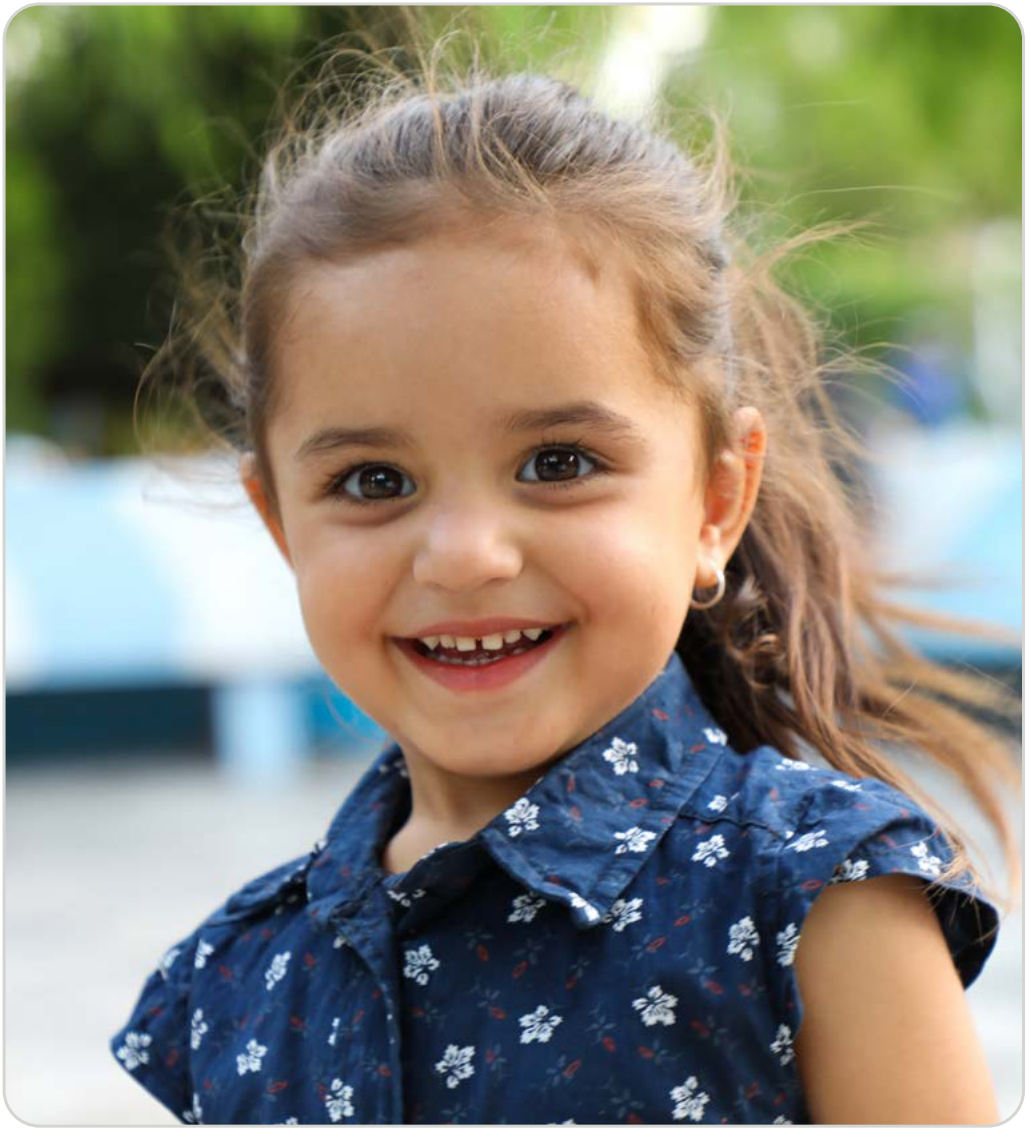
Levels & Trends in

Child Mortality

Report 2020

Estimates developed by the UN Inter-agency Group for Child Mortality Estimation



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CHILD SURVIVAL: KEY FACTS AND FIGURES

- Despite dramatic reductions in child and youth mortality over the last 30 years—under-five mortality has dropped by almost 60 per cent since 1990—the global burden of child and youth deaths remains immense. In 2019 alone, 7.4 (7.2, 7.9) million[1] children, adolescents and youth died mostly of preventable or treatable causes.

