



Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE
Americas

Epidemiological Update Coronavirus disease (COVID-19)

27 September 2021

Executive Summary

- As of the end of the epidemiological week 37 (end date 18 September 2021), 228,068,334 confirmed cumulative cases of COVID-19 have been reported globally, including 4,685,658 deaths, for which the Region of the Americas contributed 38.6% of cases and 46.4% of deaths.
- The North America subregion accounted for the highest proportions of monthly cases (69%) and deaths (51%) in the month of August for the Region of the Americas. Although an overall decreasing trend in deaths is observed at the Regional level between July and August 2021, deaths have increased in all subregions except for South America, where a decline of 53% in deaths is noted. The North America and Caribbean subregions experienced the highest percent increases both in cases (172% and 54%, respectively) and deaths (205% and 61%, respectively) compared to those reported in July 2021.
- As of 20 September 2021, Antigua and Barbuda, Argentina, Aruba, Brazil, Canada, the Cayman Islands, Chile, Costa Rica, Curacao, French Guiana, Guadeloupe, Guatemala, Martinique, Mexico, Panama, Puerto Rico, Sint Maarten, Suriname, the United States of America, and Uruguay have detected all four variants of concern (VOC).
- Among indigenous populations in 18 countries of the Americas, 633,888 cases were reported, including 15,752 deaths.
- A total of 24 countries and territories have reported 7,547 cumulative confirmed cases of multisystem inflammatory syndrome in children and adolescents (MIS-C) temporally related to COVID-19, including 153 deaths.
- Regarding health workers, 40 countries and territories have reported 2,008,680 cases, including 11,052 deaths.

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Context

On 31 December 2019, the People's Republic of China notified a cluster of pneumonia cases with unknown etiology, later identified on 9 January 2020 as a novel coronavirus by the Chinese Center for Disease Control and Prevention. On 30 January 2020, the World Health Organization (WHO) declared the outbreak a Public Health Emergency of International Concern (PHEIC). On 11 February 2020, WHO named the disease "coronavirus disease 2019 (COVID-19)," and the International Committee on Taxonomy of Viruses (ICTV) named the virus "severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)." On 11 March 2020, COVID-19 was declared a pandemic by the WHO Director-General.¹ On 9 July 2020, the WHO Director-General announced the launch of the Independent Panel for Pandemic Preparedness and Response (IPPR), which will independently and comprehensively assess the lessons learned from the international health response to COVID-19.²

The eighth meeting of the Emergency Committee convened by the WHO Director-General under the International Health Regulations (2005) (IHR) regarding the coronavirus disease (COVID-19) took place on Wednesday, 14 July 2021. The Director-General determined that the COVID-19 pandemic continues to constitute a PHEIC and accepted the advice of the Committee to WHO and issued the Committee's advice to States Parties as Temporary Recommendations under the IHR, available at: <https://bit.ly/3zlqUHF>.

Comparison periods

The most recent PAHO/WHO Epidemiological Update on COVID-19, published on 21 August 2021,³ included data from approximately the epidemiological week (EW) 30 (25-31 July 2021) to EW-33 (15-21 August 2021); thus, covering the period of 25-July to 21-August 2021. The current report will include data from EW-34 (22-28 August 2021) to EW-37 (12-18 September 2021); thus, covering the period of 22-August to 18-September 2021 (approximately one month of data), unless otherwise stated.

Global Situation Summary

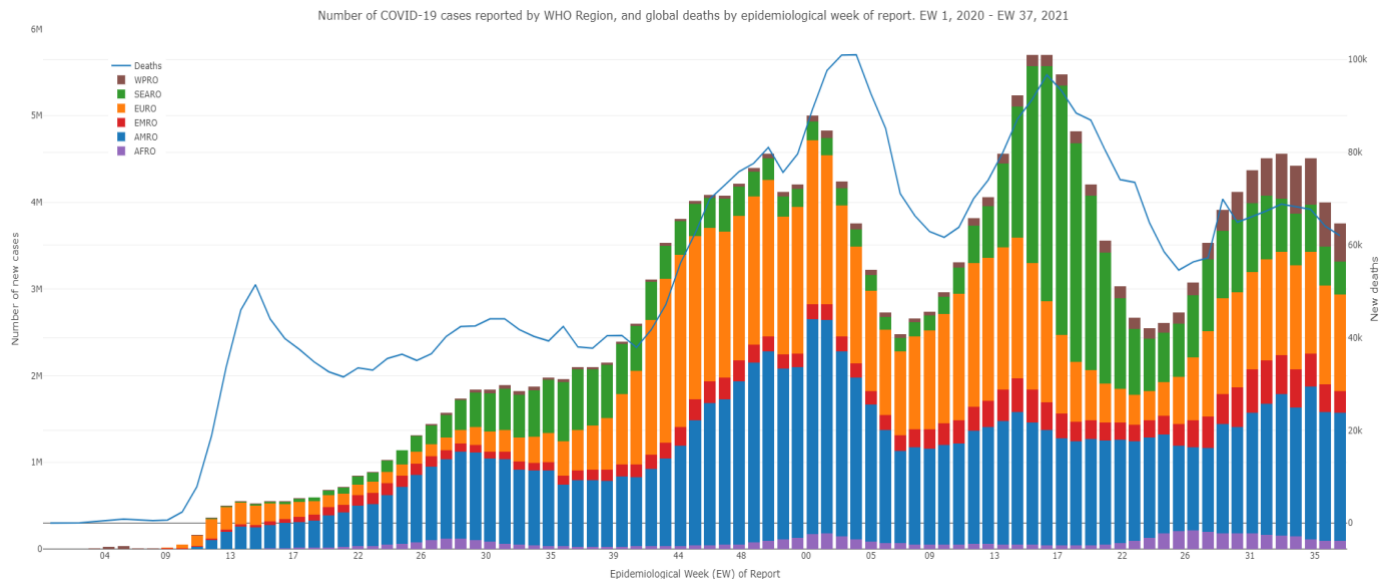
Since the first confirmed cases of COVID-19 until the end of the EW-37, a cumulative total of 228,068,334 cases of COVID-19 have been reported globally, including 4,685,658 deaths; representing a total of 16,697,309 additional confirmed cases and 262 104 additional deaths since the most recent PAHO/WHO Epidemiological Update on COVID-19, published on 21 August 2021.

¹ WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020. Available at: <https://bit.ly/3cRssQZ>

² Independent evaluation of global COVID-19 response announced. Available at: <https://bit.ly/31hLJWp>

When comparing trends between the last and current PAHO/WHO Epidemiological Updates on COVID-19 (EW-30/33 Vs. EW-34/37), a general decline in both number of new global cases (decrease of 4.9%, or 854,268 people) and deaths (decrease of 2%, or 5,262 people) was observed. When looking at specific WHO Regions, AFRO, SEARO and EMRO present a steep decrease in number of COVID-19 cases; whereas WPRO, AMRO, and EURO present a varying increase in number of cases. Regarding deaths, heterogeneous trends across WHO Regions are observed: Following the same pattern of decrease in newly reported cases, SEARO and AFRO present a steep decrease in number of deaths. However, an increase in number of deaths is seen in all remaining WHO Regions.

Figure 1. Distribution of global COVID-19 confirmed cases and deaths, by epidemiological week (EW) of report and WHO Region, as of EW-37 of 2021.



