Context

On 31 December 2019, the People’s Republic of China reported 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 new 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).” COVID-19 was declared a pandemic by WHO in March 2020, and on 31 July 2020, the PHEIC was reaffirmed at the fourth meeting of the Emergency Committee, convened by the WHO Director-General under the International Health Regulations (IHR) (2005) regarding COVID-19. On 9 July 2020, the co-chairs of the Independent Panel for Pandemic Preparedness and Response (IPPR) were announced, to evaluate the world’s response to COVID-19, following a resolution adopted in May 2020 by the World Health Assembly.

Epidemiological Highlights - Region of the Americas

Since the last PAHO/WHO COVID-19 Epidemiological Update published on 23 June 2020, and up to 22 August 2020, 14 million new cases of COVID-19, including over 300,000 deaths, have been reported worldwide. Of the total, three countries account for 60% of the new cases: The United States of America (24%), India (18%), and Brazil (17%). The majority of new deaths were reported by Brazil (19%), the United States of America (16%), India (13%), and Mexico (12%). As of 22 August, the daily notifications of cases in the United States of America and Brazil are trending downwards, whereas in India, a sustained increase has been observed over the past two months.


Global Situation Summary

As of 22 August 2020, close to 23 million cases of COVID-19, including approximately 795,000 deaths, were reported globally among 216 countries, territories, or areas (see Figure 1).³

Figure 1. Distribution of new cases of COVID-19 by date of report and WHO Region. 31 December 2019 - 22 August 2020.

Since the last PAHO/WHO COVID-19 Epidemiological Update published on 23 June 2020⁴ and up to 22 August 2020, the number of cases and deaths worldwide has increased by 158% (~14 million additional cases) and 72% (>300,000 additional deaths), respectively. The majority of new cases reported over the prior two months were reported from the Region of the Americas (56%) and the South-East Asia Region (SEARO) (20%). Three countries in those two Regions contributed to approximately 60% of the new cases: The United States of America (24%, 3 million new cases), India (18%, 2.5 million new cases) and Brazil (17%, 2.4 million new cases).

As of 22 August, the daily notifications of cases in the United States of America and Brazil appear to be trending downwards, whereas in India, a sustained increase has been observed over the prior two months.

The Region of the Americas accounts for 64% of the new deaths reported globally over the prior two months (~213,000 new deaths), though the Region only accounts for approximately 13% of the global population. The majority of the new deaths globally were reported by Brazil (19%, ~62,000 new deaths), the United States of America (16%, ~54,000 new deaths), India (13%, ~42,000 new deaths), and Mexico (12%, ~38,000 new deaths).

³ WHO Coronavirus Disease (COVID-19) Dashboard. Available at: https://covid19.who.int
⁴ PAHO/WHO Epidemiological Update on Coronavirus disease (COVID-19), 23 June 2020. Available at: https://bit.ly/3kPH6um
Situation Summary in the Region of the Americas

All 54 countries and territories in the Region of the Americas have reported COVID-19 cases and deaths. As of 22 August 2020, there are more than 12.3 million cases of COVID-19, including approximately 439,000 deaths, which is nearly triple the number of reported cases and almost twice the number of reported deaths since 22 June (4.4 million cases, including 224,000 deaths). Of the almost 8 million new cases reported in the prior two months, 73% were reported by the United States of America (42%) and Brazil (31%). These two countries also account for 54% of the new deaths reported; 29% of the new deaths were reported by Brazil and 25% were reported by the United States of America, followed by 18% in Mexico and 9% in Peru.

Map 1. Cumulative incidence rate of COVID-19 cases (A) and mortality rate (B) per 100,000 population in the Region of the Americas by country/territory. As of 23 August 2020.

5 Up to date information on COVID-19, including Situation Reports, Weekly Press Briefings, and the COVID-19 Information System for the Region of the Americas can be accessed online from the Coronavirus Disease (COVID-19) pandemic page.
The countries and territories with the highest cumulative incidence rates are French Guiana (2,945 cases per 100,000 population) and Chile (2,070 cases per 100,000 population), followed by Panama, Peru, the United States of America, Brazil, and Aruba, which each reported a cumulative incidence rate greater than 1,000 cases per 100,000 population (see Map 1A). The countries with the highest cumulative per capita death rate as of 22 August are Peru (83 deaths per 100,000 population), Chile (56 deaths per 100,000 population), Brazil (53 deaths per 100,000 population), and the United States of America (53 deaths per 100,000 population) (see Map 1B).