- In 2019, globally, 70 per cent of deaths among children and youth under 25 years of age occurred among children under 5 years of age, accounting for 5.2 (5.0, 5.6) million deaths. Among under-five deaths, 2.4 million (47 per cent) occurred in the first month of life, 1.5 million (28 per cent) at age 1–11 months, and 1.3 million (25 per cent) at age 1–4 years. An additional 2.2 (2.2, 2.4) million deaths occurred among children and young people aged 5–24 years in 2019, 43 per cent of which occurred during the adolescent period, ages 10–19.

- The global under-five mortality rate fell to 38 (36, 41) deaths per 1,000 live births in 2019 from 93 (92, 95) in 1990 and 76 (75, 77) in 2000 – a 59 (56, 61) per cent and 50 (46, 52) per cent decline, respectively. In 2019, the neonatal mortality rate fell to 17 (17, 19) deaths per 1,000 live births from 37 (36, 38) in 1990 and 30 (30, 31) in 2000 – a 52 (48, 55) per cent and 42 (37, 45) per cent decline, respectively.

- Among children and young people under 25 years of age, the risk of dying was highest in the first month of life, at an average rate of 17 (17, 19) deaths per 1,000 live births globally in 2019. In comparison, the probability of dying after the first month and before reaching age 1 was 11 (10, 12) per 1,000 and the probability of dying after reaching age 1 and before reaching age 5 was 10 (9, 11) per 1,000.

- For children, adolescents and youth aged 5–24 years, the probability of dying is lowest for young adolescents aged 10-14. Meanwhile, the risk of dying at any age 5-24 is lower than for children under 5 years of age. The probability a five-year-old would die before reaching age 10 was 4 (4, 4) deaths per 1,000; the probability a 10-year-old would die before reaching age 15 was 3 (3, 4) deaths per 1,000; the probability a 15-year-old would die before reaching age 20 was 5 (5, 5) deaths per 1,000; and the probability a 20-year-old would die before reaching age 25 was 6 (6, 7) deaths per 1,000. The probability of dying after reaching age 5 and before reaching age 25 was 18 (17, 19) deaths per 1,000 in 2019, down from 31 (31, 33) deaths in 1990.

- The global number of under-five deaths dropped to 5.2 (5.0, 5.6) million in 2019 from 12.5 (12.3, 12.7) million in 1990. On average, 14,000 children died before age 5 every day in 2019 compared to 34,000 in 1990 and 27,000 in 2000. Among the 5.2 million under-five deaths in 2019, 2.8 (2.7, 3.0) million were boys and 2.4 (2.3, 2.6) million were girls.

- About 6,700 newborns died every day in 2019. The global number of neonatal deaths declined from 5.0 (4.9, 5.2) million in 1990 to

2.4 (2.3, 2.7) million in 2019, while neonatal deaths accounted for a larger share of under-five deaths over time due to a faster global decline in mortality among children aged 1–59 months compared to children in their first month of life. In 2019, 47 (45, 49) per cent of all under-five deaths occurred in the neonatal period, up from 40 (39, 41) per cent in 1990.

- Children continue to face widespread regional disparities in their chances of survival. Sub-Saharan Africa remains the region with the highest under-five mortality rate in the world. In 2019, the region had an average under-five mortality rate of 76 (71, 87) deaths per 1,000 live births. That is equivalent to 1 child in 13 dying before reaching age 5. This rate is 20 times higher than that of 1 in 264 in the region of Australia and New Zealand and two decades behind the world average, which achieved a 1 in 13 rate by 1999.

- The persistent and overwhelming burden of deaths among children and youth highlights the urgent need to further accelerate progress in preventing child deaths. Current trends predict that close to 23 million 5-to-24-year-olds and 48 million children under 5 years of age will die between 2020 and 2030. Almost half of these under-five deaths will be newborns whose deaths can be prevented by reaching high coverage of quality antenatal care, skilled care at birth, postnatal care for mother and baby, and care of small and sick newborns.

- In 2019, 122 countries had already achieved an under-five mortality rate below the Sustainable Development Goal (SDG) target of 25 or fewer deaths per 1,000 live births. Those countries should aim to maintain progress and further reduce disparities among their populations. Of the remaining 73 countries, progress will need to be accelerated in 53 to reach the SDG target by 2030. Even more countries are projected to miss the neonatal mortality target by 2030—more than 60 countries will need to accelerate progress to reach the SDG neonatal mortality target on time.

- If all countries reach the SDG child survival targets by 2030, 11 million lives under age 5 will be saved—more than half of them in sub-Saharan Africa.