Note:

AFRO: WHO Regional Office for Africa; AMRO: WHO Regional Office for the Americas; EMRO: WHO Regional Office for the Eastern Mediterranean; EURO: WHO Regional Office for Europe; SEARO: WHO Regional Office for South East-Asia; WPRO: WHO Regional Office for the Western Pacific

Source: WHO Coronavirus (COVID-19) data reproduced by PAHO/WHO. Available at: <https://covid19.who.int/info/>. Accessed on 23 September 2021.

Situation Summary in the Region of the Americas

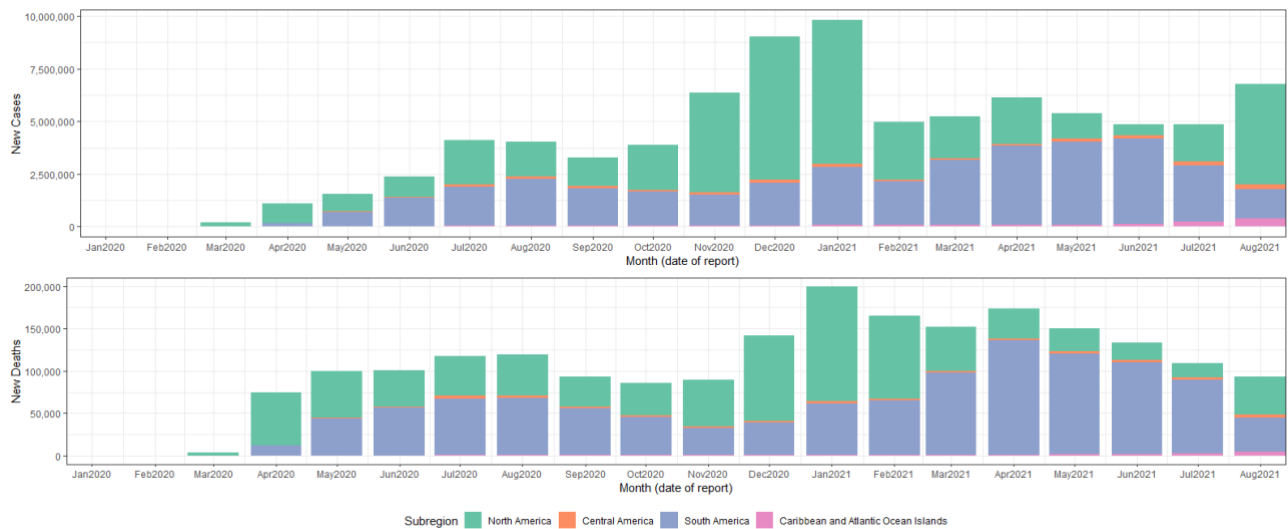
Between January 2020 – when the first COVID-19 cases were detected in the Region – and EW-37, a cumulative total of 88,008,567 confirmed cases of COVID-19, including 2,172,345 deaths, have been reported from all 56 countries and territories in the Region of the Americas, accounting for 38.6% of the globally reported cases, and 46.6% of the globally reported deaths.

Since the last day of the previous PAHO/WHO Epidemiological Update on COVID-19, published on 21 August 2021³ (end of EW-33) and as of the last day of this report (end of EW-37) 6,212,703 additional confirmed cases of COVID-19, including 100,010 additional deaths, have been reported in the Region of the Americas, representing a 7.6% increase in cases and a 4.8% increase in deaths during this time period. North America was the major contributor to the number of new cases in this period (4,856,881, or 78.2% of the cases reported in the Region), followed by South America (811,520 or 13.1%), the Caribbean and Atlantic Ocean Islands (328,508, or 5.3%), and Central America (215,794, or 3.5%).

When looking at monthly trends throughout the Region of the Americas, between January and June 2021, while monthly cases decreased in the North America subregion (by 95%), it increased in South America (by 50%), reaching a peak of over 4 million cases in June. Since then, the trends have reversed between the two subregions, with cases increasing in North America—a 233% increase compared to cases reported in June—and cases decreasing for the first time since February in South America during the month of July. Meanwhile, the Caribbean subregion has now surpassed the Central America subregion for 2 consecutive months in the proportion of monthly cases reported in the Region of the Americas (6% and 3% of cases reported in August 2021, respectively) (**Figure 2a**).

In August 2021, at the Regional level, an increase of 41% in cases was observed compared to the previous month. The North America subregion accounted for the highest proportions of monthly cases (69%) and deaths (51%) in the Region of the Americas, with a total of 4,749,278 cases and 51,102 deaths reported. Related to deaths, while an overall decrease is observed, all subregions reported increases in deaths except for the South America subregion; the overall declining trend is driven by the decrease observed in this subregion. The North America and Caribbean subregions experienced the highest percent increases in deaths—205% and 61%, respectively—compared to deaths reported in July 2021 (**Figure 2b**).

Figure 2a-b. Distribution of confirmed COVID-19 cases and deaths, by subregion and month of report. Region of the Americas, 1 March 2020 to 31 August 2021.



Source: Information shared by IHR National Focal Points (NFPs) or published on the websites of the Ministries of Health, Health Agencies or similar and reproduced by PAHO/WHO.

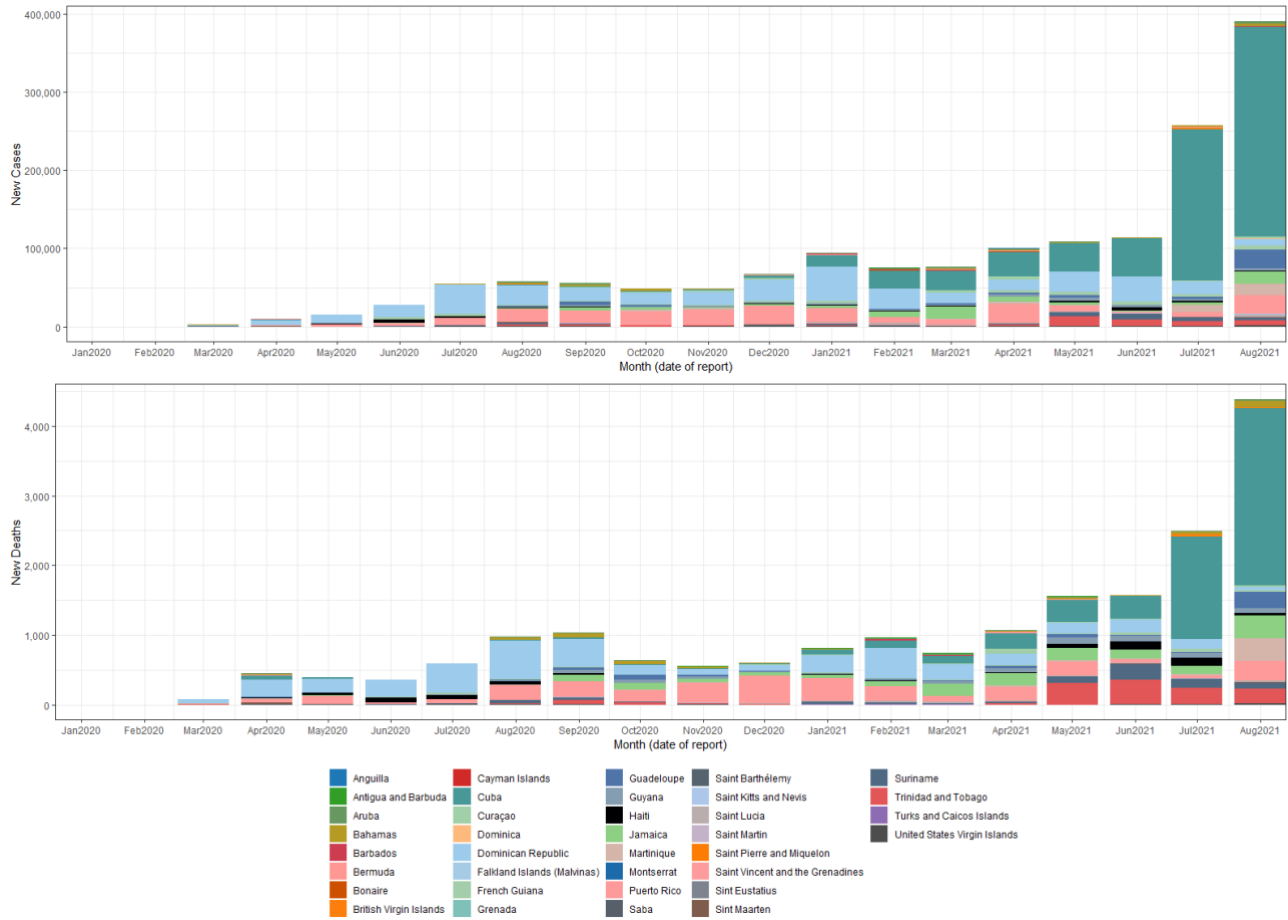
The following is a brief description of the COVID-19 trends in cases and deaths observed in the **Caribbean** subregion.

