

Epidemiological Update Coronavirus disease (COVID-19)

18 May 2021

Executive Summary

- As of 17 May 2021, 162,773,940 confirmed cumulative cases of COVID-19 have been reported globally, including 3,375,573 deaths, for which the Region of the Americas contributed 40% of cases and 47% of deaths.
- In April 2021, the South America subregion accounted for the highest proportion of cases and deaths in the Region of the Americas. Compared to March 2021, an additional 809,233 cases and 45,410 deaths were reported.
- As of 17 May 2021, Argentina, Aruba, Canada, Mexico, Panama, and the United States of America have detected the four variants of concern (VOC).
- Compared to data reported in 2020, an increase in both the number of cases and deaths among pregnant women positive to SARS-CoV-2 has been observed from January through April 2021, in at least 12 countries of the Americas. If the increasing trend continues, the number of cases and deaths reported this year will soon exceed the numbers reported for all of 2020.
- Among indigenous peoples in 18 countries of the Americas, 448,956 cases were reported, including 7,884 deaths.
- A total of 22 countries and territories have reported 5,555 cumulative confirmed cases of multisystem inflammatory syndrome in children and adolescents (MIS-C) temporally related to COVID-19, including 123 deaths.
- Regarding health workers, 23 countries have reported 1,827,427 cases, including 9,161 deaths.

Table of Contents

Context	2 -
Global Situation Summary	3 -
Situation Summary in the Region of the Americas	4 -
Epidemiological Highlights	7 -
I. SARS-CoV-2 Variants	7 -
II. COVID-19 among older adults (≥60 years of age)	11 -
III. COVID-19 during pregnancy	12 -
IV. COVID-19 among indigenous populations	14 -
V. COVID-19 among populations under 20 years of age	16 -
Multisystem inflammatory syndrome in children and adolescents (MIS-C	18 -
VI. COVID-19 among health workers	21 -
Guidance for national authorities	22 -
References	23 -

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, and on 31 July 2020, the WHO Director-General accepted the advice of the Emergency Committee, declaring that the COVID-19 pandemic continues to constitute a PHEIC, and issuing the temporary recommendations to States Parties under the International Health Regulations (IHR) (2005).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 seventh meeting of the Emergency Committee convened by the WHO Director-General under the International Health Regulations (2005) (IHR) regarding COVID-19 was held on Thursday, 15 April 2021. The Director-General determined that the COVID-19 pandemic continues to constitute a public health emergency of international concern 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/3eO4yXP.

¹ Statement on the fourth meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of coronavirus disease (COVID-19). Available at: https://bit.ly/3li7iOx

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

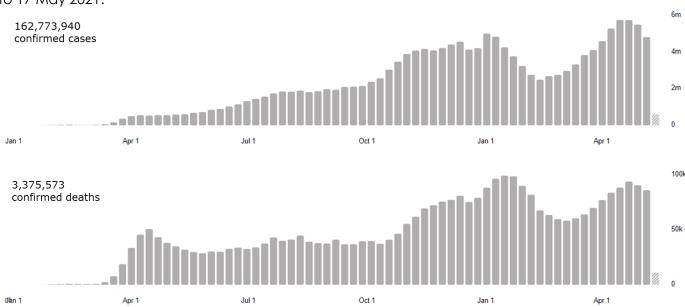
Global Situation Summary

Since the first confirmed cases of COVID-19 until 17 May 2021, a cumulative total of 162,773,940 confirmed cases of COVID-19 have been reported globally, including 3,375,573 deaths, representing a total of 26,658,506 additional confirmed cases and 438,657 additional deaths since the last PAHO/WHO Epidemiological Update on COVID-193 published on 14 April 2021.

At the global level, since the first confirmed cases were reported, the highest number of new cases was reported the week of 19 April 2021 with 5,743,532 cases. Regarding deaths, the highest number was reported during the week of 18 January 2021, with 99,165 deaths.

When observing the epidemic curve of cases at the global level, we can note that, except for the period between 18 January and 29 March 2021, the number of weekly cases in 2021 has exceeded the weekly totals reported in 2020. Related to deaths, since the beginning of January 2021, except between 15 February and 5 April, the number of weekly deaths has consistently surpassed the peak observed at the end of 2020. (Figure 1)

Figure 1. Distribution of global COVID-19 confirmed cases and deaths, by week. January 2020 to 17 May 2021.



Source: WHO Coronavirus Disease (COVID-19) Dashboard. Data as of 17 May 2021. Available at: https://covid19.who.int. Accessed 17 May 2021 at 1:45 p.m.

- 3 -

³ PAHO/WHO. Epidemiological Update: Coronavirus disease (COVID-19). 14 April 2021, Washington, D.C.: PAHO/WHO; 2021. Available at: https://bit.ly/2RS16m4

Situation Summary in the Region of the Americas

As of 16 May 2021, all 56 countries and territories in the Region of the Americas have reported a cumulative total of 64,934,163 confirmed cases of COVID-19, including 1,587,859 deaths⁴, since the detection of the first cases in the Region in January 2020.

