

## Weekly COVID-19 Epidemiological Update – Region of the Americas

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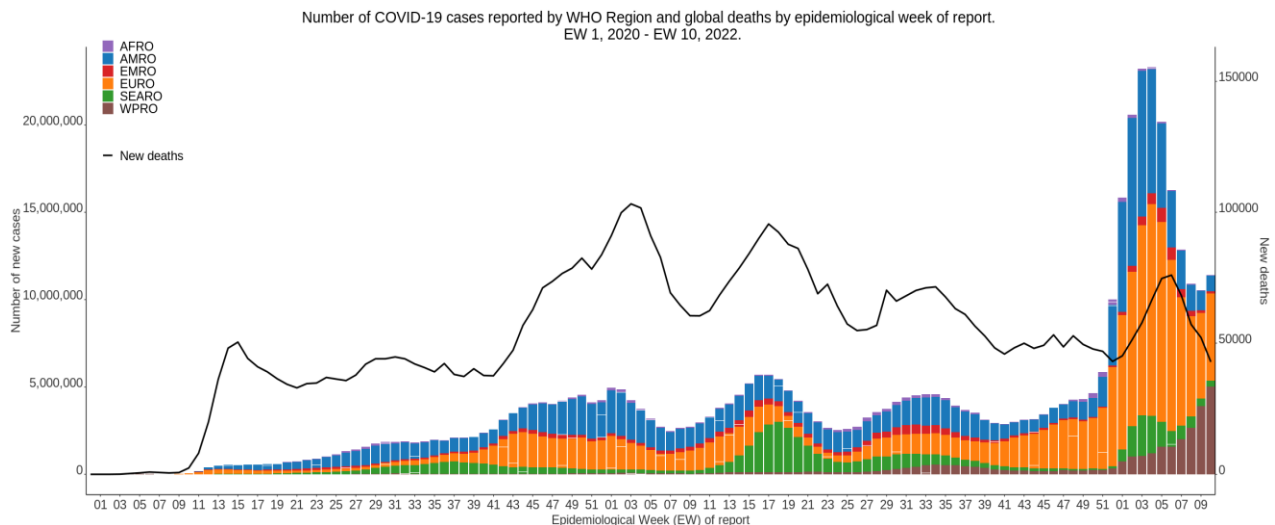
### Executive Summary

Since the onset of the pandemic in 2020 and up to 15 March 2022, a cumulative total of over 456 million COVID-19 cases including more than 6 million deaths were reported from all six WHO regions. Overall, trends during epidemiological week (EW) 10 (March 6 to 12) slightly increased in terms of cases where globally over 11.4 million cases were reported (8% increase). Deaths however continue declining globally, with 42,523 deaths reported during EW10 (19% decline). **Figure 1.** Within the WHO regions, cases increased in Western Pacific Region (WPRO) (28.9%), Africa region (AFRO) (12.3%) and Europe region (EURO) (1.9%) while they decline in all the others (range: -23.7% to -19%). In terms of deaths, all WHO regions reported declines ranging from -48.8% in Eastern Mediterranean region (EMRO) to -14.8% in Southeast Asia region (SEARO) to the exception of WPRO, were deaths increased by 12.4%.

**In the Region of the Americas**, approximately 149 million cases of COVID-19 including 2.6 million deaths were reported as of March 15, 2022. COVID-19 cases in the region continued to decline for the eighth consecutive week with more 901 thousand new cases reported in EW 10 – a decline of 19% compared to EW 9. Similarly, the downward trajectory of weekly deaths continued for a fifth consecutive week with 15,523 new deaths reported during EW 10 – a 18.4% decline.