After maintaining a relatively low number of cases since the onset of the pandemic, a sustained upward trend in cases has been observed in the Caribbean subregion since April 2021. A marked acceleration is observed in July 2021 where cases increased by 95% compared to the previous month, and once again between July and August with an increase of 54%, reaching an unprecedented peak. While this acceleration is mainly driven by cases reported in Cuba in the last two months, other islands have reached the highest number of monthly cases ever reported since the beginning of the pandemic. In the month of August, Puerto Rico, Guadeloupe, Martinique, and Jamaica were the main contributors to the case toll in this subregion (**Figure 3a**).

Additionally, comparing the last two months of full data (July and August 2021), substantial increases in cases were reported in the following Caribbean and Atlantic Ocean islands with 100,000 to 400,000 population (Aruba, Bahamas, Barbados, Grenada, Saint Lucia) and in those with 10,000 to 100,000 population (Anguilla, Antigua and Barbuda, Bermuda, Dominica, Saint Kitts and Nevis, Sint Maarten, and Saint Martin). Among islands with <9,000 population, cases have been reported every week in the month of August; of note, prior to this sustained reporting of cases, cases were sporadically reported in these islands throughout most of 2021. In the Guyanese shield, a sustained increase in cases, particularly driven by French Guiana, was observed across all countries in August, following an increasing trend that started around EW-32 (8-14 August 2021).

Related to deaths, it can be observed that they have been increasing for several months with a particular acceleration in July (by 70%) and August (by 62%) compared to the previous month. As for the cases, Cuba is also the major contributor to the death toll in July and August 2021 in this subregion (**Figure 3b**).

Figure 3a-b. Distribution of confirmed COVID-19 cases and deaths by country, by month of notification. Caribbean subregion. As of 31 August 2021.



Source: Information shared by IHR National Focal Points (NFPs) or published on the websites of the Ministries of Health, Health Agencies or similar and reproduced by PAHO/WHO.

Epidemiological Highlights

I. SARS-CoV-2 Variants

The appearance of mutations is a natural and expected event within the evolutionary process of viruses. Since the initial genomic characterization of SARS-CoV-2, this virus has been divided into different genetic groups or clades. In fact, some specific mutations define the viral genetic groups (also called lineages) that are currently circulating globally. Due to various microevolution processes and selection pressures, some additional mutations may appear, generating differences within each genetic group (called variants). It is important to mention that the names of the clade, lineage, variant, etc., are arbitrary and do not correspond to an official taxonomic hierarchy.

Since the initial identification of SARS-CoV-2 until 21 September 2021, more than 3,679,438 genomic sequences have been shared globally through publicly accessible databases.

As of 21 September 2021, 54 countries and territories in the Americas have published a total of 1 202 368 SARS-CoV-2 sequences on the GISAID platform, collected between February 2020 and September 2021. Countries and territories that have contributed genome data are depicted in **Tables 3a-d**.

On 25 February 2021, WHO provided proposed operational definitions for SARS-CoV-2 variants of interest (VOI) and variants of concern (VOC) and the associated actions that WHO will take to support Member States and their national public health institutes and reference laboratories, along with recommended actions that should be taken by Member States. The document includes general and non-exhaustive guidance on the prioritization of variants of greatest public health relevance in the broader context of SARS-CoV-2 transmission, and public health response mechanisms and established social distance measures. These definitions are periodically reviewed and updated, as necessary. Information on variants available at: <https://bit.ly/3gmGoEc>

On 31 May 2021, WHO announced assigning simple labels for SARS-CoV-2 VOI and VOC that are easy to say and remember; the labels do not replace existing scientific names, but rather they are intended to simplify public communications.⁴ The labels are available at: <https://bit.ly/39Ja6Q0>

The list of SARS-CoV-2 variants, according to the WHO classification as of 21 September 2021,⁵ is available in **Table 1**.

Table 1. SARS-CoV-2 variants of concern (VOC) and variants of interest (VOI), according to WHO classifications as of 21 September 2021.

SARS-CoV-2 Variants WHO classification	WHO Label	Pango lineage*	First detected by
Variant of concern (VOC)	Alpha	B.1.1.7 †	United Kingdom
	Beta	B.1.351	South Africa
	Gamma	P.1	Brazil

⁴ WHO. WHO announces simple, easy-to-say labels for SARS-CoV-2 Variants of Interest and Concern. 31 May 2021. Available at: <https://bit.ly/3xgARqs>

⁵ WHO. Tracking SARS-CoV-2 variants. Available at: <https://bit.ly/36FXqQY>

	Delta	B.1.617.2 §	India
Variant of interest (VOI)	Lambda	C.37	Peru
	Mu	B.1.621	Colombia

Notes:

*Includes all descendent lineages. The full list of Pango lineages can be found at <https://bit.ly/3IAhser>; for FAQ, visit: <https://bit.ly/2VQQYMJ>

≠ includes all Q.* lineages (in the Pango nomenclature system, Q is an alias for B.1.1.7)

§ includes all AY.* lineages (in the Pango nomenclature system, AY is an alias for B.1.617.2); for more information on AY.* lineages, please visit: <https://bit.ly/3IFf99V>

Source: WHO. Tracking SARS-CoV-2 variants.⁵ Accessed on 21 September 2021.

Globally, an increase in the number of countries and territories reporting VOC and VOI continues to be observed (**Table 2**). However, this increase must consider the limitations related to surveillance systems or surveillance mechanisms, as well as the capacity of the countries and territories to sequence samples, and differences in the selection of samples to be sequenced.

Table 2. Summary of the countries/territories reporting cases of SARS-CoV-2 variants of concern (VOC), as of 21 September 2021.

	WHO Label			
	Alpha	Beta	Gamma	Delta
Number of countries/territories reporting cases globally*	193	142	96	185
Number of countries/territories reporting cases in the Americas**	49	25	40	52

Note:

*Global data correspond to the WHO COVID-19 Weekly Epidemiological Update. Published on 21 September 2021.⁶

**As of 20 September 2021

Some countries/territories have reported more than one variant of concern (VOC).

Source: WHO. COVID-19 Weekly Epidemiological Update. Published on 21 September 2021.⁶

Information shared by the International Health Regulations (IHR) National Focal Points (NFPs) or published on the websites of the Ministries of Health, Health Agencies, or similar.