Since the 14 April 2021 PAHO/WHO Epidemiological Update on COVID-19⁴ and as of 16 May 2021, 6,363,082 additional confirmed cases of COVID-19, including 168,689 additional deaths, have been reported in the Region of the Americas, representing a 10% and 11% increase in cases and deaths, respectively. During the same period, Anguilla showed an increase of 73% in cases, while Trinidad and Tobago and Uruguay showed a >35% increase in both the number of cases and deaths.

During the first quarter of 2021, a total of 26,684,044 confirmed cases, including 657,055 deaths, were reported in the Americas, with the subregions of North Americas and South Americas accounting for the highest proportion of cases (53% and 44%, respectively), while the Central America and the Caribbean and Atlantic Ocean Islands subregions accounted for 2% and 1%, respectively. During the same period, North America accounted for 51% of the reported deaths, followed by South America (47%) and Central America (1%) and the Caribbean and Atlantic Ocean Islands (1%). The highest number of cases and deaths in the Region were reported in January. (**Figure 2**).

In April 2021, the South America subregion accounted for the highest proportion of additional cases and deaths in the Region of the Americas, with 809,233 cases and 45,410 deaths reported in April 2021 alone.

⁴ Updated information on COVID-19, including situation reports, weekly press briefings, and the COVID-19 information system for the Region of the Americas is available at: https://bit.ly/3kvigPD.

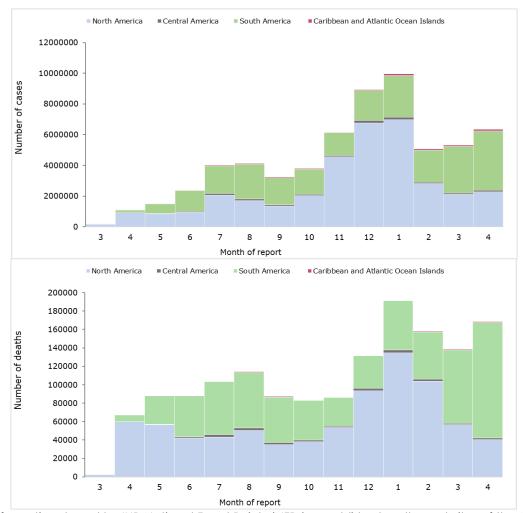
⁵ Canada, Mexico, and United States of America.

⁶ Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela.

⁷ Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

⁸ Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Bermuda, Bonaire, British Virgin Islands, Cayman Islands, Cuba, Curacao, Dominica, Dominican Republic, Falkland Islands, Grenada, Guadeloupe, French Guiana, Guyana, Haiti, Jamaica, Martinique, Montserrat, Puerto Rico, Saba, Saint Barthelemy, Saint Kitts and Nevis, Sint Eustatius, Saint Lucia, Saint Martin, Saint Pierre and Miquelon, Sint Maarten, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos, and the United States Virgin Islands.

Figure 2. Distribution of confirmed COVID-19 cases and deaths, by subregion and month of report. Region of the Americas, March 2020 to April 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 analysis of the epidemiological situation of COVID-19 in **Cuba**°. Additional details of the epidemiological situation in Cuba will be further presented in some sections of this Epidemiological Update.

- 5 -

Suggested citation: Pan American Health Organization / World Health Organization. Epidemiological Update: Coronavirus disease (COVID-19). 18 May 2021, Washington, D.C.: PAHO/WHO; 2021

⁹ It should be noted that the analysis is carried out with the available data, which could have limitations, such as delay in the notification or in the loading of the data in the different systems; the differences in days between when the case starts symptoms, consults and the examination is requested, which influences the trend of the epidemic curves; in asymptomatic cases, the time difference between the collection of the sample and the result of the examination is delivered and the information loaded into the registry system. The different methodologies at the local level for contact traceability, which influences the ability to capture new cases, among other factors.

The first cases of COVID-19 in Cuba was confirmed on 11 March 2020. Since then and until 11 May 2021, there have been 119,375 cumulative confirmed cases, including 768 deaths, with a cumulative incidence rate of 135.6 per 100,000 population and a case-fatality rate of 0.64%.

For the analysis of COVID-19 cases and deaths in Cuba in this Update, the data published on the COVID19CubaData website were used¹⁰, and population data were obtained from the population projections published by the United Nations Populations Division¹¹.

In order to determine whether the observed changes in temporal trends by epidemiological week (EW) were statistically significant, incidence rates per 100,000 population were analyzed using Joinpoint software¹². The results are described below.

When modeling the weekly incidence rate, 6 changes in the trend were identified, of which 4 were statistically significant: the first, between EW 12 and EW 16 of 2020, with a weekly percentage change (WPC) of 30.59%; the second, between EW 16 and EW 30 of 2020 with a WPC of -7.77%; the third, between EW 30 and EW 34 of 2020 with a WPC of 43.82%, and the fourth between EW 40 of 2020 and EW 5 of 2021 with a WPC of 33.63%. The other two changes, which were not statistically significant, occurred between EW 34 and EW 48 of 2020, with a WPC of 1.97% and between EW 5 and EW 18 of 2021, with a WPC of 3.07% (**Table 1**).