In the Region of the Americas, while COVID-19 cases seem to have steadied in some countries and territories at the national level (e.g. the United States and Canada), daily notification rates are now accelerating in other countries and territories, many of which are experiencing larger outbreaks for the first time since the onset of the pandemic in the Region (e.g. countries and territories in the Caribbean subregion). A decreasing trend in the daily incidence of cases is mainly from countries in the North America subregion, primarily the United States of America (see Figure 2). Trends throughout this report should be interpreted with caution as they are dependent on a number of factors which vary considerably between countries and territories (e.g. testing rates, case definitions, time delays between diagnosis, laboratory results, and official notification, etc.).

**Figure 2.** Distribution of new COVID-19 cases by epidemiological week (EW) of report and by country/territory. Region of the Americas. EW 4 – EW 34, 2020.

![Figure 2](image-url)
North America

The North America subregion, which consists of Canada, Mexico, and the United States of America, accounts for 50% of the total cases and 55% of the total deaths reported to date in the Region of the Americas. Of the approximately 3.7 million new cases, including the almost 93,000 new deaths, reported in the subregion in the prior two months, the majority of the new cases were reported by the United States of America (89%), followed by Mexico (10%) and Canada (1%). With regards to the new deaths, approximately 58% were reported by the United States of America, 41% by Mexico, and 1% by Canada. All three countries have reported community transmission per the WHO classification for COVID-19 transmission category.

Notification of daily COVID-19 cases began increasing in epidemiological week (EW) 11 of 2020 and reached a peak in EW 30 (19 - 25 July), when 516,070 new cases were reported, primarily from the United States of America (see Figure 3). Since then, the daily notification of cases has gradually declined, with a total of 349,737 cases reported during EW 34 (16 - 22 August), a 32% decrease compared to the peak shown in Figure 3.

Figure 3. Distribution of COVID-19 cases by epidemiological week (EW) of notification. North America subregion. EW 11 – EW 34, 2020.

Source: Data provided by the Ministries and Institutes of Health of the countries and territories of the Region and reproduced by PAHO/WHO.
North America’s decrease in daily case notifications is due in large part to the decreasing trend in daily cases in the **United States of America**, which had its second peak at the end of July. Per the United States Centers for Disease Control and Prevention (US CDC), the percentage of respiratory specimens testing positive for SARS-CoV-2 decreased from 6.9% in EW 32 to 6.3% in EW 33, and decreased or remained the same in nine of ten Health and Human Services regions.⁶

In **Canada**,⁷ average daily case counts at the national level have remained stable over the past three weeks, and the number of hospitalizations and deaths remain low overall. In **Mexico**, the daily notification of cases appears to be on a downward trend, with 5,481 cases reported on 22 August (7-day moving average), compared to the 7-day average of 7,022 cases reported on 2 August, a 22% relative decrease.

**Central America**⁸

As of 22 August, the total confirmed cases (~266,000) and deaths (7,203) have each increased by over 300% in the Central America⁸ subregion, compared to the totals (61,058 cases and 1,580 deaths) reported as of the last PAHO/WHO COVID-19 Epidemiological Update on 23 June 2020. Of the almost 205,000 new cases reported in the prior two months, the majority were reported by Panama (29%), Guatemala (27%), and Honduras (20%). The same three countries also made up the majority (83%) of new deaths reported in the subregion, with Guatemala accounting for the highest proportion (36%), followed by Panama (24%) and Honduras (23%). Belize and Costa Rica experienced the highest relative increases in cases compared to the total number of cases reported as of the last PAHO/WHO COVID-19 Epidemiological Update on 23 June 2020: a 29-fold increase in Belize (626 new cases) and a near 15-fold increase in Costa Rica (~30,000 new cases). Costa Rica also experienced a 28-fold increase in deaths (328 new deaths) compared to the total number of deaths reported as of 23 June 2020.

Notification of daily COVID-19 cases began increasing in EW 13 of 2020 and reached a peak in EW 30 (19 - 25 July), when 29,795 new cases were reported, primarily from Guatemala, Panama, and Honduras (see **Figure 4**). After a 15% decrease in cases during EW 31, the next substantial difference in the weekly notification of cases occurred between EW 33 and EW 34, when an 8% decrease was observed (see **Figure 4**).