Since April 2021, an exponential increase in VOC Delta samples globally has been observed. In July 2021, a global predominance of VOC Delta was observed in almost 90% of the samples worldwide, including Member States in the Americas.

On 8 August 2021, PAHO/WHO published an Epidemiological Update related to the increase of the Delta VOC and its potential impact in the Region of the Americas.⁷ In the Americas, as of 17 September 2021, 55 countries/territories have reported the detection of cases of VOC, including one additional country (Saint Kitts and Nevis) since the last PAHO/WHO Epidemiological Update on COVID-19, published on 21 August 2021 (**Table 3a-d**).³

As of 21 September 2021, the detection of all four VOC has been reported in Antigua and Barbuda, Argentina, Aruba, Brazil, Canada, the Cayman Islands, Chile, Costa Rica, Curacao, French Guiana, Guadeloupe, Guatemala, Martinique, Mexico, Panama, Puerto Rico, Sint Maarten, Suriname, the United States of America, and Uruguay.

Table 3a. Countries reporting SARS-CoV-2 variants of concern (VOC) in the North America subregion, as of 20 September 2021.

Country	Alpha	Beta	Gamma	Delta
Canada	√	√	√	√
Mexico	√	√	√	√
United States of America	√	√	√	√

⁶ WHO. Weekly epidemiological update on COVID-19. Available at: <https://bit.ly/3zyiHAP>

⁷ PAHO/WHO. Epidemiological Update: Increase of the Delta variant and its potential impact in the Region of the Americas. 8 August 2021, Washington, D.C. PAHO/WHO. 2021. Available at: <https://bit.ly/3y2Rm7K>

Table 3b. Countries reporting SARS-CoV-2 variants of concern (VOC) in the Central America subregion, as of 20 September 2021.

Country	Alpha	Beta	Gamma	Delta
Belize	√		√*	√*
Costa Rica	√	√	√	√
El Salvador	√		√*	√
Guatemala	√	√	√	√
Honduras	√		√	√
Panama	√	√	√	√*

Table 3c. Countries reporting SARS-CoV-2 variants of concern (VOC) in the South America subregion, as of 20 September 2021.

Country	Alpha	Beta	Gamma	Delta
Argentina	√	√	√	√
Bolivia	√		√	
Brazil	√	√	√	√
Chile	√	√	√	√
Colombia	√		√	√
Ecuador	√		√	√
Paraguay	√		√	√
Peru	√		√	√
Uruguay	√	√*	√	√*
Venezuela	√		√	√

Table 3d. Countries and territories reporting SARS-CoV-2 variants of concern (VOC) in the Caribbean and Atlantic Ocean Islands subregion, as of 20 September 2021.

Country/Territory	Alpha	Beta	Gamma	Delta
Anguilla	√			√
Antigua and Barbuda	√	√	√	√
Aruba	√	√	√	√
Bahamas	√		√	√
Barbados	√		√	√
Bermuda	√	√		√
Bonaire	√		√	√
British Virgin Islands	√		√	√
Cayman Islands	√	√	√	√
Cuba	√	√		√*
Curaçao	√	√*	√	√
Dominica	√			√*
Dominican Republic	√		√	√
Falkland Islands (Malvinas)	√*	√*		
French Guiana	√	√	√	√
Grenada	√			√
Guadeloupe	√	√	√	√
Guyana			√	√*
Haiti	√		√	√
Jamaica	√			√
Martinique	√	√	√	√
Montserrat	√		√	√
Puerto Rico	√	√	√	√
Saba				√
Saint Barthélemy	√			√
Saint Kitts and Nevis				√
Saint Lucia	√			√
Saint Martin	√	√		√*
Saint Pierre and Miquelon				√*
Saint Vincent and the Grenadines			√*	√
Sint Maarten	√	√	√	√
Suriname	√	√	√	√
Trinidad and Tobago	√		√	√
Turks and Caicos	√		√	√
United States Virgin Islands	√	√*		√

Note: Data are provisional and subject to change as countries and territories make adjustments and retrospective analysis.

* Sequence is not available yet in an international repository.

Source: Information shared by the IHR National Focal Points (NFPs) or published on the websites of the Ministries of Health, Health Agencies or similar, and reproduced by PAHO/WHO.

II. COVID-19 among older adults (≥60 years of age)

Some of the articles published^{8,9,10}, or pre-published, on the impact of COVID-19 vaccination campaigns provide hope in achieving a decrease in mortality rates and hospitalizations in intensive care units (ICU) among older adults (≥60 years of age). However, it is important to consider that COVID-19 vaccination campaigns are not sufficient in and of themselves to prevent the transmission of SARS-CoV-2; therefore, public health and social distancing measures should be maintained in accordance with the epidemiological situation of each country and territory.

III. COVID-19 during pregnancy

Although researchers continue to advance the knowledge base related to COVID-19 among pregnant women, helping to close existing knowledge gaps related to the impact of SARS-CoV-2 infection on the outcome of pregnancy, it is necessary to continue collecting information to contribute to that knowledge base.

COVID-19 vaccination campaigns, together with social distancing measures, hand hygiene and the proper use of face masks, targeted to this population group are expected to impact the severity and mortality observed thus far.

Since the first reported cases of COVID-19 in the Americas and until 17 September 2021, there have been a total of 310,922 SARS-CoV-2 infections among pregnant women, including 3,022 deaths (0.97% case-fatality rate), reported in 32 countries/territories for which information was available.

Compared to the data presented in the last PAHO/WHO Epidemiological Update on COVID-19, published on 21 August 2021,³ this represents 39,692 additional cases and 403 additional deaths. During the same period, the highest relative increases in cumulative confirmed cases occurred in Cuba for the second consecutive month (38%, 1,872 additional cases) and the Dominican Republic (38%, 740 additional cases). Among deaths, the highest relative increases were observed in Suriname (85%, 11 additional deaths) and Cuba (55%, 39 additional deaths) (**Table 4**).

⁸ Cook TM, Roberts JV. Impact of vaccination by priority group on UK deaths, hospital admissions and intensive care admissions from COVID-19. Available at: <https://doi.org/10.1111/anae.15442>

⁹ Leshem E, Wilder-Smith A. COVID-19 vaccine impact in Israel and a way out of the pandemic. *Lancet*. 2021 May 5 doi: 10.1016/S0140-6736(21)01018-7. Available at: <https://bit.ly/3hk18xC>

¹⁰ Haas E, Angulo F, et al. Impact and effectiveness of mRNA BNT162b2 vaccine against SARS-CoV-2 infections and COVID-19 cases, hospitalizations, and deaths following a nationwide vaccination campaign in Israel: an observational study using national surveillance data. *The Lancet*, 2021, ISSN 0140-6736, Available at: [https://doi.org/10.1016/S0140-6736\(21\)00947-8](https://doi.org/10.1016/S0140-6736(21)00947-8)

Table 4. SARS-CoV-2 infections and deaths among pregnant women, by country/territory. Region of the Americas. January 2020 to 17 September 2021*.