Table 1. Weekly Percent Change in Modeled COVID-19 Incidence Rates. Cuba, EW 12 of 2020 to EW 18 of 2021.

EW	WPC
12 - 16, 2020	30.59*
16 - 30,2020	-7.77*
30 - 34,2020	43.82*
34 - 38, 2020	-1.97
48, 2020 - 5,2021	33.63*
5 - 18,2021	3.07

Source: Data published by COVID19Cuba Data and analyzed by PAHO/WHO.

For the analysis of the mortality rate, R software¹³ was used. The analysis demonstrates three peaks in mortality rates, two of which occurred in 2020 and the third, of greater magnitude than the previous ones is currently in progress and began in EW 1 of 2021, with a statistically significant weekly increase of 11% (95% CI: 7.5% - 15.3%) between EW 2 and EW 18 of 2021 (**Figure 3**).

^{*}Statistically significant

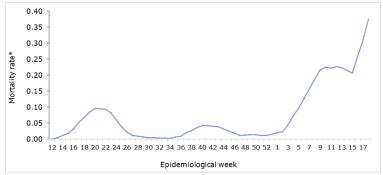
¹⁰ Covid19CubaData. Disponible en: http://www.cusobu.nat.cu/covid/#cuba

Population data projections published by the United Nations Populations Division, Department of Economic and Social Affairs. Available at: https://bit.ly/3n6jFP4

¹² Joinpoint software. Available at: https://surveillance.cancer.gov/joinpoint/

¹³ R Software. Available at: https://www.r-project.org/

Figure 3. Modeled mortality rate for COVID-19 by epidemiological week (EW). Cuba. EW 12 of 2020 and EW 18 of 2021.



*Per 100,000 population

Source: Data published by COVID19CubaData and analyzed by PAHO/WHO.

The use of programs such as Joinpoint or similar to model trend curves is important for monitoring when changes are occurring or have occurred, taking into account the implemented measures that could have had an influence on those changes. The analysis of these factors corresponds to the national authorities.

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 17 May 2021, more than 1,578,988 complete genomic sequences have been shared globally through publicly accessible databases.

As of 17 May 2021, 43 countries and territories in the Americas have published a total of 505,008 SARS-CoV-2 genomes on the GISAID platform, collected between February 2020 and May 2021. The countries and territories that have contributed genome data are: Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Bonaire, Brazil, the British Virgin Islands, Canada, the Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Curaçao, the Dominican Republic, Ecuador, El Salvador, Guadeloupe, Guatemala, French Guiana, Jamaica, Martinique, Mexico, Panama, Paraguay, Peru, Puerto Rico, Saint Barthelemy, Saint Kitts and Nevis, Saint Lucia, Saint Martin, Saint Vincent and the Grenadines, Sint Eustatius, Suriname, Trinidad and Tobago, the United States of America, Uruguay, and Venezuela.

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 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 will periodically be reviewed and updated, as necessary. The full publication is available at: https://bit.ly/3wjt8Gd

On 11 May 2021, WHO classified an additional SARS-CoV-2 variant, B.1.617 lineage¹⁴, which was first detected in India, as a VOC, bringing the number of VOC to 4 and maintaining the previous list of six VOI.

The list of SARS-CoV-2 variants, according to the WHO classification as of 11 May 2021, is available in **Table 2**.

Table 2. Variants of concern (VOC) and variants of interest (VOI), according to WHO

classifications as of 11 May 2021.

13 d3 01 11 May 2021.		
SARS-CoV-2 Variants WHO classification	Lineage	First detected by
	B.1.1.7	United Kingdom
Variant of concern	B.1.351	South Africa
variant of concern	P.1	Brazil / Japan
	B.1.617	India
	B.1.525	United Kingdom / Nigeria
	B.1.427/B.1.429	United States of America
Variant of interest	B.1.1.28.2, alias P.2	Brazil
variant of interest	B.1.1.28.3, alias P.3	Philippines and Japan
	B.1.526 with E484K or S477N	United States of America
	B.1.616	France

Note: The B.1.617 lineage is divided into three sublineages (B.1.617.1, B.1.617.2 and B.1.617.3), which differ in mutations and phenotypic characteristics. The currently available data is too limited to make clear distinctions between sublineages currently.

Source: WHO. COVID-19 Weekly Epidemiological Update. Published on 11 May 2021.¹⁵

Globally, an increase in the number of countries and territories reporting VOC and VOI continues to be observed. However, this increase must take into account 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.

¹⁴ WHO. Weekly Epidemiological Update on COVID-19. 11 May 2021. Available at: https://bit.ly/3v6e0Mi

Table 3. Summary of the countries/territories reporting cases of variants of concern (VOC), as of 17 May 2021.

