

Weekly COVID-19 Epidemiological Update — Region of the Americas

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Contents:

- Executive summary including global overview
- Regional trends incidence and severity
- Genomic Surveillance
- Immunization

Executive Summary

Globally, COVID-19 cases decreased for the first-time after six consecutive weeks of increasing trends since EW 50, 2021 (Figure 1). More than 19.8 million cases were reported in EW 5 representing a decrease of 14.6% compared to the previous week. The decrease in cases was observed across most WHO regions except for the Eastern Mediterranean Region where it increased by approximately 36% compared to the previous week.

The global weekly deaths continue to accelerate for the sixth consecutive week with a 13.4% increase reported during EW 5 (72,278 deaths) compared to EW 4 (63,503 deaths) (Figure 1).

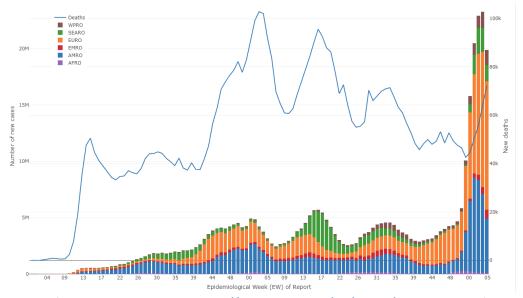
In the Region of the Americas, more than 4.8 million new cases including over 33,000 new deaths were reported in EW 5 representing a decrease of 31% in cases and an increase of 13% in deaths compared to EW 4.

The weekly cases decreased for the third consecutive week in the region of the Americas across all sub-regions, while regional deaths increased for the fifth consecutive week in all subregions except for the Caribbean and Atlantic Ocean Islands where it decreased by 29% relative to the previous week.

Overall, while weekly deaths remain elevated, the growth appears to have slowed down across all subregions compared to the previous weeks.

Weekly trends in hospitalizations and/or ICU admissions declined or remained similar to the previous week in many North American (Canada and USA) and Caribbean and Atlantic Ocean Islands. ICU admissions appear to be increasing, particularly among countries in South America and some larger Caribbean and Atlantic Ocean Islands like Jamacia and Cuba.

Figure 1: COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. As of EW 5 2022.

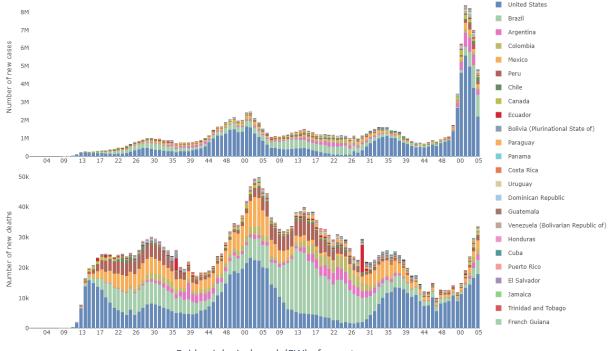


More information available at: https://www.paho.org/en/topics/coronavirus-infections/coronavirus-disease-covid-19-pandemic and https://shiny.pahobra.org/wdc/

Incidence

With approximately 4.8 million new cases reported in epidemiological week (EW) 5 - 31% less than the cases reported in EW 4 - weekly incidence continues to decline for the third consecutive week in the region of the Americas (**Figure 2**).

Figure 2: COVID-19 cases and deaths by epidemiological week (EW) of report and country/territory. Region of the Americas. As of EW 5 2022.



Epidemiological week (EW) of report

Source: Data published by Ministries of Health

The trend was observed across all four subregions with the largest declines observed in North America (- 41.5%) and the Caribbean and Atlantic Ocean Islands (- 45.3%) **Table 1**. Weekly cases decreased by approximately 18% each in Central and South America compared to the previous week.

While the countries and territories with the largest relative increase compared to the previous week included the Cayman Islands (3874% increase), Honduras (104%), Dominica (88%), and Chile (44%) — the increase in the Cayman Islands is a data artifact due to delays in reporting and the trend is actually consistent with the weekly numbers observed since EW 1, 2022.