Country	Number of pregnant women positive for SARS-CoV-2	Number of deaths among pregnant women positive for SARS-CoV-2	Case-fatality rate (%)
Anguilla	2	N/A	N/A
Antigua and Barbuda**	4	0	0.00
Argentina	21,871	203	0.93
Bahamas**	101	1	0.99
Bolivia	3,405	51	1.50
Belize**	315	2	0.63
Bermuda**	11	0	0.00
Brazil †	14,632	1,260	8.61
British Virgin Islands	3	N/A	N/A
Canada	7,244	3	0.04
Cayman Islands	9	0	0.00
Chile	15,830	16	0.10
Colombia	17,139	179	1.04
Costa Rica	1,131	9	0.80
Cuba	4,939	71	1.44
Dominican Republic	1,935	81	4.19
Ecuador**	10,207	48	0.47
El Salvador	564	15	2.66
Guatemala	1,556	10	0.64
Guyana	13	N/A	N/A
Haiti**	79	4	5.06
Honduras**	818	56	6.85
Mexico&	27,264	538	1.97
Panama &	2,406	14	0.58
Paraguay &	2,109	85	4.03
Peru &	54,175	181	0.33
Saint Kitts and Nevis	15	0	0.00
Saint Lucia**	29	0	0.00
Suriname	520	13	2.50
United States of America	120,459	155	0.13
Uruguay	1,460	12	0.82
Venezuela	677	15	2.22
Total	310,922	3,022	0.97

Note:

N/A: Data not available.

& Corresponds to pregnant and postpartum women

† The information presented for Brazil corresponds data extracted from the Influenza Epidemiological Surveillance Information System (SIVEP-Gripe).

* 17 September 2021 corresponds to the date of the most recent report received by PAHO/WHO; there may be differences in the dates that each country provided the last report to PAHO/WHO or published the report. Preliminary data subject to change based on retrospective investigation.

** No update since the 21 August 2021 PAHO/WHO Epidemiological Update on COVID-19³

Source: Latin American Center for Perinatology/Women's Health and Reproductive Health (CLAP/SMR) and information shared with PAHO/WHO by IHR National Focal Points (NFPs) or published on the websites of the Ministries of Health, health agencies, or similar and reproduced by PAHO/WHO.

According to data obtained from 24 countries in 2021, compared to the data reported in 2020, an increase in both the number of cases and deaths among pregnant women positive for SARS-CoV-2 has been reported (**Table 5**). An increase has been observed from January through September 2021 and, for most countries, the numbers of cases and deaths reported this year have exceeded the numbers reported for all of 2020. Additionally, most countries have reported a higher maternal mortality ratio (MMR) in the current year.

Table 5. Select COVID-19 indicators during pregnancy in countries of the Americas. 2020 and 2021 (January to September 2021).

Country	Year 2020			January - September 2021		
	Number of pregnant women positive for SARS-CoV-2	Number of deaths among pregnant women positive for SARS-CoV-2	MMR*	Number of pregnant women positive for SARS-CoV-2	Number of deaths among pregnant women positive for SARS-CoV-2	MMR*
Argentina ^{&}	8,984	41	5.5	12,887	162	21.6
Belize	181	2	24.8	131	0	0.0
Bolivia	963	31	12.5	2,300	N/A	N/A
Brazil	5,462	256	9.0	9,170	1004	35.6
Canada	2,917	1	0.3	4,327	2	0.5
Chile	6,610	2	1.0	9,220	14	12.1
Colombia	7,974	56	7.6	9,165	123	25.2
Costa Rica	335	3	4.4	796	6	N/A
Cuba	180	0	0.0	4,759	71	101.4
Dominican Republic	707	36	22.1	1,228	45	42.5
Ecuador	6,116	25	7.4	4,091	23	6.8
El Salvador	272	10	9.0	292	5	4.5
Guatemala	652	8	1.9	904	2	0.5
Haiti	76	4	1.5	3	0	0.0
Honduras	508	15	7.2	310	41	19.6
Mexico ^{&}	10,568	205	9.4	16,696	333	15.3
Panama ^{&}	1,852	4	5.0	561	3	3.8
Paraguay ^{&}	599	1	0.7	1,289	55	38.4
Peru	40,818	81	14.3	13,357	100	17.6
Saint Lucia	5	0	0.00	24	0	0.0
Suriname ^{&}	184	2	18.9	336	11	104.4
United States of America	68,459	80	2.0	52,000	75	1.9
Uruguay	106	0	0.0	1232	9	51.3
Venezuela	338	9	1.5	339	6	1.0

Note: [&] Corresponds to pregnant and postpartum women

* MMR Maternal mortality ratio, calculated using deaths among pregnant women (in some instances, including postpartum deaths) positive to SARS-CoV-2. Per 100,000 live new births.

N/A: Data not available

Source: Latin American Center for Perinatology/Women's Health and Reproductive Health (CLAP/SMR) and information shared with PAHO/WHO by IHR National Focal Points (NFPs) or published on the websites of the Ministries of Health, health agencies, or similar and reproduced by PAHO/WHO

IV. COVID-19 among indigenous populations

Since January 2020 and until 17 September 2021, there have been 633, 888 confirmed cases of COVID-19, including 15, 752 deaths, reported among indigenous populations in 18 countries in the Region of the Americas for which information was available (**Table 7**). Compared to the data in the last PAHO/WHO Epidemiological Update on COVID-19, published on 21 August 2021,³ this represents 29,624 additional cases, and 725 additional deaths. In comparison with the previous PAHO/WHO Epidemiological Update, the largest relative increases¹¹ in cases were observed in Guatemala with 33% (9 365 additional cases) and Mexico (29%, 8 694 additional cases) while the largest relative increases in deaths were observed in Paraguay with 23% (17 additional deaths) and Suriname (18%, 11 additional deaths).

Table 7. Cumulative number of confirmed cases and deaths of COVID-19 among indigenous populations in the Region of the Americas. January 2020 to 17 September 2021*.

Country	Number of COVID-19 confirmed cases	Number of deaths
Argentina	3,127	111
Belize**	2,093	45
Bolivia	30,603	575
Brazil	53,188	807
Canada	38,263	408
Chile	67,678	1,258
Colombia	70,069	2,035
Costa Rica	2,460	35
Ecuador	5,832	216
Guatemala	28,289	676
Guyana**	95	6
Mexico	29,740	3,715
Panama	6,918	123
Paraguay	583	73
Peru	30,805	682
Suriname	2,731	60
United States of America**	259,884	4,860
Venezuela	1,530	67
Total	633,888	15,752

Note:

* 17 September 2021 corresponds to the date of the most recent report received by PAHO/WHO; there may be differences in the dates that each country provided the last report to PAHO/WHO or published the report. Preliminary data subject to change based on retrospective investigation.

** No update since the 21 August 2021 PAHO/WHO Epidemiological Update on COVID-19.³

Source: Data provided by the International Health Regulations (IHR) National Focal Points (NFPs) or published by the Ministries of Health, Institutes of Health, indigenous organizations, or similar and reproduced by PAHO/WHO.

¹¹ Relative increases may be a result of delayed notification.

V. COVID-19 among populations under 20 years of age

Since the beginning of the pandemic, it has been apparent that children and adolescents, compared to other age groups, have a lower risk of illness and death from COVID-19. Additionally, it has been recognized that children and adolescents are being particularly affected by the measures taken to control the transmission of the virus. These indirect effects include the negative consequences of school closures, restrictions on the movement of people which limit opportunities for play and relationships with family and friends, the loss of work and income that also affect the mental health of caregivers and consequently the relationships between children and their caregivers, and the disruption of health and social protection services, among others.¹²

The evidence available to date suggests that children and adolescents are less susceptible to SARS-CoV-2 infection and transmit the virus less frequently than adults. When they do acquire infection, they are generally asymptomatic but, when they do get sick, they usually have mild illness with symptoms like other common illnesses at these ages. Within the 0-19 age group, studies suggest that susceptibility and transmission are lower among children under 5 years of age than among older children and adolescents.^{13,14,15,16,17}

Although further evidence is required, some studies suggest that children, as in the case of adults, may present long lasting symptoms related to SARS-CoV-2 infection.^{18,19} Findings from a prospective cohort study involving children aged 5 to 17-years-old in the United Kingdom showed that while disease is usually short and with low burden in children, a small proportion (<2%) presented with long-term illness after infection by SARS-CoV-2.²⁰

The following is a brief analysis on the **evolution of COVID-19 cases and deaths among minors in the Region of the Americas** since the onset of the pandemic, according to data available.