---

⁷ Statement from the Chief Public Health Officer of Canada on August 24, 2020. Available at: PHAC
⁸ Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.
**Figure 4:** Distribution of COVID-19 cases by epidemiological week (EW) of notification. Central America subregion. EW 10 – EW 34. 2020.

In the Central America subregion, Panama has reported the highest cumulative incidence of COVID-19 cases (1,913 cases per 100,000 population), followed by Costa Rica (571 cases per 100,000 population) and Honduras (515 cases per 100,000 population). The highest rates of cumulative deaths per capita were reported by Panama (41 deaths per 100,000 population), Honduras (16 deaths per 100,000 population), and Guatemala (14 deaths per 100,000 population).

To date, all seven countries in the Central America subregion have reported community transmission per the WHO classification for COVID-19 transmission category. Belize was the last country in the subregion to join that classification rank, when they declared community transmission on 20 August with 553 confirmed cases including five deaths.

**Source:** Data provided by Ministries and Institutes of Health of the countries and territories of the Region and reproduced by PAHO/WHO.
Caribbean and Atlantic Ocean Islands

The Caribbean and Atlantic Ocean Islands subregion reported more than 100,000 new cases, including 1,384 deaths, since the last PAHO/WHO COVID-19 Epidemiological Update on 23 June 2020, a 230% and 123% increase in cases and deaths, respectively. Eighty percent of new cases reported in the prior two months were from the Dominican Republic (59%) and Puerto Rico (21%). The Dominican Republic reported 64% of the new deaths, followed by Puerto Rico (17%) and Haiti (8%). In addition to the Dominican Republic, Puerto Rico, French Guiana, and Haiti, the countries and territories of Aruba, Sint Maarten, Suriname, Trinidad and Tobago, and the U.S. Virgin Islands now also have community transmission.

In this subregion, the notification of daily COVID-19 cases began increasing in EW 12 of 2020 (15–21 March) and reached a high of 15,636 new cases reported in EW 31 (26 July - 1 August), primarily from the Dominican Republic and Puerto Rico (see Figure 5).

**Figure 5**: Distribution of COVID-19 cases by epidemiological week (EW) of notification. Caribbean and Atlantic Ocean Islands subregion. EW 10 – EW 34, 2020.

Source: Data provided by Ministries and Institutes of Health of the countries and territories of the Region and reproduced by PAHO/WHO.

---

9 Anguilla, Antigua and Barbuda, Aruba, the Bahamas, Barbados, Bermuda, Bonaire, Sint Eustatius and Saba, the British Virgin Islands, the Cayman Islands, Cuba, Curacao, Dominica, the Dominican Republic, the Falkland Islands, Grenada, Guadeloupe, French Guiana, Guyana, Haiti, Jamaica, Martinique, Montserrat, Puerto Rico, Saint Barthélemy, Saint Kitts and Nevis, Saint Lucia, Saint Martin, Saint Pierre and Miquelon, Sint Maarten, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos, and the U.S. Virgin Islands.
The weekly number of new cases has been fluctuating since EW 31, with a 15% decrease in EW 32, a 10% increase in EW 33, followed by a 10% decrease in EW 34, relative to the previous weeks (see Figure 5). Countries and territories such as Aruba, the Bahamas, Sint Maarten, Trinidad and Tobago, and Turks and Caicos generally began reporting an increase in the daily number of cases since the last report, with an acceleration in cases reported in the prior two weeks; all of which relaxed their social distancing and public health measures in July, including the re-opening of airports.

South America

Following North America, South America remains the subregion with the highest number of confirmed cases and deaths reported to date. As of 22 August, the 10 countries in the subregion have reported a combined total of more than 5.6 million cases, including close to 186,000 deaths, nearly three times the number of cases and more than twice the number of deaths since the last report (~1,780,000 cases, including ~71,500 deaths). All of the countries have reported community transmission except for Uruguay (Clusters of cases).

The shape of the epidemic curve in South America (see Figure 6) is largely attributed to the situation in Brazil, which has the second highest number of cumulative cases and deaths reported to date at both the global and regional levels. Of the 3.8 million new cases reported in the prior two months, Brazil accounts for the highest proportion of cases (64%), followed by Colombia (12%), Peru (8%), and Argentina (7%). Similarly, of the 106,000 new deaths, the highest proportions were reported by Brazil (55%), Peru (17%), and Colombia (13%).

---

10 Argentina, Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, and Venezuela.
**Figure 6**: Distribution of COVID-19 cases by epidemiological week (EW) of notification. South America subregion. EW 10 - EW 34, 2020.