		Name of th	ne variant *	
Summary	B.1.1.7	B.1.351	P.1	B. 1.617
Number of countries/territories reporting cases globally*	142	97	56	44
Number of countries/territories reporting cases in the Americas	36	17	21	8

Note:

Source: WHO. COVID-19 Weekly Epidemiological Update. Published on 11 May 2021.¹⁵ 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, and reproduced by PAHO/WHO.

Regarding the situation in the Americas, as of 17 May 2021, 39 countries/territories have reported the detection of cases of VOC, representing 3 additional countries (Bolivia, Dominica, and Haiti) since the 14 April 2021 PAHO/WHO COVID-19 Epidemiological Update.⁴ As of 17 May 2021, the detection of the four VOC has been reported in Argentina, Aruba, Canada, Mexico, Panama, and the United States of America. Additionally, Brazil, Chile, Costa Rica, French Guiana, Puerto Rico, and Suriname have detected three VOC. (**Table 3**)

^{*}Global data correspond to the WHO COVID-19 Weekly Epidemiological Update. Published on 11 May 2021. Some countries/territories have reported more than one variant of concern (VOC).

Table 4. Countries and territories reporting variants of concern (VOC) in the Region of the Americas, as of 17 May 2021.

Country	B.1.1.7	B.1.351	P.1	B. 1.617
Argentina	Yes	Yes	Yes	Yes
Aruba	Yes	Yes	Yes	Yes
Barbados	Yes	No	No	No
Belize	Yes	No	No	No
Bolivia	Yes	No	No	No
Bonaire	Yes	No	No	No
Brazil	Yes	Yes	Yes	No
Canada	Yes	Yes	Yes	Yes
Cayman Islands	Yes	No	No	No
Chile	Yes	Yes	Yes	No
Colombia	Yes	No	Yes	No
Costa Rica	Yes	Yes	Yes	No
Cuba	Yes	Yes	No	No
Curacao	Yes	No	No	No
Dominica	Yes	No	No	No
Dominican Republic	Yes	No	No	No
Ecuador	Yes	No	Yes	No
French Guiana	Yes	Yes	Yes	No
Grenada	Yes	No	No	No
Guadeloupe	Yes	Yes	No	Yes
Guyana	No	No	Yes	No
Haiti	Yes	No	Yes	No
Jamaica	Yes	No	No	No
Martinique	Yes	Yes	No	No
Mexico	Yes	Yes	Yes	Yes
Panama	Yes	Yes	Yes	Yes
Paraguay	No	No	Yes	No
Peru	Yes	No	Yes	No
Puerto Rico	Yes	Yes	Yes	No
Saint Barthélemy	Yes	No	No	No
Saint Lucia	Yes	No	No	No
Saint Martin	Yes	Yes	No	No
Sint Maarten	Yes	Yes	No	Yes
Suriname	Yes	Yes	Yes	No
Trinidad and Tobago	Yes	No	Yes	No
Turks and Caicos	Yes	No	No	No
United States of America	Yes	Yes	Yes	Yes
Uruguay	Yes	No	Yes	No
Venezuela	No	No	Yes	No

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

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.

- 10 -

Suggested citation: Pan American Health Organization / World Health Organization. Epidemiological Update: Coronavirus disease (COVID-19). 18 May 2021, Washington, D.C.: PAHO/WHO; 2021

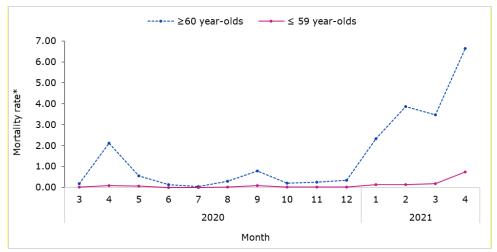
II. COVID-19 among older adults (≥60 years of age)

Some of the articles published^{15,16,17}, 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 by 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.

The trend that has been observed since the beginning of the pandemic, in relation to mortality rates among older adults, has also observed in **Cuba**. At the national level, persons aged \geq 60 years had mortality rates ranging from 0.12 deaths per 100,000 population (in June 2020) to 6.63 deaths per 100,000 population (in April 2021). In comparison, persons aged \leq 59 years of age had mortality rates ranging from 0.00 deaths per 100,000 population (in June and July 2020) to 0.74 deaths per 100,000 population (April 2021) (**Figure 4**). Older adults account for 80% of all COVID-19 deaths reported nationally.

Of note, as has been observed in other countries in the Americas, there has been a significant change in mortality rates among the group of \leq 59 years of age. When comparing the December 2020 age-specific mortality rates with those of April 2021, there was an increase from 0.02 to 0.74 deaths per 100,000 population among persons aged \leq 59 years, while the older adults increased from 0.33 to 6.63 deaths per 100,000 population.

Figure 4. Monthly age-specific mortality rates of COVID-19 among older adults (≥60 years) and persons aged 59 years and younger. Cuba. March 2020 to April 2021.