Introduction

At the time of writing, the novel coronavirus pandemic had reached every region of the world, with millions of infections globally and untold disruptions to nearly every aspect of daily life. Among the many difficult realities underscored by this pandemic and other life-threatening epidemics before it, such as HIV, is the precarious nature of mortality gains. Years of progress brought about by concerted action and resource delivery can be undone by inaction or indirect disruptions to care during a single protracted crisis.

While the extent and severity of the mortality impact of COVID-19 on children and youth is still unknown, the potential of a mortality crisis in 2020 threatens years of remarkable improvement in child and adolescent survival from 1990 to 2019, the period covered in this report. The global under-five mortality rate declined by almost 60 per cent from 93 deaths per 1,000 live births in 1990 to 38 deaths in 2019. Meanwhile, mortality among adolescents aged 10–19 fell from 13 deaths per 1,000 adolescents aged 10 in 1990 to 8 deaths in 2019—a 39 per cent decrease. Even with that progress, some 5.2 million children died before reaching their fifth birthday in 2019 alone. Tragically, many of those children died of preventable or treatable conditions.

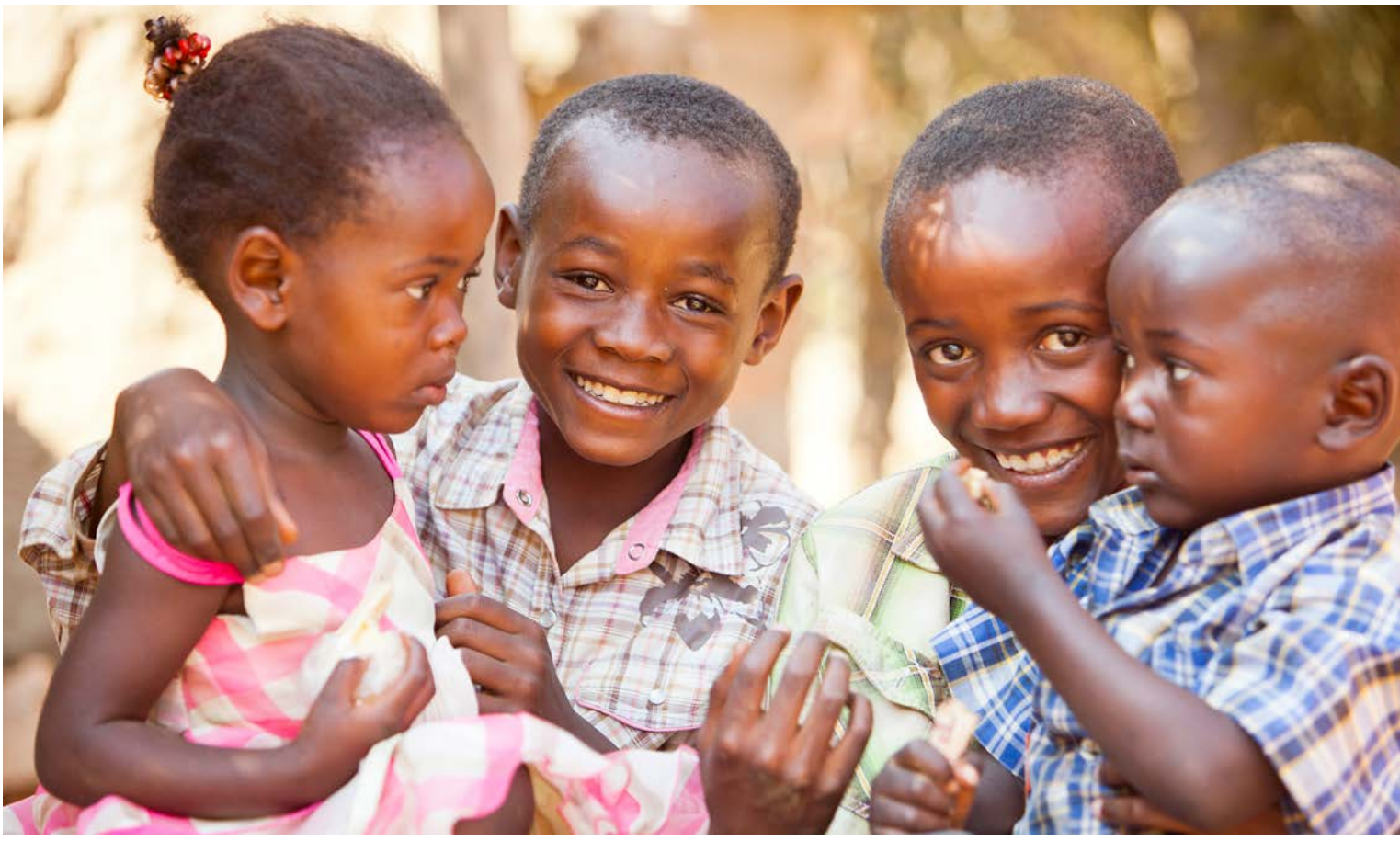
Even before COVID-19 captured the world's attention and highlighted just how tenuous mortality decline can be, it was well understood that maintaining progress and saving even more lives would require mobilization of resources and monitoring. That understanding led to the inclusion of child survival goals in numerous global initiatives including the United Nations Global Strategy for Women's Children's and Adolescents' Health (2016-2030)[2] and the Sustainable Development Goals (SDGs).[3] The SDGs call for ending preventable deaths of newborns and children under age 5, with all countries aiming to have a neonatal mortality rate of 12 or fewer deaths per 1,000 live births and an under-five mortality rate of 25 or fewer deaths per 1,000 live births by 2030.