![Figure 6: Distribution of COVID-19 cases by epidemiological week (EW) of notification. South America subregion. EW 10 - EW 34, 2020.](image)

**Source**: Data provided by Ministries and Institutes of Health of the countries and territories of the Region and reproduced by PAHO/WHO.

In South America, the weekly notification of COVID-19 cases began increasing in EW 13 of 2020 (22 – 28 March) and reached a high of more than 530,000 new cases reported in EW 33 (9 - 15 August), primarily from Brazil, Colombia, and Peru (see **Figure 6**). A 10% decrease in cases was observed in EW 34 (16 - 22 August).
Highlight - Comorbidities and Age as Risk Factors for COVID-19

If an individual becomes infected, the risk of severe COVID-19 is known to be higher among older adults and those with underlying health conditions. Understanding the number of individuals at increased risk of severe COVID-19 can inform the design of strategies to protect, manage chronic care conditions, and guide vaccine allocation for those at-risk.\textsuperscript{11,12}

Populations at increased risk of severe COVID-19 are those with at least one underlying health condition.\textsuperscript{§} The population at high risk is also estimated, and includes those who would require hospitalization if infected.\textsuperscript{13} In the Americas, three out of ten people (29%), nearly 325 million people, are at increased risk of developing severe COVID-19 due to underlying health conditions, while there are 43 million people at high risk. A similar scenario is presented for Latin America and the Caribbean, where about 186 million people (26%) are at increased risk and 25 million (4%) are at high risk of severe COVID-19 (see Figure 8).\textsuperscript{18}

\textbf{Figure 8.} Number (in millions) and percentage of population by number of underlying conditions and increased risk – High prevalence estimates.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure8}
\end{figure}


\textsuperscript{11} PAHO, 2020. COVID-19 and comorbidities in the Americas: Background information. Available at: https://bit.ly/3goDIyT

\textsuperscript{§} The 14 underlying health conditions are listed as “at increased risk” in public health agencies guides (WHO, CDC, and PHE) and include: cardiovascular disease, chronic kidney disease, chronic respiratory disease, chronic liver disease, diabetes, cancers with immunosuppression, cancer with possible immunosuppression caused by treatment, HIV/AIDS, tuberculosis, chronic neurological disorders, sickle cell disorders, tobacco smoking, severe obesity, and hypertension.

Pan American Health Organization • http://www.paho.org • © PAHO/WHO, 2020
Persons over the age of 65 are at-risk of experiencing more severe disease, as the likelihood of developing multiple health conditions increases with age. Working-age adults, i.e., individuals between 15 and 64 years, are also vulnerable, as many of them live with one or more underlying health conditions (see Figure 9).\(^3\)

**Figure 9.** Percentage of population at increased risk of severe COVID-19 by age, Latin America and the Caribbean – High prevalence estimates.

![Figure 9: Percentage of population at increased risk of severe COVID-19 by age, Latin America and the Caribbean](image)

**Source:** Adapted from Clark A. *et al.* Global, regional, and national estimates of the population at increased risk of severe COVID-19 due to underlying health conditions in 2020: a modelling study. The Lancet Global Health. 2020 Jun 15.

These estimates provide information that may help countries tailor their response to better protect vulnerable groups from risk and to implement innovative programs to help individuals safely and more consistently manage their conditions.

**Comorbidities and Outcomes among COVID-19 Reported Cases in Latin America and the Caribbean**

As part of the incident management system established to respond to the COVID-19 pandemic, countries of the Region of the Americas have reported individual-level data for COVID-19 probable and confirmed cases, including demographic, clinical, and epidemiological characteristics, as well as information on potential risk factors for both SARS-CoV-2 infection and complications following infection.

Of 762,302 COVID-19 cases (probable or confirmed) from 36 countries and territories in Latin America and the Caribbean (LAC), representing 28% of all confirmed and probable cases reported in the Region of the Americas as of 17 June 2020, the majority were from South America (588,225; 77%), while 159,930 (21%) were from Central America and 162,243 (2%) were from the Caribbean and Atlantic Ocean Islands subregions. Of the total cases, 349,462 (54%) were male, 46,922 (6%) were aged <20 years, 589,528 (78%) were aged 20-59 years, and 122,715 (16%) were aged ≥ 60 years.
Of the 393,742 COVID-19 cases (52%) with information regarding hospital admission, 174,252 (44%) were admitted to a hospital; fifty-eight percent of adults ≥60 years and 43% of adults 20-59 years compared to 24% of <20 years were hospitalized. With regards to severe hospitalization, 155,627 (22%) had information on intensive care admission, mechanical ventilation, extracorporeal membrane oxygenation (ECMO), or in-hospital death. Of those, 29,628 (19%) had a severe hospitalization outcome. Severe hospitalization was associated with older age; 45% of adults ≥60 years had a severe hospitalization compared to 12% among adults 20-59 years and 8% among <20 years.