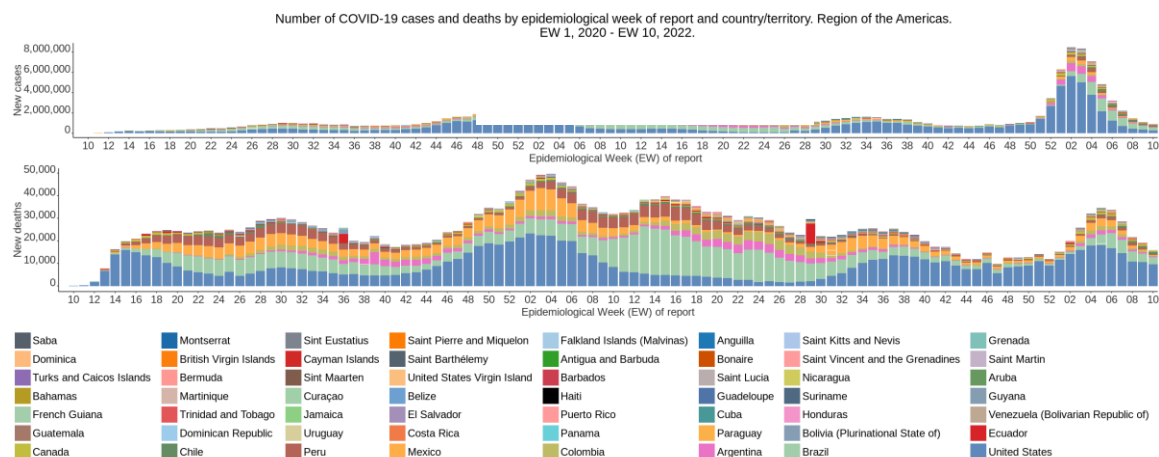
Trends for COVID-19 **hospitalizations** and/or **ICU admissions** are also generally declining across the region.

**Figure 1:** COVID-19 cases and deaths by epidemiological week (EW) of report and WHO region. As of EW 10, 2022.



## Region of the Americas – an overview

**Weekly COVID-19 cases** declined for eighth consecutive week in 2022 with over 901 thousand new cases reported in EW 10 – a 19% decrease compared to the previous week (**Figure 2**). The decreasing trend in cases was observed in all sub-regions to the exception of the Caribbean and Atlantic Ocean Islands, where cases increased by 56.6% (**Table 1**).



**Figure 2:** COVID-19 cases and deaths by epidemiological week (EW) of report and country/territory. Region of the Americas. As of EW 10 2022.

Source: Data published by Ministries of Health

**Weekly COVID-19 deaths** followed a similar downward trajectory for the fifth consecutive week, with 15,523 new deaths reported during EW 10 – a 18.4% decline. At subregional level, declines in deaths were observed in all four subregions, ranging from -6.9% in the Caribbean and Atlantic Ocean Islands to -27.9% in Central America (**Table 1**).

**Table 1:** Weekly change (%) in cases and deaths between EW 9 and EW 10 by subregion. Region of the Americas

Subregion	Total of Cases	Total of Deaths	Cases - EW9	Deaths - EW9	Cases - EW10	Deaths - EW10	% Variation of Cases	% Variation of Deaths
North America	87,760,272	1,319,067	400,970	11,556	306,902	9,747	-23.50%	-15.70%
Central America	3,031,340	49,252	42,622	337	26,554	243	-37.70%	-27.90%
South America	55,019,380	1,264,880	650,882	7,013	539,410	5,425	-17.10%	-22.60%
Caribbean and Atlantic Ocean Islands	3,228,497	32,234	18,156	116	28,432	108	56.60%	-6.90%