The United States (2.2. million new cases), Brazil (1.2 million new cases), and Argentina (283K new cases) continued to report the highest number of weekly cases, but the overall trend has been on the decline in the United States and Argentina for the past three weeks. In Brazil there was a slight decline in EW 5 (- 3.3%) compared to the previous week — however weekly cases are still elevated in the context of the entire pandemic with the highest number of weekly cases ever reported in EW 4 of 2022.

Subnational trends by country and sub-region are presented in **Annex 1** accompanied by their corresponding maps.

Table 1: Weekly change (%) in cases and deaths between EW 4 and EW 5 by subregion. Region of the Americas

Subregion	Total of Cases	Total of Deaths	Cases - EW 4	Deaths - EW 4	Cases - EW 5	Deaths - EW 5	% Variation of Cases	% Variation of Deaths
Caribbean and Atlantic Ocean Islands	3,113,273	31,087	113,228	576	61,953	409	-45.30%	-29.00%
Central America	2,762,785	47,383	131,706	364	107,388	469	-18.50%	28.80%
North America	84,205,525	1,240,390	4,085,341	20,523	2,390,302	20,585	-41.50%	0.30%
South America	50,382,817	1,223,778	2,705,980	8,910	2,217,852	10,972	-18.00%	23.10%

Source: Data published by Ministries of Health

Severity

COVID-19 deaths increased for the fifth consecutive week in the region of the Americas with approximately 33,466 deaths reported in EW 5 - a 13% increase compared to the previous week (**Figure 1**). At the subregional level, weekly deaths either remained similar to the previous week (North America, 0.3% increase) or increased (Central America, 28.8% increase; South America 23% increase); except in the Caribbean and Atlantic Ocean Islands where deaths decreased by 29% compared to the previous week (**Table 1**).

At the national level, only one country/territory remains without any **COVID-19 death** reported to date in the region of the Americas – the Falkland Islands (Malvinas). Among the remaining 53 countries and territories, 23% (12/53) did not report a significant change from the previous week (0-5% change), 36% (19/53) reported an increase (range: 5.6% - 100%) and rest reported a decline (range: 9% - 100%) in deaths compared to the previous week.

Those reporting increasing trends in weekly deaths were primarily in the South American (excluding Colombia) and Central American (excluding Belize and Nicaragua) subregions. From the Caribbean and Atlantic Ocean Island subregions, only Barbados, Cuba, the Dominican Republic, and Saint Lucia reported relative increases in deaths compared to the previous week. In North America, Canada reported a decrease of nearly 25% while the United States and Mexico reported mild increases of approximately 4% and 8% respectively. compared to the previous week.

The United States (17K deaths), Brazil (4.6K), Mexico (2.9K), Argentina (1.7K), Colombia (1.7K), and Peru (1.5K) continues to report the highest number of weekly deaths in the region, and the trends in all six countries remain elevated and/or on an upward trajectory.

Among the 38 countries and territories with available data for **COVID-19 hospitalizations**, 12 reported an increase during EW 5 compared to the previous week (range: 3.4% - 100%) — primarily among countries and territories in the Caribbean and Atlantic Ocean Islands (7/12) followed by those in South America (3/12) and Central America (2/12) **Table 2**. While two countries/territories reported a relative increase in hospitalizations greater than 50% this week — Montserrat (100%) and Chile (52.5%) — compared to last week when only Paraguay reported such a large increase — in terms of absolute numbers, Montserrat only had one additional hospitalization this week (n=2) compared to the previous week (n=1).

Table 2: Weekly change (%) in hospitalizations between EW 4 and EW 5 by country/territory and corresponding vaccination coverage (per 100 persons). Region of the Americas. As of EW 5.