Approximately half (45%) of reported COVID-19 cases had information on their final disease outcome classification; of those 344,238 cases, 22,445 (7%) died. Twenty-two percent of adults ≥60 years died, reaching as high as 33% among adults ≥80 years. The median number of days between symptom onset and death varied between age groups, ranging from 8.5 days among children 0-9 years and 9 days among adults ≥80 years, compared to 14.5 days among adults 20-29 years.

Among those with available information, 158,335 (36%) reported at least one comorbidity. The most common comorbidities reported were diabetes (40%), cardiac disease (37%), and lung disease (12%) (see Figure 10). Having at least one comorbidity was statistically associated with age but not sex. Twenty-nine percent of adults 20-59 years reported at least one comorbidity compared to 57% of adults ≥60 years. Among those with available information, 69,665 (44%) were classified as having one comorbidity, 16,641 (11%) as having 2 comorbidities, and 2,649 (1.5%) as having ≥3 comorbidities.

Sixty-three percent of individuals reporting at least one comorbidity were hospitalized compared to 53% of individuals reporting no comorbidities. When examining the association between comorbidities and hospitalization, the odds ratio (OR) for “at least one comorbidity” was 2.92 adjusting for age, sex, and subregion. The OR increased with the number of comorbidities: for one comorbidity the OR was 2.49, for 2 comorbidities the OR was 3.65, and for ≥3 comorbidities the OR was 6.87. When examining the association between comorbidities and severe hospitalization, the OR increased again with each additional comorbidity, up to 2.69 for ≥3 comorbidities. Finally, death was reported for 61% of individuals with at least one comorbidity and 39% of individuals with no comorbidities. The OR was 2.20 for at least one comorbidity and up to 4.44 for ≥3 comorbidities.
Overall, the analysis showed that hospitalization and severe hospitalization were associated with older age. One-third of COVID-19 cases reported at least one comorbidity. Among the most frequently reported comorbidities were diabetes, heart disease, and lung disease. The presence of at least one comorbidity, regardless of its severity, was associated with increased hospitalization, severe hospitalization, and death. The association between comorbidities and serious COVID-19 outcomes increased with the cumulative number of comorbidities. Findings highlighted the importance of reinforcing risk communication messages for high-risk groups, including the elderly and individuals with chronic conditions.
Highlight - COVID-19 Among Indigenous populations

From the beginning of the COVID-19 pandemic in the Region of the Americas and until 22 August, 93,622 confirmed cases, including 1,893 deaths (2.0%), were reported among indigenous peoples or communities in 11 countries for which information was available in the Americas.

Comparing the current data with the data published in the PAHO/WHO Epidemiological Update on 5 August, the highest relative increase in the number of cases has been observed among the indigenous peoples of Colombia, followed by Ecuador and Brazil. With regards to the number of deaths, the highest relative increase has been observed in Ecuador, followed by Colombia (see Table 1).

Table 1. Number of confirmed cases and deaths of COVID-19 among indigenous peoples in the Region of the Americas. 1 January to 21 August 2020.15