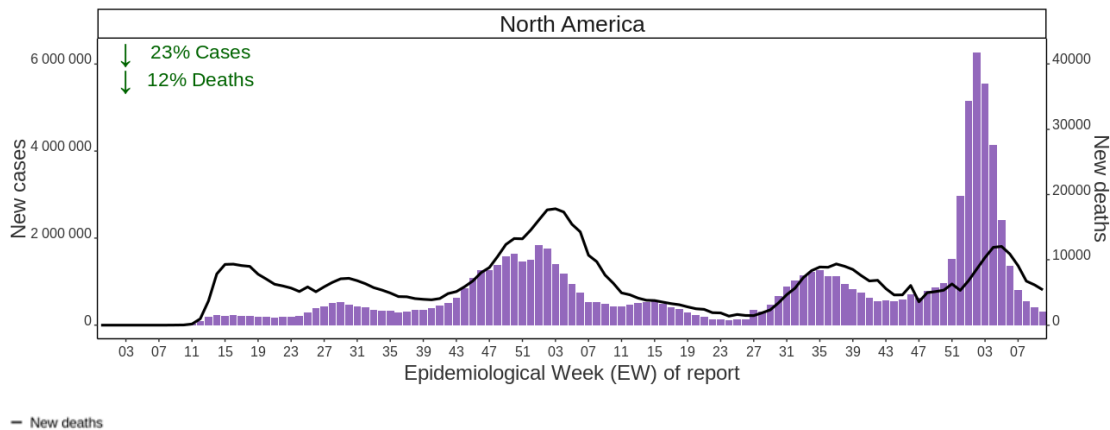
Source: Data published by Ministries of Health

Out of the 35 countries and territories with available data on **hospitalizations**, only 2 showed an increase from EW9 to EW10, those being Bermuda (71.5%) and Panama (2.1%). In terms of ICU bed occupancy, all countries and territories where data is available have shown declines (range: 0% to -100%).

## North America

All three countries reported declines in the monitored indicators (**Figure 3**). From EW9 to EW10, the decline in **cases** ranges from -3.7% in Canada to -39.2% in Mexico. **Deaths** follow the same trends, with variations from -113.7% in Canada to -9.2% in the United States of America.

**Figure 3:** COVID-19 cases and deaths by epidemiological week (EW). **North America.** Region of the Americas. EW 5, 2020 – EW 10 2021.

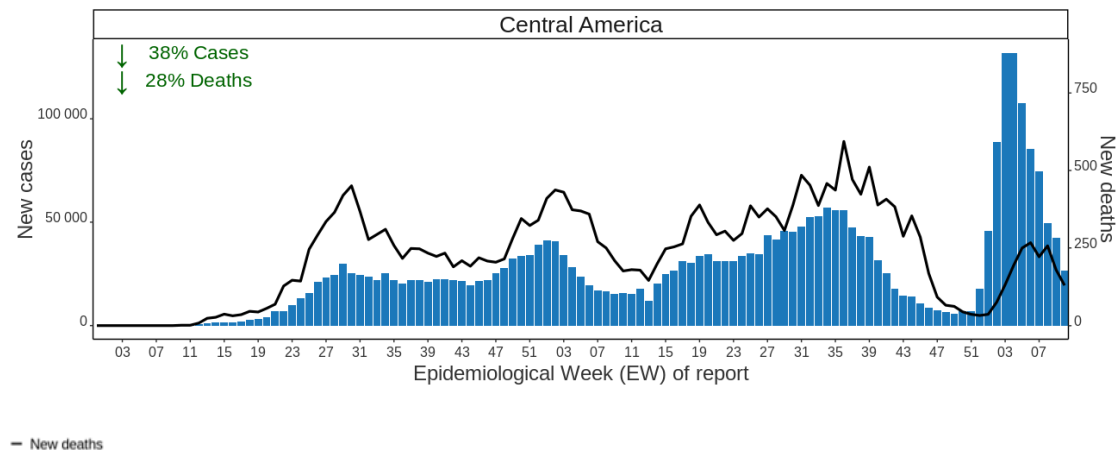


**Hospitalization** declined by -13.3% and -28.5% in Canada and the United States respectively, while **ICU bed occupancy** decreased by 12% and 29.2% respectively.

## Central America

Between EW9 and EW10 all countries in the Central America subregion reported declines in **cases** (range: -5.2% to -100%) and **deaths** (range: -6% to -62%). (**Figure 4**). Panama reported a slight increase in **hospitalizations** (2.1% or 195 hospitalized cases in EW10) while **ICU bed occupancy** declined by -10.7% week on week.