¹² UN Sustainable Development Group. Policy Brief: The Impact of COVID-19 on children. April 2020. Available at: <https://bit.ly/38r1JbH>

¹³ Gaythorpe, K. A., Bhatia, S., Mangal, T., et al. Children's role in the COVID-19 pandemic: a systematic review of early surveillance data on susceptibility, severity, and transmissibility. Imperial College London. 3–26. DOI: <https://doi.org/10.25561/84220>

¹⁴ Viner, R. M., Mytton, O. T., Bonell, C., et al. Susceptibility to SARS-CoV-2 Infection among Children and Adolescents Compared with Adults: A Systematic Review and Meta-Analysis. *JAMA Pediatrics*, 175(2), 143–156. DOI: <https://doi.org/10.1001/jamapediatrics.2020.4573>

¹⁵ Viner, R. M., Russell, S., Saullé, R., et al. Impacts of school closures on physical and mental health of children and young people: a systematic review. *MedRxiv*, 2021.02.10.21251526. <https://doi.org/10.1101/2021.02.10.21251526>

¹⁶ Davies, N.G., Klepac, P., Liu, Y. et al. Age-dependent effects in the transmission and control of COVID-19 epidemics. *Nat Med* 26, 1205–1211 (2020). DOI: <https://doi.org/10.1038/s41591-020-0962-9>

¹⁷ Leidman E, Duca LM, Omura JD, Proia K, Stephens JW, Sauber-Schatz EK. COVID-19 Trends Among Persons Aged 0–24 Years — United States, March 1–December 12, 2020. *MMWR Morb Mortal Wkly Rep* 2021; 70:88–94. DOI: <http://dx.doi.org/10.15585/mmwr.mm7003e1>

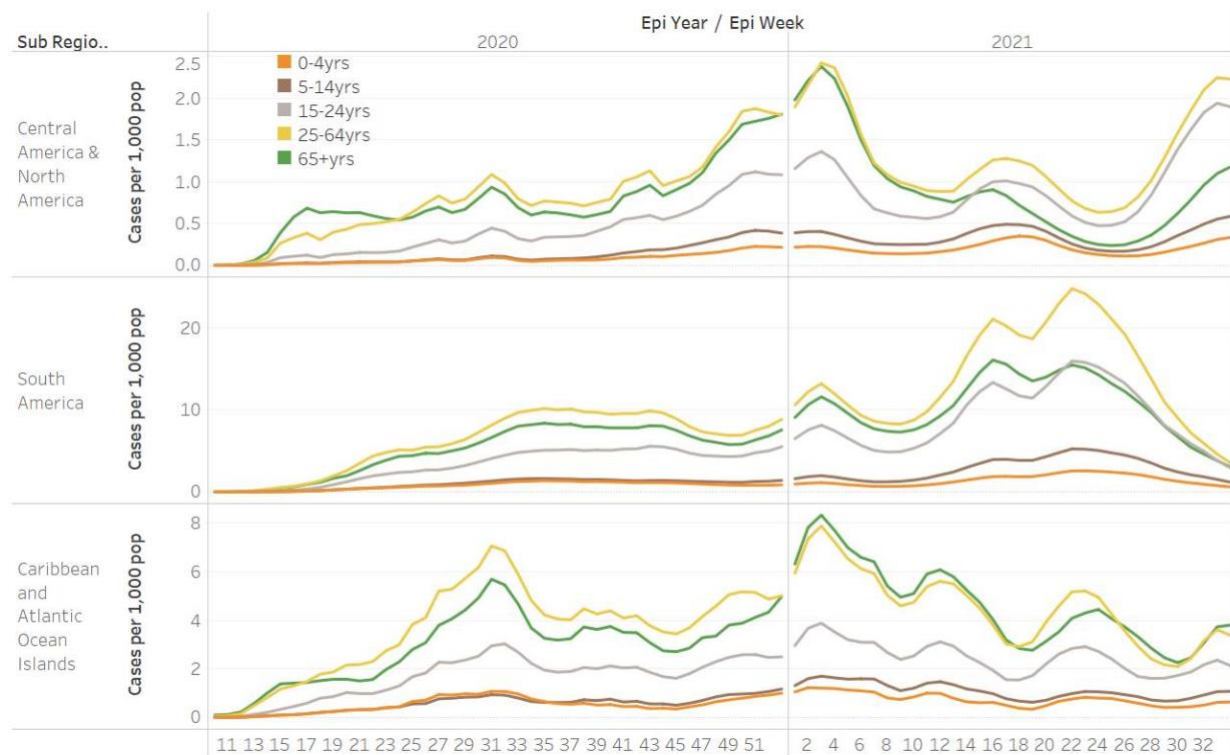
¹⁸ Buonsenso D, Munblit D, De Rose C, et al. Preliminary evidence on long COVID in children. *Acta Paediatr*. 2021;110(7):2208–2211. DOI: <https://doi.org/10.1111/apa.15870>

¹⁹ Brackel, L.H., Lap, C.R., Buddingh, E.P. et al. Pediatric long-COVID: An overlooked phenomenon? *Pediatric Pulmonology*, 2021 (56); 2495–2502. DOI: <https://doi.org/10.1111/apa.15870>

²⁰ Molteni, E., Sudre, C.H., Canas, L.S., et al. Illness duration and symptom profile in symptomatic UK school-aged children tested for SARS-CoV-2. *The Lancet Child & Adolescent Health*, 2021. DOI: [https://doi.org/10.1016/S2352-4642\(21\)00198-X](https://doi.org/10.1016/S2352-4642(21)00198-X).

As seen in the graph below, COVID-19 cases trends have been disaggregated per age brackets (**Figure 4**). The transmission level of cases and deaths among children <5 years old and 5–14 years old has remained at the lowest rates compared to other age-groups across all subregions in the Region of the Americas.

Figure 4. COVID-19 incidence rate (per 1,000 population) by age group, by subregion in the Region of the Americas. 2020-2021.



Source: Data provided by the IHR National Focal Points (NFPs) and reproduced by PAHO/WHO.

In the table below, cases and deaths per age group for the Region of the Americas is presented (**Table 8**).

Table 8. Cumulative cases and percentage of COVID-19 cases and deaths by age group in the Region of the Americas. 2020 (May-December) and 2021 (Jan-Aug).

	Case	Case	% Case	% Case	Deaths	Deaths	% Deaths	% Deaths
Age-Group	2020	2021	2020	2021	2020	2021	2020	2021
0-4yrs	196,352	213,635	1.5%	1.32%	951	468	0.20%	0.13%
5-9yrs	204,251	266,724	1.5%	1.65%	217	133	0.05%	0.04%
10-14yrs	262,634	430,673	2.0%	2.66%	301	174	0.06%	0.05%
15-19yrs	495,322	848,271	3.7%	5.25%	737	509	0.16%	0.15%
Adults	12,198,380	14,404,398	91.3%	89.12%	467,069	345,803	99.53%	99.63%

Source: Data provided by the IHR National Focal Points (NFPs) and reproduced by PAHO/WHO.