<table>
<thead>
<tr>
<th>Country</th>
<th>Indigenous nations or indigenous communities</th>
<th>Number of confirmed cases</th>
<th>Number of deaths</th>
<th>Relative increase in cases</th>
<th>Relative increase in deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>Moxaño Trinitario, Moxima, Mejía Ignacio, Cabezaño, Trinitario rio marañón, Guaraño, Chipí, Cuyabeno, Esse eje, Tacana cabeno, Guarañ, Yucaré, Baure, Itamama, Sirionó, Ayoreo, Mosetén, Yuqui, Canichana, Lecó de apo, and Arauá</td>
<td>1,881</td>
<td>89</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Canada**</td>
<td>Alberta, British Columbia, Quebec, Ontario, and Saskatchewan</td>
<td>429</td>
<td>6</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Colombia</td>
<td>Ambaí, Andoque, Atalaia, Awá, Awí, Bora, Cocama, Coconuco, Coréique, Guambiana, Curripaco, Desano, Duíja (Tamina), Embera, Embera Chami, Embera Katioi, Esperança Sindic, Guayabero, Inga, Kaménta, Karamamo, Kichwa, Kajo, Kifán, Malapi, Miraflo, Misak (Guambiano), Mococo, Morona, Musica, Nuri, (Utotoi), Nasa, Páez, Pasto, Papi, Pijao, Piraputanga, Polindara, Pumave, Quilincinga, Salva, Sikuani (Guaiibo), Siona, Taninmac, Tanaro, Testi, Toboro, Tubara, Tucano, U'wa, Wayuu, Wiwa, Wounaan (Waunana), Yagua, Yanaconá, Yurupí, Yukuna, and Zeno</td>
<td>6,478</td>
<td>226</td>
<td>52%</td>
<td>56%</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Achuar, Cañari, Chagá, Secoya, Shiwiar, Shuar, Siona, Waranani and Zapara</td>
<td>2,113</td>
<td>86</td>
<td>45%</td>
<td>219%</td>
</tr>
<tr>
<td>Guatemala</td>
<td>Maya, Garfíuna, and Xinca</td>
<td>2,675</td>
<td>131</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Mexico</td>
<td>Persons that recognize themselves as indigenous</td>
<td>6,072</td>
<td>877</td>
<td>12%</td>
<td>15%</td>
</tr>
<tr>
<td>Panama</td>
<td>Comarca Ngäbe-Buglé, Comarca Emberá Wounaan, Comarca Guna de Wargandi, Comarca Guna de Madugandí, Comarca Emberá Alto Bayeno, and Tierras colectivas Emberá Wounaan</td>
<td>2,415</td>
<td>47</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Peru</td>
<td>Awasini (aguasuno, antua), Chucho - Chucho Rina, Chiquiba, Chipí - Conito - Shetabo, Achuar, Achuar, Ashaninka, Catatobo (Uni), Urinama (Itukale, Shimaco, Kachi), Cocama - Cocambo, Yine - Yami (&quot;Piro&quot;), Yagua (Yawa, Nhameso), Wampis (Mayuña), Mayora (Matsai), Bara (Himú), Huito, Incluye Murui, Mancha, Maimanu, Shawi (Chachapua), Kanjungan, Kapiy Pawi, Tucuna (Uxué), Candoshi - Murato, Ashininka/Yanehia (&quot;Amushu&quot;), Secoya (Aldo Pio), Esa' Eia (&quot;Huayllay&quot;), Amanakaeni, Javaro (Shiiko, Tawoji), Otros Grupos Indígenas Amazonicos, Amahuaca, Capanahuas (Junkun), Huaraná (Tagarí, Tomaranana), Ocana (Ivi Tsa), Orezon (Mal Huna, Maljuna), Lusio (Mayo, Kandí), Alesaro, Shapí, Yanehia, Araraima, Isoconaua (Icokakhoi), Yamanauha, Sharanauha / Maranauha / Onokion, Yora (&quot;Nahuas&quot;, &quot;Arequihaus&quot;), Cashinahuas (Junkun), Nâmatsipecuau, Maticsipe, Cuina (Madi), Mastanahuas, Sapiri, Iquito, and Haraimbut</td>
<td>11,182</td>
<td>69</td>
<td>4%</td>
<td>23%</td>
</tr>
<tr>
<td>United States of America***</td>
<td>Alaska, Alburquerque, Bemidji, Billings, California, Great Plains, Nashville, Navajo, Oklahoma City, Phoenix, Portland, and Tucson</td>
<td>39,051</td>
<td>n/a</td>
<td>20%</td>
<td>n/a</td>
</tr>
<tr>
<td>Venezuela</td>
<td>Pemón, Kurripaco, Yararé, Yanomami, and Warao</td>
<td>184</td>
<td>n/a</td>
<td>3%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

15 For Table 1. References, please see last page.
Table Notes:
- n/a: Data not available
- ‡ Relative increase in comparison with the data published in the PAHO/WHO Epidemiological update on 5 August 2020.
- *Brazil: Data corresponds to the 34 Special Districts of Indigenous Health (DSEI, per the Portuguese acronym).
- **Canada: Data corresponds to provinces.
- ***United States of America: Data corresponds to 12 areas of the Indian Health Service (IHS).