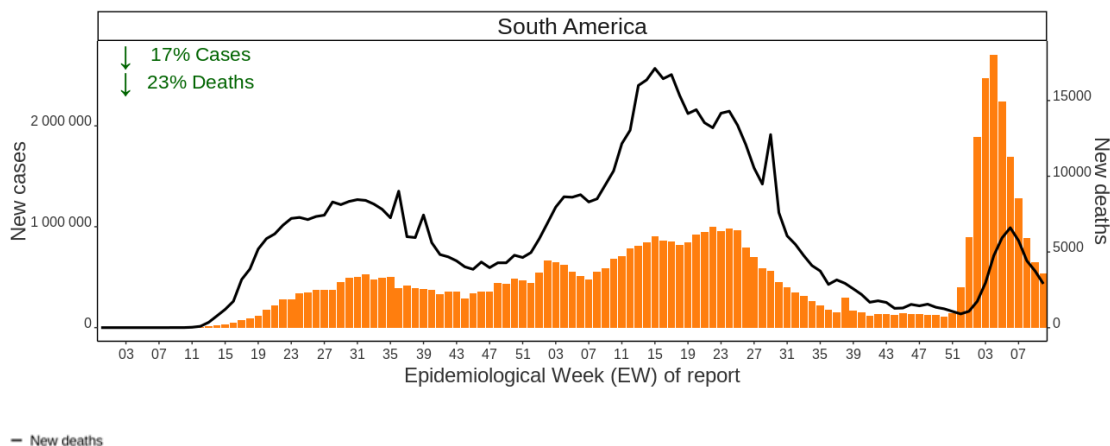
**Figure 4:** COVID-19 cases and deaths by epidemiological week (EW). **Central America.** Region of the Americas. EW 5, 2020 – EW 10 2021.



## South America

To the exception of Bolivia, all other countries in this subregion reported declines in both **cases** and **deaths** from EW9 to EW10 (**Figure 1 and Table 2**). Bolivia's increase was however moderate (5%, producing more than 2.8 thousand cases in EW10). Chile reported declines of -22.6% in cases and -6.2% in deaths.

**Figure 5:** COVID-19 cases and deaths by epidemiological week (EW). **South America**. Region of the Americas. EW 5, 2020 – EW 10 2021.



**Hospitalization** declines for those countries where data is available, ranged from -11.1% in Chile to -100% in Paraguay. Similarly, where **ICU bed occupancy** information is available, reductions ranged from -4.1% in Chile to -100% in Paraguay.

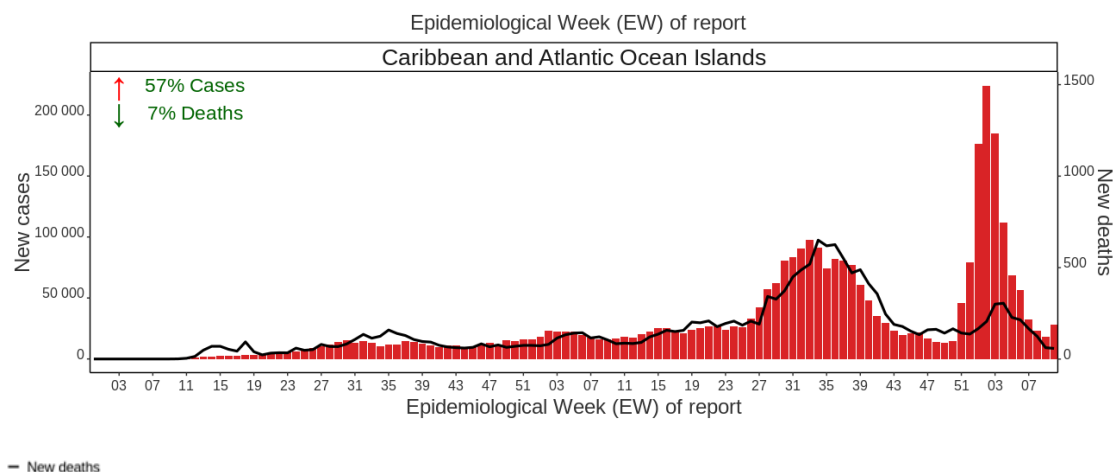
**Table 2:** Weekly change (%) in cases and deaths between EW 9 and EW 10 in South American countries. Region of the Americas