In terms of percentage deaths, rates have remained lower for all age ranges in 2021 compared to 2020. Regarding the percentage of cases, except for the age bracket of 0 to 4 years old, the other ranges present a slight increase in percentage. However, interpretation of the data needs to be done carefully given that the months included in 2020 and in 2021 differ in this analysis, and that: 1) testing availability and access in 2020 was significantly lower than in 2021, 2) there has been strict school closures implemented across the Region during most of 2020 and half of 2021, thus reducing children's exposure, 3) vaccination rates among adults has increased over time although with notable differences between countries, 4) in the northern hemisphere from June to late August was the summer holiday season which is generally associated with family vacation movements and children summer camps, and 5) since September 2021 in-person schooling has been reinstated in some northern hemisphere countries.

Multisystem inflammatory syndrome in children and adolescents (MIS-C) temporally related to COVID-19

Globally, various reports and scientific publications, have described groups of children and adolescents requiring admission to intensive care units (ICU) due to a multisystem inflammatory condition with some features similar to those of Kawasaki disease and toxic shock syndrome. Based on the available evidence, WHO has provided the case definition of this syndrome, called multisystem inflammatory syndrome in children and adolescents (MIS-C) temporally related to COVID-19, available at: <https://bit.ly/2RBZzgr>.

Although MIS-C is considered a rare event, these cases present important challenges for health systems, and can lead to severe clinical presentations and even death.

In the Region of the Americas, PAHO/WHO began active surveillance of MIS-C cases in June 2020, inviting Member States to share a minimum set of epidemiological variables allowing for the characterization of MIS-C in the Region.

Between mid-May 2020 and 17 September 2021, a cumulative total of 7,547 confirmed cases of MIS-C temporally related to COVID-19, including 153 deaths (case-fatality rate 2.03%), have been reported in 24 countries/territories of the Region of the Americas (**Table 9**). During this same period, 21 countries and territories have officially reported to PAHO/WHO that they have not detected cases of MIS-C.

Since the last PAHO/WHO Epidemiological Update on COVID-19, published on 21 August 2021³ and until 17 September 2021, there were 517 additional confirmed cases reported and 15 additional deaths.

As the numbers of cases of MIS-C increase, it is important that each country/territory characterizes the cases²¹ to better understand the clinical presentation, severity, treatment, and clinical outcomes.

²¹ Case notification form available at: <https://bit.ly/3ilbGvw>.

Table 9. Distribution of cumulative confirmed cases and deaths of multisystem inflammatory syndrome in children and adolescents (MIS-C) temporally related to COVID-19 in the Region of the Americas, by country/territory. May 2020 to 17 September 2021*.

Country/Territory	Number of Confirmed Cases	Number of Confirmed Deaths
Argentina	211	1
Barbados	2	1
Bolivia	1	1
Brazil	1,269	80
Canada	136	0
Chile	382	5
Colombia	10	5
Costa Rica	42	0
Cuba	3	0
Dominican Republic	137	6
Ecuador	27	0
El Salvador	30	0
French Guiana	1	0
Guadeloupe	6	0
Guatemala	2	0
Honduras	3	0
Martinique	3	0
Panama	81	2
Paraguay	133	8
Peru	16	0
Puerto Rico	*	*
Saint Martin	2	0
Trinidad and Tobago	29	0
United States	4,808	44
Uruguay	18	0
Venezuela	195	0
Total	7,547	153

Notes: *17 September 2021 corresponds to the date of the most recent report received by PAHO/WHO; there may be differences in the dates that each country provided the last report to PAHO/WHO or published the report. Preliminary data subject to change based on retrospective investigation.

According to the United States Centers for Disease Control and Prevention (US CDC) website, the data for the United States includes 52 US jurisdictions (including 49 states, New York City, Puerto Rico, and Washington, DC). Available at: <https://bit.ly/2SrKBOj>

Sources: Data provided by the International Health Regulations National Focal Points or published by the Ministries of Health, Institutes of Health, or similar health agencies and reproduced by PAHO/WHO.

The following is a brief description of the epidemiological situation of MIS-C in the Americas.

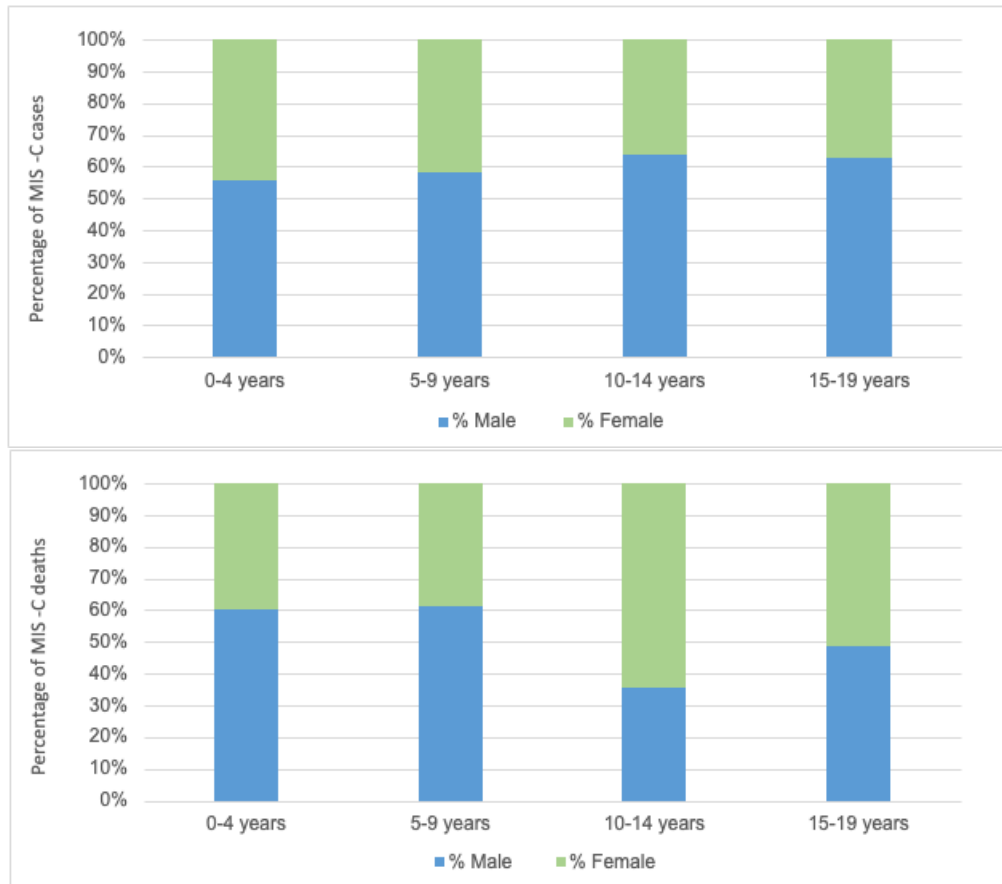
Of the total number of reported cases for which data on age and sex were available (n=7.078), the distribution of cases among age groups was 33% among 5 to 9 years, 30.4% among 0 to 4 years, 25.9% among 10 to 14 years, and 10.7% among 15 to 19 years (the United States of America includes 20-year-olds in this age group). Regarding the distribution by sex, 59.2% of the cases were male.

Among the 149 deaths for which data on age and sex were available, 33.6% were aged 0 to 4 years, 20.8% aged 5 to 9 years, 20.8% aged 10 to 14 years, and 24.8% aged 15 to 19 years. Regarding the distribution by sex, the gap between males and females is closer, with 52% of the deaths among males.