Note: *Rates per 100,000 population.

Source: Data published by COVID19CubaData and analyzed by PAHO/WHO.

¹⁵ 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

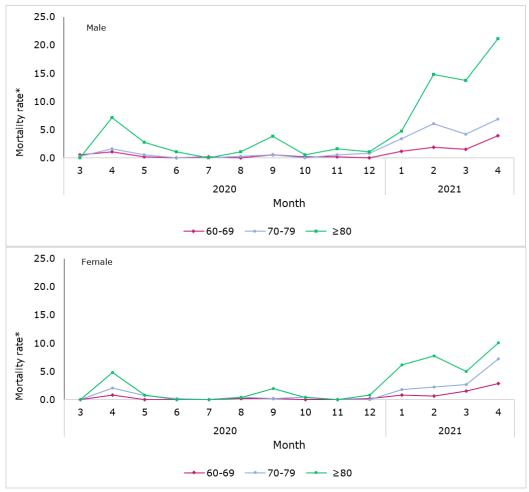
¹⁶ Leshem E, Wilder-Smith A. COVID-19 vaccine impact in Israel and a way out of the pandemic. Lancet. 2021 May 5 doi: 10.1016/S0140-6736(21)01018-7. Available at: https://bit.ly/3hk18xC

¹⁷ Haas E, Angulo F, et al. Impact and effectiveness of mRNA BNT162b2 vaccine against SARS-CoV-2 infections and COVID-19 cases, hospitalisations, 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

When disaggregating the mortality rates of the elderly into three age subgroups and analyzing the trend between March 2020 and April 2021, it is observed that, the older the age, the higher the mortality rate is for both sexes.

Across the three age subgroups, an increase in rates was observed from January 2021; in fact, during January-April 2021, the highest rates since the notification of the first confirmed cases in March 2020 were observed (**Figure 5**).

Figure 5. Age-specific mortality rates of COVID-19 among older adults (≥60 years), by month and sex. Cuba. March 2020 to April 2021.



Note: *Rate per 100,000 population among persons ≥60 years of age.

Source: Data published by COVID19CubaData and analyzed by PAHO/WHO.

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 final outcome of pregnancy; accordingly, it is necessary to continue collecting information to contribute to that knowledge base.

Compared to the data reported in 2020, an increase in both the number of cases and deaths among pregnant women positive to SARS-CoV-2 has been reported in the 12 countries¹⁸ listed in **Table 5**. An increase has been observed from January through April 2021 and, if the increasing trend continues, the number of cases and deaths reported this year will soon exceed the numbers reported for all of 2020.

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.

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

		Year 2020		1 Janua	ary - 30 April 2021	
Country	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	8,592	40	5.3	3,511	16	2.1
Chile	8,976	5	2.2	5,779	0	0.0
Colombia	7,626	56	8.0	2,369	13	1.5
Costa Rica	335	3	5.1	210	0	0.0
Cuba	95	0	0.0	619	1	0.9
Guatemala	653	8	1.9	294	1	0.2
México&	10,530	205	10.1	5,438	133	20.9
Panamá&	1,852	4	5.0	561	3	3.8
Paraguay	599	1	0.7	631	14	9.8
Saint Lucia	2	0	0.0	13	0	0.0
Suriname	41	0	0.0	36	0	0.0
Uruguay	82	0	0.0	742	1	2.1

Note: & Corresponds to pregnant and postpartum women

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.

Since the first reported cases of COVID-19 in the Americas and until 17 May 2021, there have been a total of 202,101 SARS-CoV-2 infections among pregnant women, including 1,271 deaths (0.63% case-fatality rate), reported in 24 countries/territories for which information was available.

Compared to the data presented in the 14 April 2021 PAHO/WHO COVID-19 Epidemiological Update⁴, this represents 10,201 additional cases and 169 additional deaths. During the same period, the highest relative increases in cumulative confirmed cases occurred in the Dominican Republic and Uruguay, while for deaths, the highest relative increase was observed in Paraguay (**Table 6**).

^{*} MMR Maternal mortality ratio, calculated using deaths among pregnant women (in some instances, including postpartum deaths) positive to SARS-CoV-2

¹⁸ Among those for which data is available.

Table 6. COVID-19 during pregnancy, by country. Region of the Americas. January 2020 to 17 May 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 (%)
Argentina	12,103	56	0.46
Bahamas	42	1	2.38
Bolivia	1,858	31	1.67
Belize	228	2	0.88
Brazil	5,931	428	7.22
Chile	9,764	5	0.05
Colombia	9,995	69	0.69
Costa Rica	545	3	0.55
Cuba	714	1	0.14
Dominican Republic	955	42	4.40
Ecuador	2,145	29	1.35
El Salvador**	272	9	3.31
Guatemala	947	9	0.95
Haiti	82	4	4.88
Honduras	36	N/A	N/A
Mexico&	16,132	334	2.07
Panama&	2,413	12	0.50
Paraguay	1,230	15	1.22
Peru&**	46,524	114	0.25
Saint Lucia	15	0	0.00
Suriname	77	0	0.00
United States of America	88,880	99	0.11
Uruguay	824	1	0.12
Venezuela**	389	7	1.80
Total	202,101	1,271	0.63

Note:

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 until 17 May 2021, there have been 448,956 confirmed cases of COVID-19, including 7,884 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 14 April 2021 PAHO/WHO Epidemiological Update on COVID-19⁴, this represents 25,533 additional confirmed cases including 914 deaths.