Country	Cases - EW9	Deaths - EW9	Cases - EW10	Deaths - EW10	% Variation of Cases	% Variation of Deaths
Bolivia (Plurinational State of)	2,700	49	2,834	18	5.00%	-63.30%
Argentina	40,760	660	35,868	414	-12.00%	-37.30%
Ecuador	9,168	85	7,811	32	-14.80%	-62.40%
Brazil	395,152	3,865	331,315	3,301	-16.20%	-14.60%
Chile	152,705	885	118,141	830	-22.60%	-6.20%
Uruguay	15,895	82	10,912	52	-31.30%	-36.60%
Paraguay	3,529	121	2,313	68	-34.50%	-43.80%
Peru	15,862	766	10,183	428	-35.80%	-44.10%
Venezuela (Bolivarian Republic of)	2,809	17	1,763	11	-37.20%	-35.30%
Colombia	10,710	483	6,231	271	-41.80%	-43.90%

## Caribbean and Atlantic Ocean Islands

In this subregion, although **cases** had been declining for the past 7 week, on EW10 the subregion saw an increase (**Figure 6**). Twelve out of the 31 countries and territories showed increases in **cases** from EW9 to EW10 (**Table 3**).

**Figure 6:** COVID-19 cases and deaths by epidemiological week (EW). **Caribbean and Atlantic Ocean Islands.** Region of the Americas. EW 5, 2020 – EW 10 2021.



Saint Pierre and Miquelon produced 52 cases in EW10, compared to 8 in EW9, representing an increase of 550% week on week. Martinique follows with a 368% increase, generating more than 15 thousand cases during EW10, and United States Virgin Islands with a 319% increase and 130 cases in EW10. All other countries and territories reported declines ranging from -2% in Barbados to -100% in the British Virgin Islands.