Among cases by age group, the distribution by sex generally aligns with the overall distribution by sex for the 0 to 4-year-olds (55% male, 45% female) and 5- to 9-year-olds (58% male, 42% female). However, the gap by sex is markedly pronounced among 10 to 14-year-olds (63% male, 37% female) and 15 to 19-year-olds (63% male, 37% female), with approximately two-thirds of cases occurring among males. (**Figure 9a**)

Regarding deaths by age group, the distribution by age aligns with the overall distribution by sex for the 15 to 19-year-olds (49% male, 51% female). Among the 0 to 4-year-olds (60% male, 40% female) and the 5 to 9-year-olds (61% male, 39% female) the proportion of males is greater and among the 10 to 14-year-olds (35% male, 65% female) the proportion of females to males is greater (**Figure 9b**). The potential factors contributing to these differs warrant further investigation and should continue to be monitored.

Figure 9a-b. Percentage of confirmed cases and deaths of multisystem inflammatory syndrome among children and adolescents (MIS-C) temporally related to COVID-19 in the Region of the Americas, by age group and sex. May 2020 to 17 September 2021*.



Notes: *17 September 2021 corresponds to the date of the most recent report received by PAHO/WHO; there may be differences in the dates that each country provided the last report to PAHO/WHO or published the report. Preliminary data subject to change based on retrospective investigation.

According to the U.S. Centers for Disease Control and Prevention (CDC) website, data for the United States include 52 U.S. jurisdictions (including 49 states, New York City, Puerto Rico, and Washington, DC). Available at: <https://bit.ly/2SrKBOj>

Sources: Data provided by the International Health Regulations National Focal Points or published by the Ministries of Health, Institutes of Health, or similar health agencies and reproduced by PAHO/WHO.

VI. COVID-19 among health workers

Since the first confirmed cases of COVID-19 were reported in the Region of the Americas and until 17 September 2021, at least 2,008,680 COVID-19 cases among health workers, including 11,052 deaths, have been reported according to the data made available by 40 countries and territories in the Americas (**Table 10**). This represents 216 468 additional cases and 750 additional deaths, since the last PAHO/WHO Epidemiological Update on COVID-19, published on 21 August 2021.³ The total number of cases represents 13.4% of the estimated 15 million health workers in the Americas.²²

²² PAHO/WHO. Weekly Press Briefing on COVID-19: Director's Opening Remarks, 12 May 2021. Available at: <https://bit.ly/3uEhbKC>

Table 10. Distribution of cumulative confirmed cases and deaths of COVID-19 among health workers in the Region of the Americas. January 2020 to 17 September 2021*.

Country/Territory	Number of confirmed cases of COVID-19	Number of deaths
Anguilla	10	0
Antigua and Barbuda**	44	2
Argentina	98,685	613
Aruba	290	0
Bahamas	955	13
Belize**	340	2
Bermuda**	49	0
Bolivia	28,418	456
Bonaire	102	1
Brazil	642,783	872
British Virgin Islands**	141	0
Canada	106,425	62
Cayman Islands	24	0
Chile	64,681	134
Colombia	66,561	327
Costa Rica	8,558	48
Curaçao	122	0
Ecuador	12,262	121
El Salvador	7,643	79
Dominica**	1	0
Dominican Republic	2,097	39
Grenada	14	0
Guatemala	7,920	65
Haiti**	808	1
Honduras**	13,668	115
Jamaica**	861	4
Mexico‡	274,493	4,392
Panama	8,657	112
Paraguay	17,448	182
Peru	75,039	1,424
Saint Kitts and Nevis	34	0
Saint Lucia**	160	0
Saint Vincent and the Grenadines	31	0
Sint Eustatius	8	0
Sint Maarten	61	0
Suriname	1,722	3
Turks and Caicos	97	0
United States of America	553,103	1,759
Uruguay	9,174	28
Venezuela	5,191	198
Total	2,008,680	11,052

Notes: * 17 September 2021 corresponds to the date of the most recent report received by PAHO/WHO; there may be differences in the dates that each country provided the last report to PAHO/WHO or published the report. Preliminary data subject to change based on retrospective investigation.

** No update since the PAHO/WHO Epidemiological Update on COVID 19, published on 21 August 2021³

‡ The information Mexico presents corresponds to the occupation variable of the Epidemiological Surveillance System for Viral Respiratory Disease (SISVER). The analysis reflects cases reported performing a health-related


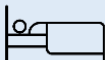





occupation. It is important to clarify that the information collected in SISVER does not allow to identify if the contagion occurred in the workplace, at home or in the community; nor does it establish whether health personnel are currently working in a medical care unit.

Source: Data provided by the IHR National Focal Points (NFPs) or published by the Ministries of Health, Institutes of Health, or similar health agencies and reproduced by PAHO/WHO.

Guidance for national authorities

PAHO/WHO continues to reiterate and update recommendations to support all Member States on management and protection measures for COVID-19 and reiterates the recommendations included in the PAHO/WHO Epidemiological Alerts and Updates on COVID-19 available at: <https://www.paho.org/en/epidemiological-alerts-and-updates>.

The following are guidance, scientific reports, and other resources published by PAHO/WHO and WHO.

<p>Surveillance, rapid response teams, and case investigation</p> 	<p>Clinical management</p> 
<p>WHO resources available at: https://bit.ly/30zjmCj</p> <p>PAHO/WHO resources available at: https://bit.ly/36DJi3B</p>	<p>WHO resources available at: https://bit.ly/3li6wQB</p> <p>PAHO/WHO resources available at: https://bit.ly/3sadTxQ</p>
<p>Laboratory</p> 	<p>Infection prevention and control</p> 
<p>WHO resources available at: https://bit.ly/3d3TJ1g</p> <p>PAHO/WHO resources available at: https://bit.ly/3oD2Qen</p>	<p>WHO resources available at: https://bit.ly/3d2ckuV</p> <p>PAHO/WHO resources available at: https://bit.ly/3nwyOaN</p>
<p>Critical preparedness and response</p> 	<p>Travel, Points of entry, and border health</p> 
<p>WHO resources available at: https://bit.ly/3ljWHBT</p> <p>PAHO/WHO resources available at: https://bit.ly/36DJi3B</p>	<p>WHO resources available at: https://bit.ly/3ivDivW</p> <p>PAHO/WHO resources available at: https://bit.ly/36DJi3B</p>
<p>Schools, workplaces, & other institutions</p> 	<p>Other resources</p>
<p>WHO resources available at: https://bit.ly/3d66iJO</p> <p>PAHO/WHO resources available at: https://bit.ly/36DJi3B</p>	<p>WHO resources available at: https://bit.ly/33zXgRQ</p> <p>PAHO/WHO resources available at: https://bit.ly/36DJi3B</p>

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11. Report by the **Costa Rica** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
12. Report by the **Dominican Republic** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
13. Report by the **Ecuador** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
14. Report by the **El Salvador** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
15. Report by the **Guatemala** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
16. Report by the **Mexico** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
17. Report by the **Netherlands** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email

18. Report by the **Panama** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
19. Report by the **Paraguay** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
20. Report by the **Peru** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
21. Report by the **Saint Kitts and Nevis** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
22. Report by the **Suriname** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
23. Report by the **United Kingdom** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
24. **United States of America.** Centers for Disease Control and Prevention. Data on COVID-19 during Pregnancy. Available at: <https://bit.ly/2SWWyYT>. Multisystem inflammatory syndrome in children (MIS-C), available at: <https://www.cdc.gov/mis-c/>. Data on COVID-19 among Health Care Personnel. Available at: <https://bit.ly/3i3YGvW>.
25. Report by the **Uruguay** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
26. Report by the **Venezuela** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email