In comparison with previous PAHO/WHO Epidemiological Update, the highest increase in both cases and deaths was observed in Paraguay.

^{*17} May 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 14 April 2021 PAHO/WHO Epidemiological Update on COVID-193

[&]amp; Corresponds to pregnant and postpartum women

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 May 2021*.

Country	Number of COVID-19 confirmed cases	Number of deaths
Argentina	1,504	45
Belize	1,668	41
Bolivia	13,118	295
Brazil	48,036	672
Canada	28,118	326
Chile**	40,745	703
Colombia	46,772	1,425
Costa Rica	158	33
Ecuador**	5,153	206
Guatemala	13,575	488
Guyana**	95	6
Mexico	19,149	2,904
Panama**	5,807	102
Paraguay	376	38
Peru	27,838	540
Suriname	604	32
United States of America	195,379	N/A
Venezuela**	861	28
Total	448,956	7,884

Note: N/A: data not available

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.

Following is a description of the COVID-19 epidemiological situation among indigenous populations of Canada.

In **Canada**, since the confirmation of the first case until 11 May 2021, there were 28,118 confirmed COVID-19 cases among indigenous populations, including 326 deaths. Of the total confirmed cases, 26,972 are reported as recovered (96%). The provinces of Alberta (8,103 cases), Manitoba (7,518 cases), and Saskatchewan (6,742 cases) account for 80% of all confirmed cases among indigenous populations in Canada.

In Canada, indigenous populations are part of the priority groups for COVID-19 vaccination. Mass vaccination campaigns in indigenous communities began the week of 17 January 2021, a date that coincides with the start of the decline in active cases reported. When looking at **Figure**

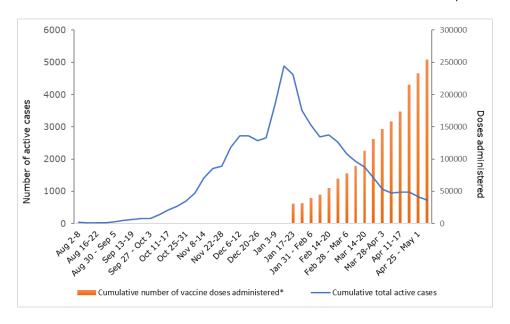
^{*17} May 2021 corresponds to the date of the most recent report received by PAHO/WHO; there may be differences in the dates that each country provided the last report to PAHO/WHO or published the report. Preliminary data subject to change based on retrospective investigation.

^{**} No update since the 14 April 2021 PAHO/WHO Epidemiological Update on COVID-194.

6, an inverse relationship is observed between the number of cumulative active cases and the number of vaccine doses administered.

As of 12 May 2021, a total of 416,106 doses have been administered, of which 134,740 were second doses, among this population group.

Figure 6. Number of active COVID-19 cases among the First Nations communities by report week and number of COVID-19 vaccine doses administered, Canada. As of 11 May 2021.



Note: *Cumulative total of COVID-19 doses administered, including first and second doses.

Source: Government of Canada. Epidemiological summary of COVID-19 cases in First Nations communities ¹⁹ and reproduced by PAHO/WHO.

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

Since the beginning of the pandemic, it has been apparent that children and adolescents have a lower risk of illness and death from COVID-19 compared to other age groups. As well, it has been recognized that children and adolescents are being affected mainly 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 alteration of health and social protection service functions, among others. The number of studies documenting the magnitude of these effects on the health, development, and learning of children and adolescents, is growing²⁰.

¹⁹ Government of Canada. Epidemiological summary of COVID-19 cases in First Nations communities. Available at: https://bit.ly/2S3dcJi

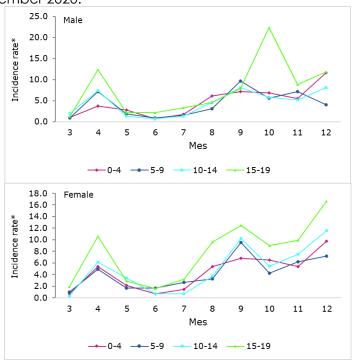
²⁰ UN Sustainable Development Group. Policy Brief: The Impact of COVID-19 on children. April 2020. Available at: https://bit.ly/38r1JbH

The evidence available thus far suggests that children and adolescents are less susceptible to SARS-CoV-2 infection and also transmit the virus less frequently than adults. When they acquire infection, they are generally asymptomatic and, when they do get sick, they usually have mild illness with symptoms similar to other common illnesses in 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.²¹,²²,²³,²⁴,²⁵

The following is an analysis of the age-specific incidence rates among children and adolescents between March and December 2020 in **Cuba**, per the available data.