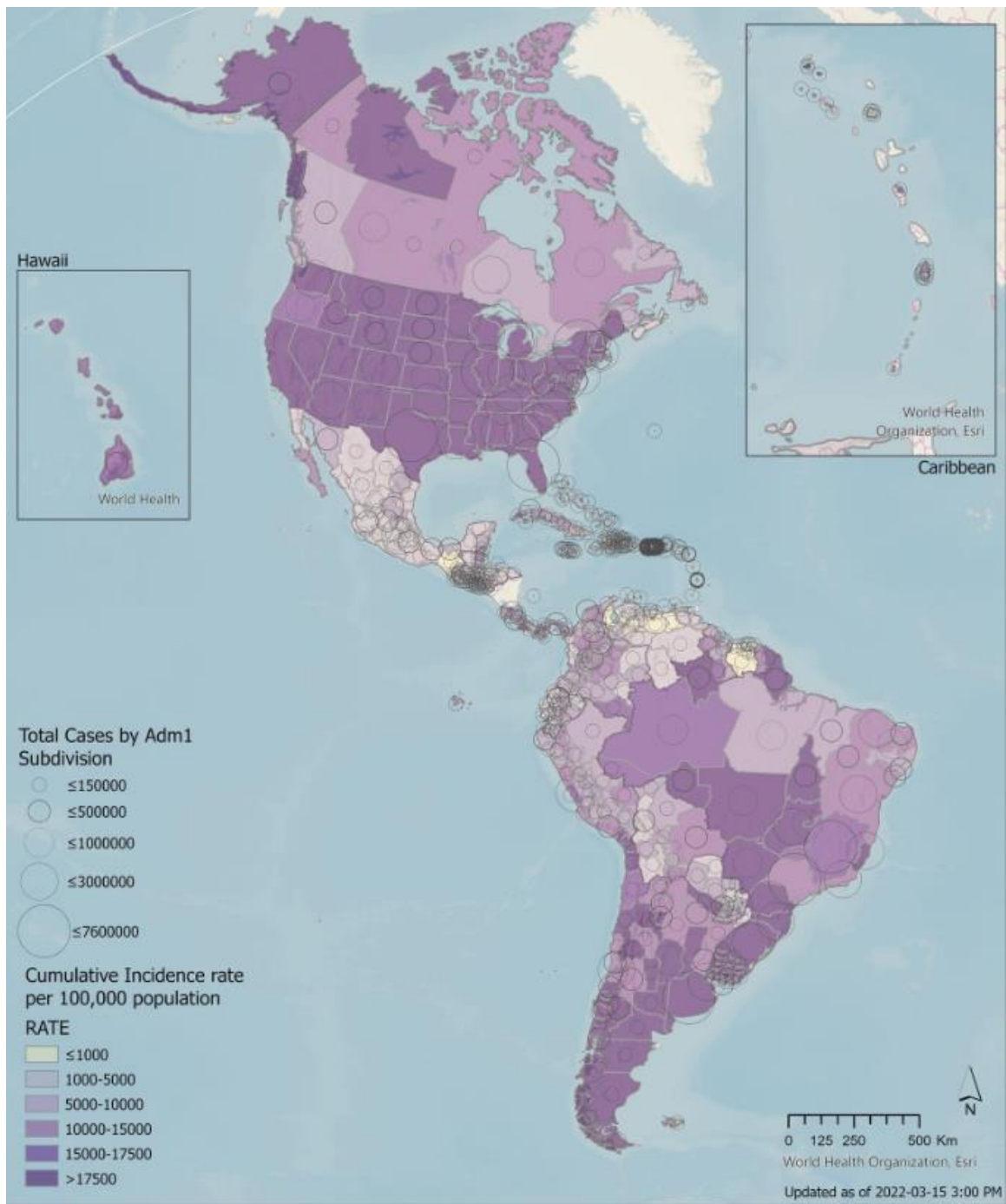
**Table 3:** Weekly change (%) in cases between EW 9 and EW 10 in selected Caribbean and Atlantic Ocean Islands. Region of the Americas.

Country	Total of Cases	Total of Deaths	Cases - EW9	Deaths - EW9	Cases - EW10	Deaths - EW10	% Variation of Cases
Saint Pierre and Miquelon	1,055	1	8	0	52	0	550.00%
Martinique	132,756	907	3,216	1	15,072	12	368.70%
United States Virgin Island	15,556	109	31	0	130	0	319.40%
Saint Barthélemy	3,763	4	15	0	37	0	146.70%
Montserrat	166	2	1	0	2	0	100.00%
Aruba	33,732	212	29	0	48	1	65.50%
Bermuda	11,850	124	144	0	216	1	50.00%
Saint Martin	9,908	44	28	0	38	0	35.70%
Guadeloupe	128,353	924	1,728	1	2,097	5	21.40%
Dominica	11,529	62	232	4	281	1	21.10%
Saint Lucia	22,847	365	84	2	100	5	19.00%
Cuba	1,076,785	8,503	3,717	5	3,755	4	1.00%

In terms of **deaths**, only 5 countries reported increases. Martinique leads the % variation with a 100% increase, followed by Guadeloupe (400%), Saint Lucia (150%), Barbados (133%) and Jamaica (35.7%).

To the exception of Bermuda, where **hospitalization** increased by 71.4%, all other countries and territories where data is available for hospitalization and **ICU bed occupancy**, these indicators are declining.