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

Guidance and recommendations for national authorities


1. Surveillance

Surveillance Strategies

PAHO/WHO recommends that *Public health surveillance for COVID-19* be followed in conjunction with *Critical preparedness, readiness and response actions for COVID-19* and *Contact tracing in the context of COVID-19.*

To interrupt COVID-19 transmission the following activities should be conducted:

- Early detection of suspected cases,
- Laboratory testing,
- Isolation,
- Contract tracing and quarantine of contacts.

The latest guidance includes the revision of suspected and probable case definitions, as follows, to broaden the clinical spectrum of COVID-19 signs and symptoms.

---

**Suspected COVID-19 case**

A. A person who meets the clinical AND epidemiological criteria:

Clinical criteria: 1. Acute onset of fever AND cough; or 2. Acute onset of any three or more of the following signs or symptoms: fever, cough, general weakness/fatigue, headache, myalgia, sore throat, coryza, dyspnoea, anorexia/nausea/vomiting, diarrhoea, altered mental status.

AND

Epidemiological criteria: 1. Residing or working in an area with high risk of transmission of the virus: for example, closed residential settings and humanitarian settings, such as camp and camp-like settings for displaced persons, any time within the 14 days prior to symptom onset; or 2. Residing in or travel to an area with community transmission anytime within the 14 days prior to symptom onset; or 3. Working in health setting, including within health facilities and within households, anytime within the 14 days prior to symptom onset.

B. A patient with severe acute respiratory illness (SARI: acute respiratory infection with history of fever or measured fever of ≥ 38°C; and cough; with onset within the last 10 days; and who requires hospitalization).

**Probable COVID-19 case**

A. A patient who meets clinical criteria above AND is a contact of a probable or confirmed case, or epidemiologically linked to a cluster of cases which has had at least one confirmed case identified within that cluster.

B. A suspected case (described above) with chest imaging showing findings suggestive of COVID-19 disease.

Typical chest imaging findings suggestive of COVID-19 include the following (Manna 2020):

- chest radiography: hazy opacities, often rounded in morphology, with peripheral and lower lung distribution
- chest CT: multiple bilateral ground glass opacities, often rounded in morphology, with peripheral and lower lung distribution
- lung ultrasound: thickened pleural lines, B lines (multifocal, discrete, or confluent), consolidative patterns with or without air bronchograms.

C. A person with recent onset of anosmia (loss of smell) or ageusia (loss of taste) in the absence of any other identified cause.

D. Death, not otherwise explained, in an adult with respiratory distress preceding death AND who was a contact of a probable or confirmed case or epidemiologically linked to a cluster which has had at least one confirmed case identified within that cluster.

**Excess Mortality**
Public health intervention strategies to reduce the consequences of the COVID-19 pandemic on mortality are cause-specific and require the input of accurate mortality data. Obtaining accurate cause-specific data to measure mortality due to COVID-19 is challenging, mainly because:

- the diagnostic uncertainty could lead to a miscount of COVID-19 deaths;
- categorical attribution of a COVID-19 infection does not necessarily tell the complete public health story, as the infection increases mortality risk from other conditions;
- the increased stress on or saturation of health care services during the pandemic may lead to increased mortality from other conditions; and
- the challenge of diagnosing COVID-19 deaths outside of hospitals presents a significant barrier to obtaining accurate cause-specific mortality data.

All-cause excess mortality analysis is a sound and recommended analytic approach for assessing the impact of COVID-19, as it captures the net effect of all factors that may increase or decrease mortality and is readily measurable from existing Civil Registration and Vital Statistics (CRVS) systems.

**A Case Example – Peru**

Excess mortality analysis was applied to the case of Peru using official data from the *Repositorio Único de Información de Salud, Ministerio de Salud*, including registered deaths from 2017 to 2020 and deaths due to COVID-19. Data quality assessment and data correction for under-registration (2017-2020) were carried out, and estimates of the expected deaths and expected death rates and corresponding threshold based on previous years (2017-2019) were obtained. Median (50 percentile) and third quartile (75 percentile) were calculated. Absolute number of deaths, age- and sex-specific death rates, and age-standardized death rates, accounting for the population size and age distribution in the population, were computed by week to estimate the excess of deaths.

Between EW 12 and EW 21 of 2020 in Peru, a total of 55,477 deaths and an excess of 21,260 deaths compared to the median of previous years (2017-2019) was estimated. Of these excess deaths, 4,510 (21%) deaths were due to COVID-19. Excess mortality was increasing almost exponentially week by week during this time frame. Findings suggest that:

- there exists a high level of excess deaths as a consequence of the COVID-19 pandemic;
- there is a high number of excess deaths due to non-COVID-19 or other causes (79%) that are indirectly attributed to the COVID-19 pandemic; and
- the higher than expected level of excess mortality due to non-COVID-19 suggests a possible under-reporting of death due to COVID-19.