In **Figure 7**, 15-19-year-olds reflect a higher incidence rate of becoming ill, among both males and females; additionally, two important increases are observed for each of the sexes: the first in April among both sexes and a second in October among males and in August-September among females.

Figure 7. Age-specific COVID-19 incidence rates among children and adolescents, by sex. Cuba. March to December 2020.



²¹ 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. https://doi.org/10.25561/84220

²² 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. https://doi.org/10.1001/jamapediatrics.2020.4573

²³ Viner, R. M., Russell, S., Saulle, 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

²⁴ 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). https://doi.org/10.1038/s41591-020-0962-9

²⁵ 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

Note: *Rate per 100,000 population among persons aged < 20 years.

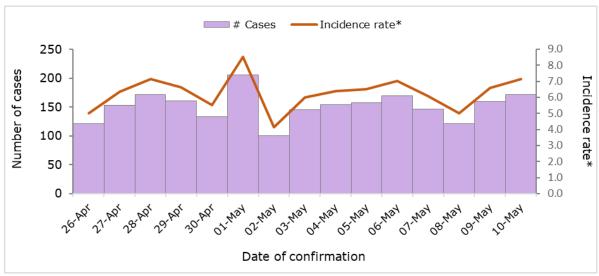
Source: Data published by COVID19CubaData and analyzed by PAHO/WHO.

For the first time since the first cases were reported in the country, an increase has been observed between January and May 2021 not only in incidence rates, but also in serious and critical conditions being reported among cases in population group under 20 years of age.

Between March 2020 and 11 May 2021, 17.5% of the total cases nationally correspond to the under 20 years of age group (20,891), of which 15,246 are under 18 years of age and among these, 812 are under 1 year of age. Overall, 97% of cases among children under 20 years of age have been reported in 2021.

When considering the epidemiological situation between 26 April and 10 May 2021, an average of 152 cases per day was reported among children under 18 years of age. In this same period, the age-specific incidence rates ranged from 4.1 to 8.5 cases per 100,000 population among children under 20 years of age (**Figure 8**).

Figure 8. Number of cases and age-specific incidence rates for COVID-19 among children aged < 20 years, by confirmation date. Cuba. 23 April to 10 May 2021.



Source: Data published by the Cuba Ministry of Public Health²⁶ and reproduced by PAHO/WHO

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

Various reports and scientific publications, from different places worldwide, have described groups of children and adolescents requiring admission to intensive care units (ICU) with 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

²⁶ Cuba Ministry of Public Health Press Conference Dr. Francisco Durán (11 May 2021). Accessed on 12 May 2021. Available at: https://bit.ly/3fhK4WD

of this syndrome, called multisystem inflammatory syndrome (MIS) in children and adolescents temporally related to COVID-19, available at: https://bit.ly/2RBZzgr

Although MIS-C occurs relatively infrequently, these cases present important challenges for health systems.

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

Between mid-May 2020 and 17 May 2021, a cumulative total of 5,555 confirmed cases of MIS-C temporally related to COVID-19, including 123 deaths, have been reported in 22 countries/territories of the Region of the Americas (**Table 8**).

Since the 14 April 2021 PAHO/WHO Epidemiological Update on COVID-19⁴ to 17 May 2021, an additional 595 confirmed cases were reported, including 12 deaths. During this same period, 23 countries and territories have officially reported to PAHO/WHO that they have not detected cases of MIS-C.

As the numbers of cases of MIS-C increase, it is important that each country/territory characterizes the cases²⁷ in order to contribute to closing the gaps in information, particularly related to clinical management and response measures.

²⁷ WHO. Case Report Form for suspected cases of multisystem inflammatory syndrome (MIS) in children and adolescents temporally related to COVID-19. Available at: https://bit.ly/3cTmrUF

Table 8. 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 May 2021*.

Country/Territory	Number of confirmed cases	Number of confirmed deaths
Argentina	128	1
Barbados	2	1
Brazil	952	63
Bolivia	1	1
Canada	94	0
Chile	286	5
Costa Rica	33	0
Colombia	6	3
Cuba	4	0
Dominican Republic	132	6
Ecuador	10	0
El Salvador	19	0
French Guiana	1	0
Guadeloupe	4	0
Guatemala	2	0
Honduras	3	0
Panama	81	2
Paraguay	79	6
Peru	1	0
Saint Martin	3	0
Trinidad and Tobago	29	0
United States of America	3,685	35
Total	5,555	123

Note: *17 May 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.

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.

As of 17 May 2021, Cuba has reported 4 MIS-C cases and no deaths.

Of the total number of reported cases for which data on age and sex were available (n=4,851), 30% were aged 0 to 4 years, 34% aged 5 to 9 years, 26% aged 10 to 14 years, and 11% aged 15 to 19 years (the United States of America includes 20-year-olds in this age group). Regarding the distribution by sex, 59% of the cases were male.