**Map 1:** Cumulative incidence per 100,000 population.

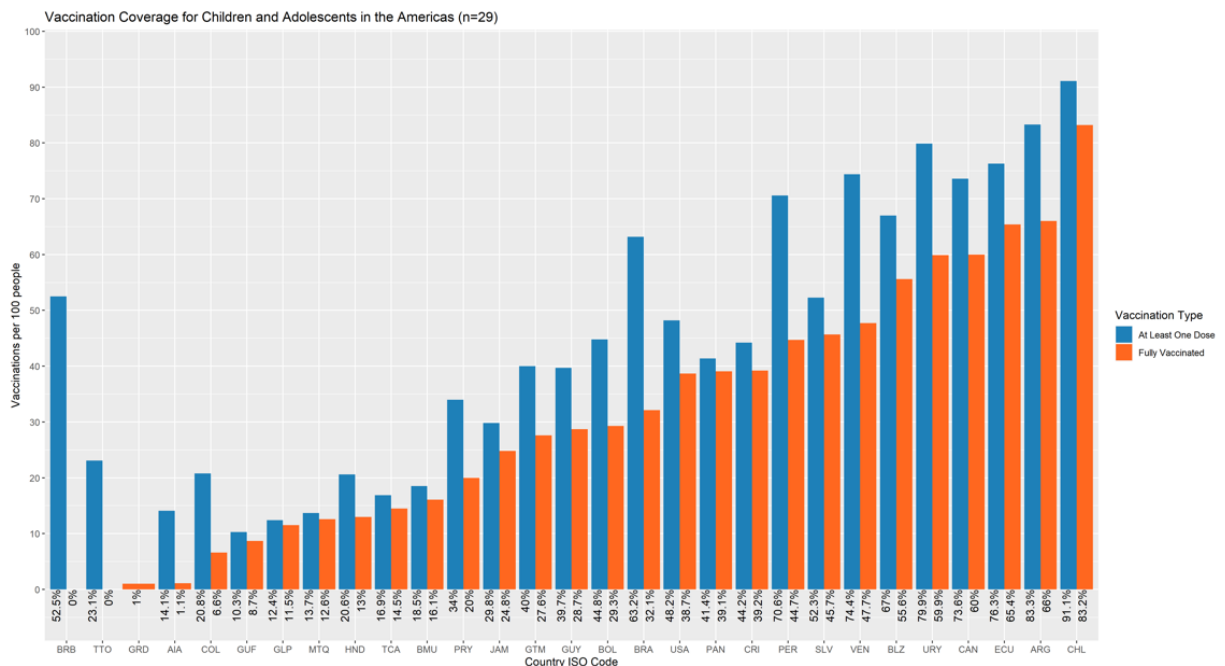


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## Immunization

Vaccination for children and adolescents in the Americas is moving forward (**Figure 7**). Each reporting country is currently vaccinating distinct age groups (i.e., some countries are vaccinating children aged 12-17 years, while others are vaccinating children aged 5-17 years). The coverage is calculated using a country-specific denominator\*, which takes into account the subgroup\*\* and age range currently being vaccinated in each country. Current advancements show that, at present, only Chile has completely vaccinated 70% of its target underage population, while nine countries/territories have reached 40% coverage for minors. It is important to remember vaccination for minors began later compared to the adult population and at different dates for each country.

**Figure 7: Vaccination coverage for children and adolescents in the Americas**



\* Coverage percentages are based on UN Population Estimates for 2021 except for countries/territories with fewer than 100,000 inhabitants. For those countries, the reference population is taken from the US Census Bureau estimates database.

\*\* Mexico is currently vaccinating only minors with comorbidities, while all other reporting countries are vaccinating all persons within their selected age range.