Country	Total Cases	Total Deaths	Hospit. EW 4	Hospit. EW 5	% Variation Hospit.	Complete vaccination schedule per 100 persons [1]
Montserrat	163	1	1	2	100.00%	29.6
Chile	2,405,672	40,060	2,136	3,258	52.50%	88.4
Costa Rica	721,971	7,641	711	860	21.00%	71.5
Barbados	48,658	286	92	111	20.70%	51.1
Venezuela	496,283	5,487	6,115	7,333	19.90%	49.3
Grenada	12,886	211	6	7	16.70%	32.7
Bermuda	10,926	118	16	18	12.50%	63.8
Paraguay	607,947	17,605	1,061	1,135	7.00%	43.2
Aruba	33,302	195	47	50	6.40%	74.5
Martinique	96,619	842	186	197	5.90%	37.0
Saint Lucia	21,691	341	48	50	4.20%	27.7
Panama	727,413	7,875	856	885	3.40%	65.3

Sources: Hospitalization data published by Ministries of Health and analyzed by PAHO/WHO Vaccination data collected by PAHO/WHO Immunization Unit

With regards to **COVID-19 ICU admissions**, among the 30 countries and territories with available data, ten reported a relative increase compared to the previous week (range: 2.4% - 34.5%) — primarily in South America (5/10), the Caribbean and the Atlantic Ocean Islands (4/10), and Central America (1/10) **Table 3**. Chile (34.5%), Uruguay (25%), Jamaica (22.2%), and Paraguay (17.3%) were among the countries and territories with the highest relative increase in ICU admissions this week compared to the previous. Among the 30 countries and territories reporting both indicators (hospitalizations and ICU admissions), 13 reported no substantial changes or declining trends for both compared to the previous week while four reported increasing trends (Chile, Costa Rica, Paraguay, and Saint Lucia).

Table 3: Weekly change (%) in COVID-19 ICU admissions between EW 4 and EW 5 by country/territory and corresponding vaccination coverage (per 100 persons). Region of the Americas. As of EW 5.

Country	Total Cases	Total Deaths	ICU - EW 4	ICU - EW 5	% Variation I CU	Complete vaccination schedule per 100 persons [1]
Chile	2,405,672	40,060	426	573	34.50%	88.44
Uruguay	726,071	6,640	132	165	25.00%	77.30
Jamaica	126,293	2,698	27	33	22.20%	21.03
Paraguay	607,947	17,605	179	210	17.30%	43.18
Saint Lucia	21,691	341	6	7	16.70%	27.70
Cuba	1,054,909	8,443	63	69	9.50%	86.92
Costa Rica	721,971	7,641	124	135	8.90%	71.54
Peru	3,363,489	206,984	1,273	1,380	8.40%	69.69
Suriname	75,531	1,283	13	14	7.70%	39.41
Colombia	5,966,796	135,757	2,667	2,732	2.40%	62.15

Hospitalization data published by Ministries of Health and analyzed by PAHO/WHO

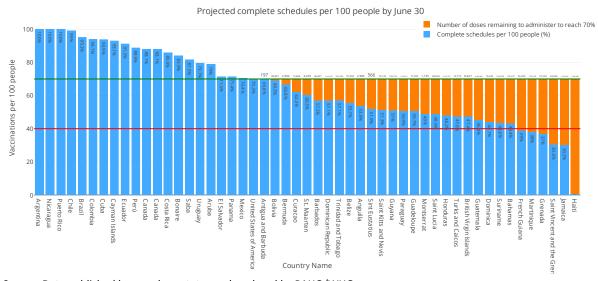
Vaccination data collected by PAHO/WHO Immunization Unit

[1] Number of people who received the last recommended dose of any vaccine or completed their schedule. This includes the second dose if the schedule is a two-dose schedule and the single dose in a single dose schedule

Immunization

According to a forecasting analysis by the PAHO immunization team, 21 countries will meet the 70% goal proposed by WHO for 30 June 2022 (Figure 3). Also, approximately 20 million people* will still need to complete their vaccination schedule if all remaining countries are to meet this goal. As we approach 30 June deadline, the model will have an increasingly accurate fit, with narrower error margins.