Among 120 fatal cases for which data on age and sex were available, 40% were aged 0 to 4 years, 20% aged 5 to 9 years, 15% aged 10 to 14 years, and 25% aged 15 to 19 years, and 51% were male.

VI. COVID-19 among health workers

Since the first confirmed cases of COVID-19 were reported and until 12 May 2021, there were 1,827,427 COVID-19 cases among health care workers, including 9,161 deaths, per the data made available by 23 countries in the Americas (**Table 9**). This represents 12% of the estimated 15 million health workers in the Americas.²⁸

Table 9. Distribution of cumulative confirmed cases and deaths of COVID-19 among health workers in the Region of the Americas. January 2020 to 17 May 2021*.

Country	Number of confirmed cases of COVID-19	Number of deaths
Argentina	84,493	496
Bahamas	505	13
Belice	315	2
Bolivia	21,659	430
Brazil	753,089	656
Chile	66,606	102
Colombia	57,321	274
Costa Rica	7,717	33
Ecuador	12,306	118
El Salvador**	6,609	72
Dominican Republic	972	21
Guatemala	6,438	60
Haiti	808	1
Jamaica	861	4
Mexico£	235,961	3,861
Panama**	7,925	123
Paraguay	12,857	132
Peru	57,901	1,001
Saint Lucia	133	0
Suriname	450	0
United States of America	482,432	1,579
Uruguay	7,043	18
Venezuela	3,026	165
Total	1,827,427	9,161

Note:

*17 May 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.

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.

^{**} No update since the 14 April 2021 PAHO/WHO Epidemiological Update on COVID-193

[£] The information that Mexico presents corresponds to the occupation variable of the Epidemiological Surveillance System for Viral Respiratory Disease (SISVER). The analysis reflects the cases that 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.

²⁸ PAHO/WHO. Weekly Press Briefing on COVID-19: Director's Opening Remarks, 12 May 2021. Available at: https://bit.ly/3uEhbKC

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.

Surveillance, rapid response teams, and case investigation	Clinical management
WHO resources available at: https://bit.ly/30zjmCj	WHO resources available at: https://bit.ly/3li6wQB
PAHO/WHO resources available at: https://bit.ly/36DJi3B	PAHO/WHO resources available at: https://bit.ly/3sadTxQ
Laboratory	Infection prevention and control
WHO resources available at: https://bit.ly/3d3TJ1g	WHO resources available at: https://bit.ly/3d2ckuV
PAHO/WHO resources available at: https://bit.ly/3oD2Qen	PAHO/WHO resources available at: https://bit.ly/3nwyOaN
Critical preparedness and response	Travel, Points of entry, and border health
Critical preparedness and response	Travel, Points of entry, and border health
Critical preparedness and response WHO resources available at: https://bit.ly/3ljWHBT	Travel, Points of entry, and border health WHO resources available at: https://bit.ly/3ivDivW
WHO resources available at:	WHO resources available at:
WHO resources available at: https://bit.ly/3ljWHBT PAHO/WHO resources available at:	WHO resources available at: https://bit.ly/3ivDivW PAHO/WHO resources available at:
WHO resources available at: https://bit.ly/3ljWHBT PAHO/WHO resources available at: https://bit.ly/36DJi3B	WHO resources available at: https://bit.ly/3ivDivW PAHO/WHO resources available at: https://bit.ly/36DJi3B
WHO resources available at: https://bit.ly/3ljWHBT PAHO/WHO resources available at: https://bit.ly/36DJi3B	WHO resources available at: https://bit.ly/3ivDivW PAHO/WHO resources available at: https://bit.ly/36DJi3B

References

- 1. PAHO/WHO. Epidemiological Update: Coronavirus disease (COVID-19). 14 April 2021, Washington, D.C.: PAHO/WHO; 2021. Available at: https://bit.ly/3lfCYoh
- 2. WHO. COVID-19 Weekly Epidemiological Update. Published on 11 May 2021. Available at: https://bit.ly/3v6e0Mi
- 3. Report by the **Argentina** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
- 4. Report by the **Bolivia** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
- 5. Ministry of Health of **Brazil**. Available at: https://bit.ly/2OnJAVg and
- 6. Government of **Canada**. Coronavirus (COVID-19) and indigenous communities. Available at: https://bit.ly/2lhCEWq
- 7. Report by the **Chile** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
- 8. Report by the **Colombia** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
- 9. Report by the **Costa Rica** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
- 10. Ministry of Public Health of **Cuba**. Available at: https://bit.ly/3fhK4WD
- 11. Covid19CubaData. Available at: https://bit.ly/3hBZ98i
- 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 **Mexico** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
- 15. Report by the **Paraguay** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
- 16. Report by the **Saint Lucia** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email

- 17. Report by the **Suriname** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email
- 18. **United States**. 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/
- 19. Report by the **Uruguay** International Health Regulations (IHR) National Focal Point (NFP), received by PAHO/WHO via email