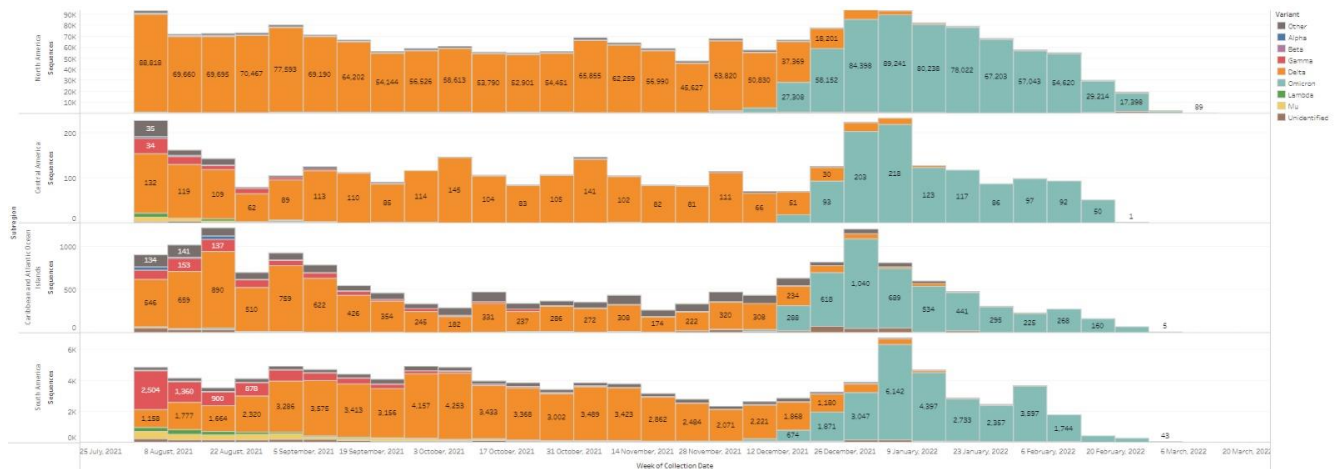
## Genomic Surveillance

Through PAHO's Genomic Surveillance Regional Network and the work from the Member States, more than 296,729 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 15 March 2022.

After the introduction of the Omicron VOC in the Americas by the end of December 2021, it has rapidly increased in prevalence and has been officially reported by 50 Countries or Territories. Omicron is now predominant in all PAHO countries with the BA.1 and BA.1.1 sub lineages identified in more than 97% of the samples from South

America (94% in North America) characterized between February 11 and March 11, 2022, less than 2,4% of BA.2 (5.6% in North America), and no BA.3 detected so far (**Figure 8**).

**Figure 8:** Percentage of variants sequenced per subregion.



### Spotlight: Recombination event demonstrated in Europe

A recombination event between the VOC Delta and the VOC Omicron has been recently confirmed in Europe. First described in France, the sequence of the virus shows mostly genes from Delta (AY.4 sublineage) with most of the Spike protein gene corresponding to Omicron (BA.1 sublineage)<sup>1</sup>. Similar viruses have been demonstrated in clusters notified by Denmark and The Netherlands. It is still not clear if these viruses come from a common ancestor or if they correspond to different recombination events. So far, only around 30 sequences have been confirmed between January and February 2022.

Recombination is a natural phenomenon already described in different viruses as a mutation mechanism to exchange genomic material (should not be confused with the reassortment mechanism observed in segmented genomes). A recombination event might occur when two (2) viruses from the same species but genetically different, simultaneously infect the same cell in the same individual. Therefore, the current recombination event most likely occurred by the end of 2021 (mid-November-December) when the incidence of both Delta and Omicron was high in France, increasing the chances for a co-infection.

Currently, there is no evidence of increasing transmission patterns or changes in clinical outcomes due to this recombinant virus. Although no specific threat to Public Health is expected, genomic surveillance should be maintained and enhanced to early detect any change in the behavior of the virus.

Phylogenetic inference showing evidence of Delta (AY.4) and Omicron (BA.1) recombination in purple (**Figure 9**). While the spike gene sequence falls on Omicron variants clade (orange), the rest of the genome is clustered together with Delta variants (light green). Source: GISAID (<https://www.gisaid.org/>).

<sup>1</sup> <https://github.com/cov-lineages/pango-designation/issues/444>



**Figure 9:** Phylogenetic inference showing evidence of Delta (AY.4) and Omicron (BA.1) recombination in purple