Figure 3: Projected COVID-19 vaccination coverage by 30 June 2022 based on past vaccination distribution data. Region of the Americas.



Source: Data published by members states and analyzed by PAHO/WHO

To forecast a country's vaccination rate based on past vaccination distribution data, the PAHO Immunization team uses a time series analysis to model trend behaviors of COVID-19 vaccination coverage. The team applies the Exponential Smoothing model proposed by Holt and Winters which allows us to assign greater weight to the more recent data points.

Genomic Surveillance

Through the PAHO Genomic Surveillance Regional Network and the work from the Member States, approximately 261,849 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 January 2021.

To date, 55 countries and territories in the Americas have detected at least one of the five variants of concern (Alpha, Beta, Gamma, Delta and Omicron). Up to December 2021, Delta variant was predominant in all of the Americas Countries (**Figure 4**). Nevertheless, after the emergence of the Omicron VOC, it has rapidly increased and has been officially reported by 48 Countries or Territories. Omicron is now predominant in all PAHO subregions (**Figure 4**).

^{*}Based on UN population projections for 2021 and US Census Bureau projections for countries with less than 100,000 inhabitants.

^{*} PAHO has developed a dashboard on SARS-CoV-2 Variants in the Region of the Americas available at: https://ais.paho.org/phip/viz/SARS_CoV2 variants regional.asp. The dashboard, which is publicly available and automatically updated, presents in a friendly and flexible way the geographical and temporal distribution of variants in the Region.

Figure 4: Prevalence of SARS-COV-2 variants by subregion. Region of the Americas. December 2021 — January 2022.

Source: GISAID

Currently, four different sub lineages of Omicron have been described: BA.1, BA.1.1, BA.2, and BA.3. Globally, BA.1 is the predominant sub lineage. Furthermore, among SARS-CoV-2 samples sequenced between 31 December 2021 and 6 February 2022 in the Region of the Americas, the BA.1 and BA1.1 sub lineages have been identified in more than 98% of samples from North America and more than 97% of samples from South America and the Caribbean (**Figure 5**).

Prevelance of Omicron sublineages by subregion, Region of the Americas, Dec 2021 - Jan 2022 0.03% % of Omicron Sequences 5796 6796 4696 096 48% 0% 4396 48% 1% 3396 319 75% 7796 7096 36% 2396 2596 56% 4496 4196 2796 8196 7496 3096 196 Dec 5, 21 Dec 12, 21 Dec 19, 21 Jan 9, 22 Jan 16, 22 Jan 23, 22

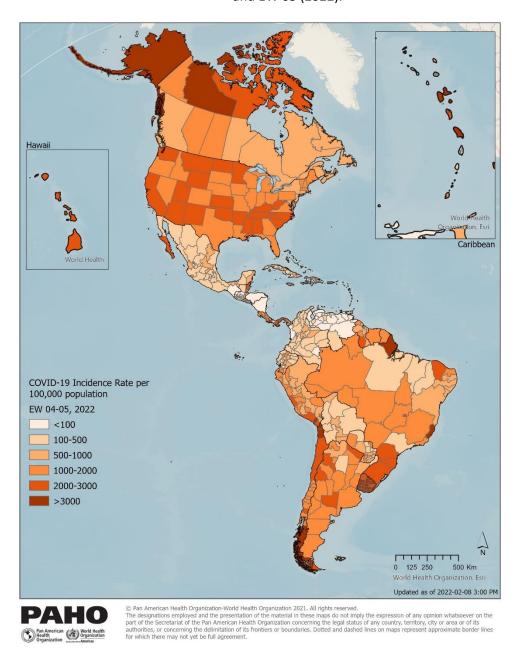
Figure 5: Prevalence Omicron sub lineages by subregion. Region of the Americas. December 2021 – January 2022

Source: GISAID

The BA.2 sub lineage has been identified mainly in Africa (27%) In Asia (19%) and Europe (14%). In the Americas, BA.2 has been officially reported in USA, Mexico, and Argentina and Brazil. So far, this sub lineage represents less than 0.5% of samples reported to the global database, GISAID.