If the child survival targets are to be met on time, resources and policy must be geared toward not only sustaining current rates of decline but also accelerating progress, which would save millions of lives. If the trends from 2010 to 2019 continue, 53 countries will not meet the SDG target on under-five mortality on time—if all countries were to meet that target, 11 million under-five deaths would be averted from 2020 to 2030. Achieving the child survival goals and heading off a reversal of progress in child survival in 2020 will require universal access to effective, high-quality and affordable care and the continued, safe provision of life-saving interventions for women, children, and young people.

While the full extent of the coronavirus pandemic on child and youth mortality is yet to be understood, it is already possible to anticipate the impacts and lay the foundation for tracking and responding to them. If we are to comprehend the true toll of this pandemic on child mortality and to continue to effectively monitor progress toward global goals, it is crucial to understand the prevailing levels and trends in child mortality. Reliable estimates of child, adolescent and youth mortality at the national, regional and global levels are essential for evidence-based policymaking to improve the chances of survival of the world's children in the face of a global pandemic.

In the absence of reliable and continually collected vital registration data—the preferred

source for monitoring vital events—evidence-based estimation of child mortality remains indispensable for monitoring child mortality levels and progress towards child survival goals. The United Nations Inter-agency Group for Child Mortality Estimation (UN IGME) produces estimates of child and adolescent mortality annually, reconciling the differences across data sources and taking into account the systematic biases associated with the various types of data on child and adolescent mortality. This report presents the UN IGME's latest estimates – through 2019 – of neonatal, infant and under-five mortality as well as mortality among children and young adolescents aged 5–14 years. This report also presents the inaugural set of mortality estimates among youth aged 15–24. It assesses progress in the reduction of child, adolescent and youth mortality at the country, regional and global levels, and provides an overview of the methods used to estimate the indicators mentioned above. The estimates and analysis presented in this report provide the foundation for monitoring changes in mortality, including the impact of the COVID-19 pandemic, which itself serves as a call for further disaggregated data as evidence of the differential impact of the virus emerges.



Levels and trends in child mortality

Global progress in reducing child mortality has been remarkable. The global under-five mortality rate has declined by almost 60 per cent since 1990 to 38 deaths per 1,000 live births in 2019. As a result, millions more children survive to adolescence today than they did in 1990 (see Figure 1 and Figure 2).

Against this backdrop of progress, the burden of child deaths remains unconscionable—7.4 million children and young people under the age of 25 died in 2019 alone. Compounding this tragedy, these children and young people died mostly of preventable causes. Some 5.2 million children died before reaching age 5—almost half of those deaths (2.4 million) were among newborns. Among all deaths over age 5, adolescents aged 10–19 accounted for 1 million, children aged 5–9 for 0.5 million and youth aged 20–24 for 0.8 million (see Figure 1 and Figure 2).

While young people and older adolescents face an increasing risk of dying with age, newborns face the greatest risk of dying among children under age five. The age distribution of mortality among children and youth shows that the risk of mortality is highest during the first 28 days of life, the neonatal period, before decreasing for older children and young adolescents (ages 5–14), then increasing with age among youth aged

FIGURE 1 **Global mortality rates and number of deaths by age, 2019**