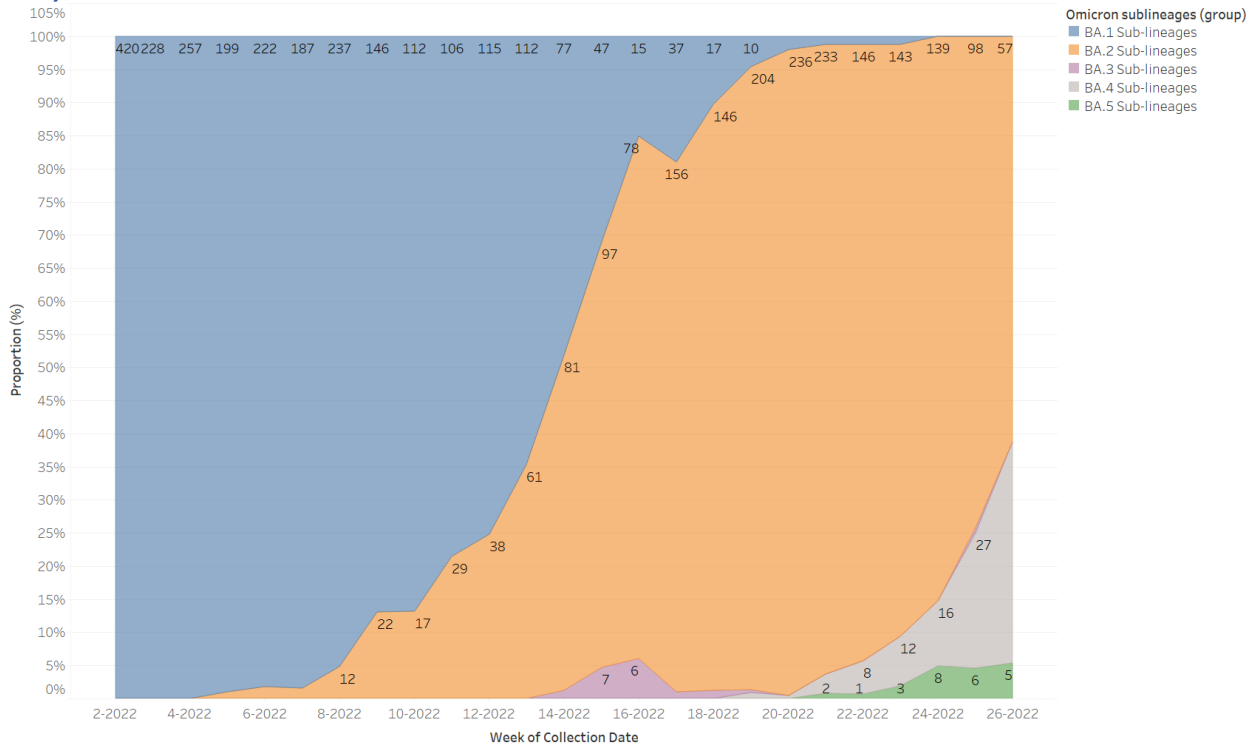
Country-specific data is available at: https://ais.paho.org/phis/viz/SARS_CoV2_variants_regional.asp

Figure 11. Distribution of VOC and VOI identified by the Countries in Central America (January 2021-July 2022)