Annex 1

Map 1: COVID-19 incidence per 100,000 population in the Region of the Americas reported in EW 04 and EW 05 (2022).

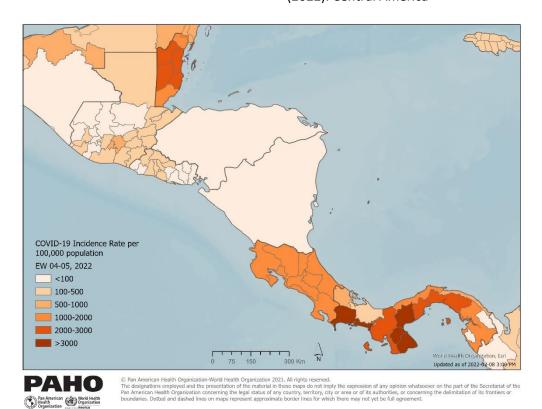


The maps represent the incidence rate of COVID-19 cases per 100,000 population in the Region of the Americas reported in EW 04 and EW 05, 2022. Countries reporting highest COVID-19 incidence for the past two weeks include Canada, Brazil, Uruguay, Chile, Panama, as well as several Caribbean Islands listed below.

In **North America**, a decrease in incidence was observed compared to the previous two weeks in the United States and Mexico. Most U.S. states reported below 3000 cases per 100,000 population, and in Mexico most states reported below 1000 cases per 100,000 except for Baja California Sur (reported between 2000-3000 cases per 100,000). In Canada, incidence rates remained stable compared to the previous two weeks.

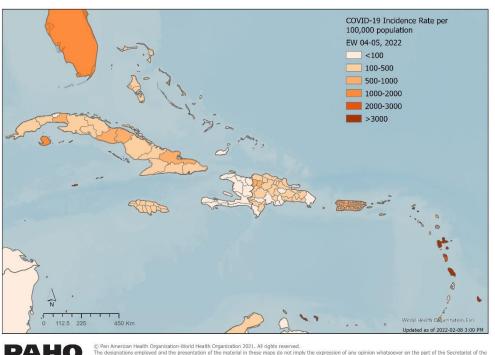
In **South America**, a decrease in incidence was noted in Colombia, Bolivia, Argentina, Peru, and Uruguay compared to the previous two weeks, while incidence rates in many Brazilian states continue to be on the rise. Highest rates in Brazil were found in Amapa and Espirito Santo (>3000 cases per 100,000 people).

Map 2: COVID-19 incidence per 100,000 population in the Region of the Americas reported in EW 04 and EW 05 (2022). Central America



In Central America, incidence decreased in Belize, Guatemala and Panama compared to the previous two weeks. In Panama, the provinces of Chiquiri, Los Santos, Herrera, and Coclé reported the highest rates in the sub-region (over 3000 cases per 100,000 people), and the remaining of Panama's west coast provinces reported between 2000 and 3000 cases per 100,000. In Belize, all districts except Corozal and Toledo reported between 2000-3000 cases per 100,000 people.

Map 3: COVID-19 incidence per 100,000 population in the Region of the Americas reported in EW 04 and EW 05 (2022). Caribbean and Atlantic Ocean Islands.



PAHO
Pan American

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In the **Caribbean**, the decreasing trend in incidence in Jamaica, Dominican Republic, and Puerto Rico continued for the past two weeks. Highest incidence rates (above 3000 cases per 100,000 people) were reported in Guadeloupe, Martinique, Dominica, Curacao, Barbados, the Cayman Islands, as well as Bonaire, Saba, and Sint Eastatius. In the Guiana shield, a decrease in incidence was observed in all regions except for regions 1 and 8, as well as in French Guiana. An increase in incidence was perceived in region 9 in Guyana (now reporting between 2000 and 3000 cases per 100,000 people).