---

19 *Repositorio Único de Información de Salud, Ministerio de Salud*. Available at: https://bit.ly/3gs1xKx
Detailed information and results from the study are available online.\textsuperscript{21}

Excess mortality monitoring supports the mitigation of the COVID-19 pandemic by providing:

1. insights about the effectiveness of public health and health care interventions;
2. information to support decision-making, and formulate strategic actions and policy development;
3. comprehensive information about factors impacting mortality and population health, including specific causes and most affected populations; and
4. a highly comparable excess mortality index, useful for comparisons across population groups and countries.

\textsuperscript{21} Case Study: Excess Mortality in Peru. Available at: https://bit.ly/32thg7h
Recent COVID-19 Resources Technical Guidance

Surveillance

- Interim guidance for Considerations for implementing mass treatment, active case-finding and population-based surveys for neglected tropical diseases in the context of the COVID-19 pandemic (published 27 July)
- WHO COVID-19 preparedness and response progress report - 1 February to 30 June 2020 (published 3 August)
- Scientific brief on Estimating mortality from COVID-19 (published 4 August)
- Scientific brief on the Status of environmental surveillance for SARS-CoV-2 virus (published 5 August)
- Interim guidance on Public health surveillance for COVID-19 (published 7 August)

Laboratory

- COVAX, the act-accelerator vaccines pillar (published 6 August)

Infection prevention and control

- Interim guidance on Infection prevention and control during health care when coronavirus disease (COVID-19) is suspected or confirmed (published 29 June)
- Health advisory on Preparedness for Cyclones, Tropical Storms, Tornadoes, Floods and Earthquakes during the COVID-19 pandemic (published 29 June)
- Interim guidance for WHO Member States on Investing in and building longer-term health emergency preparedness during the COVID-19 pandemic (published 6 July)
- Scientific brief on Transmission of SARS-CoV-2: implications for infection prevention precautions (published 9 July)
- WHO mass gathering COVID-19 risk assessment tool – Generic events, Guidance for authorities and event organizers planning mass gatherings during the current COVID-19 pandemic (published 10 July)
- An interim checklist for local authorities of Practical actions in cities to strengthen preparedness for the COVID-19 pandemic and beyond (published 17 July)
- Guidance for conducting a Country Intra-Action Review (published 23 July)
- Public health considerations while resuming international travel (published 30 July)
- Interim guidance on Considerations for quarantine of contacts of COVID-19 (published 19 August)
- Advice on the use of masks for children in the community in the context of COVID-19 (published 21 August)
Clinical Management

- Updated scientific brief on Smoking and COVID-19 (published 30 June)
- Updated Guidance on maintaining a safe and adequate blood supply during the coronavirus disease 2019 (COVID-19) pandemic and on the collection of COVID-19 convalescent plasma (published 10 July)
- Updated Global COVID-19 Clinical Platform: Pregnancy Case Report Form (CRF) (published 13 July)
- Interim guidance on Water, sanitation, hygiene, and waste management for SARS-CoV-2, the virus that causes COVID-19 (published 24 July)

Health Systems and Services

- Policy brief on Preventing and managing COVID-19 across long-term care services (published 24 July)
- Considerations for the provision of essential oral health services in the context of COVID-19 (published 3 August)
- Interim guidance on Home care for patients with suspected or confirmed COVID-19 and management of their contacts (published 12 August)
References for Table 1.

2. Special Secretary for Indigenous Health / Ministry of Health of Brazil. Available at: www.saudeindigena.saude.gov.br
4. Colombia International Health Regulations (IHR) National Focal Point (NFP) report, received by PAHO/WHO via email.
5. Report from the PWR in Guatemala, received by PAHO/WHO via email.
6. Ecuador International Health Regulations (IHR) National Focal Point (NFP) report, received by PAHO/WHO via email.
7. Mexico International Health Regulations (IHR) National Focal Point (NFP) report, received by PAHO/WHO via email.
8. TV indigenous organization of Panama. Available at: https://bit.ly/3aJrLHf
9. Peru International Health Regulations (IHR) National Focal Point (NFP) report, received by PAHO/WHO via email.