Source: GISAID

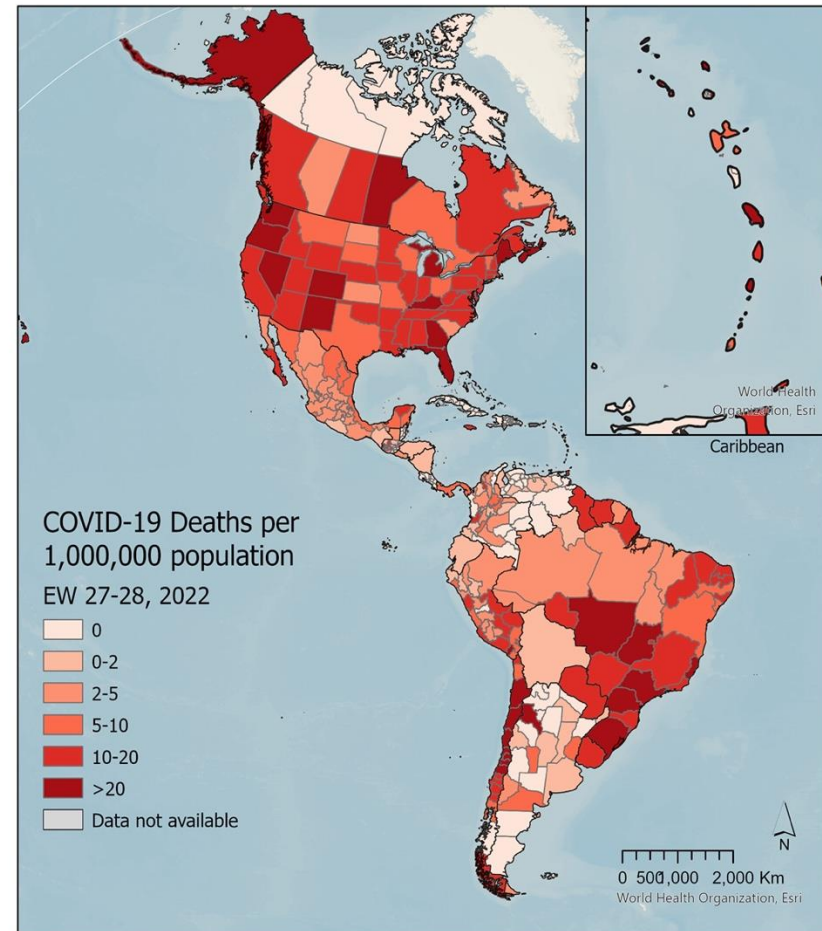
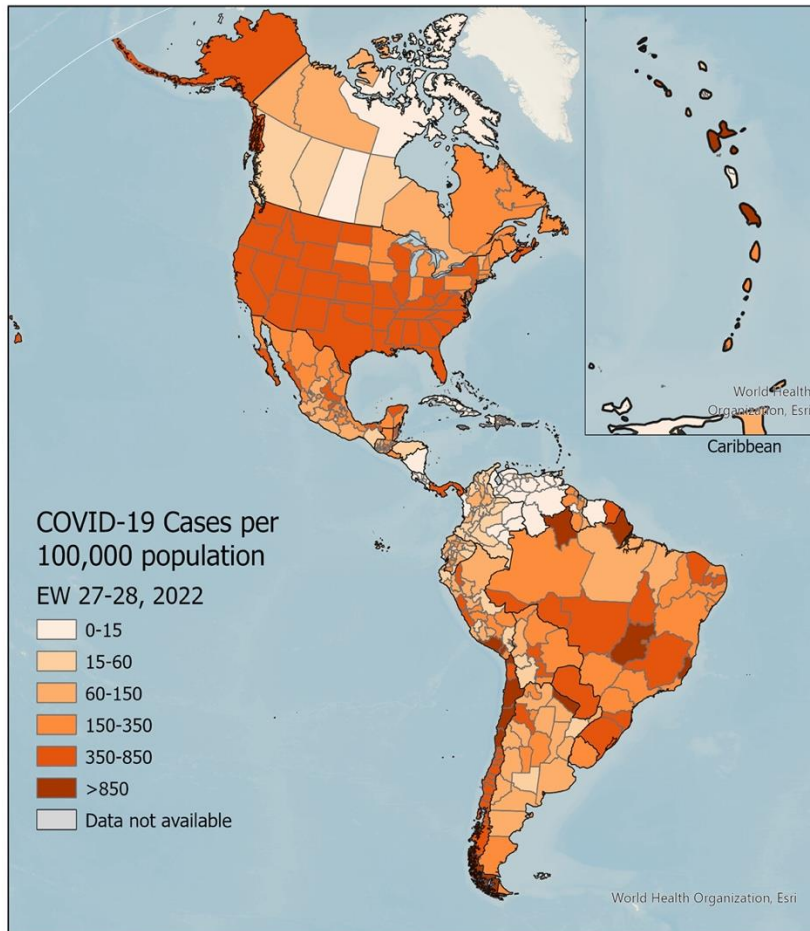
Figure 12. Distribution of VOC Omicron sublineages identified by the countries in Central America (January-July 2022)



Source: GISAID



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 27 and 28, 2022.



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The maps (**Annex 1**) represent the COVID-19 incidence rate per 100,00 population and the mortality rate from COVID-19 per 1 million population in the Region of the Americas reported in EW 27 and 28, 2022. Countries reporting highest incidence (>350 cases per 100,000 people) over the past two weeks were Chile, the United States of America, Brazil, French Guiana as well as several Caribbean Islands including: Aruba, Guadeloupe, Martinique, Barbados, and Puerto Rico. The highest mortality rates (>20 deaths per 1 million people) were observed in Canada, the United States of America, Brazil, Chile, Martinique, Saint Kitts and Nevis, the Bahamas, Saint Vincent and the Grenadines, Aruba, and United States Virgin Islands.

In North America, most states in the United States maintain incidence rates over 350 cases per 100,000 population and mortality rates over 10 deaths per million. In Canada, increases in both incidence and mortality were observed at the country-level compared to the previous two weeks. In Mexico, while incidence remain relatively stable compared to the previous two weeks, increases in mortality are observed in most states, with the states of Yucatan and Baja California Sur reporting between 10-20 deaths per million people, the highest rates in the country.

In Central America, incidence increased slightly compared to the previous two weeks while mortality remained relatively stable. Increases were most notable in Guatemala, with the Guatemala and Sacatepéquez departments reporting above 850 cases per 100,000 people.

In South America, increases in both incidence and mortality were noted compared to the previous two weeks, with largest increases in incidence observed in Paraguay, Argentina, Ecuador, and Venezuela. Argentina, Colombia, and Paraguay also reported increases in mortality rates compared to the previous two weeks.

Lastly, slight decreases in both incidence and mortality were observed in the Caribbean. At the country-level, notable increases in incidence were noted in British Virgin Islands, Saint Vincent and the Grenadines as well as Turks and Caicos. Some increases in mortality rates were observed in Aruba, Saint Kitts and Nevis as well as in Curaçao compared to the previous two weeks.