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Covid-19: True global death toll from pandemic is almost 15 million, says WHO

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The global number of deaths caused by covid-19 has been severely under-reported, the World Health Organization has said. It estimates that 14.9 million direct and indirect deaths occurred from SARS-CoV-2 in 2020 and 2021—almost three times the 5.4 million reported by governments around the world.¹

The undercount is the result of a lack of covid-19 testing and death certification, said William Msemburi, technical officer at WHO. Seventy countries do not produce cause of death certificates, he said, and even before the pandemic six in every 10 deaths went unreported.

The figures confirm the disproportionate global impact of covid-19. Of the excess deaths around the world, 68% are concentrated in just 10 countries—Brazil, Egypt, India, Indonesia, Mexico, Peru, Russia, South Africa, Turkey, and the US.

Middle income countries accounted for 81% of the excess deaths, while high income countries accounted for 15% and low income countries 4%. Men made up a larger proportion of deaths from covid-19 (57%) than women (43%).

The estimates of excess deaths were roughly in line with official tallies in the US, where WHO modelled 932 458 excess deaths, and in Brazil, where it modelled 681 267. But in India WHO's models estimated 4 740 894 excess deaths, nearly triple the figure in government reports.

Data gaps

The report is an attempt to fill large remaining data gaps for the covid-19 pandemic, said Somnath Chatterji, head of WHO's Surveys, Measurements and Analysis Programme. Reliable statistics were scarce in some regions such as Africa, where 41 of 54 African countries reported insufficient data, he said.

While some countries have reported complete mortality numbers, some have released only partial data, and others have issued none at all. WHO's Technical Advisory Group for Covid-19 Mortality Assessment used figures from countries with full datasets to model the missing figures from countries with incomplete data. To project the numbers they used metrics such as income levels, the reported covid-19 death rates, and test positivity rates.

The figures are an “estimation of reality” and will be subject to margins of error, but at present they offer the most complete picture of the pandemic's impact on mortality rates, said Samira Asma, assistant director general at WHO's division of Data, Analytics and Delivery for Impact. The methodology for the models is available online, and WHO is in close discussion with countries over the findings, she added.²

The figures use excess death statistics, so they include people who died from the covid-19 disease as well as those who died indirectly from its greater impact, such as patients who could not access health services. Most of the deaths were likely caused directly by the disease, WHO said.

The report suggests that some countries were able to keep an accurate tally of covid-19 mortality. In the UK, for example, WHO modelled 148 897 covid-19 related excess deaths, similar to the government's figure of 150 142.³

Disputed figures

The report has caused controversy in India, where the government has challenged WHO's figures.⁴ It disputes the methodology behind WHO's assessments, which estimated 4.7 million covid-19 deaths in India—around three times the country's official figure and around a third of the global total.

India also contested a study published in the *Lancet* in April that estimated the country to have recorded more than four million excess deaths during the pandemic.⁵

WHO officials emphasised large confidence intervals for some nations: the lower range for excess deaths in India was 3 308 100, and the upper range was 6 479 698. They called for better health monitoring to be better able to respond to future pandemics.

“Data is the foundation of our work every day to promote health, keep the world safe, and serve the vulnerable,” said Ibrahima Socé Fall, WHO's assistant director general for emergency response. “We know where the data gaps are, and we must collectively intensify our support to countries, so that every country has the capability to track outbreaks in real time, ensure delivery of essential health services, and safeguard population health.”

- 1 World Health Organization. Global excess deaths associated with covid-19 (modelled estimates). May 2022. <https://www.who.int/data/sets/global-excess-deaths-associated-with-covid-19-modelled-estimates>
- 2 World Health Organization. Methods for estimating the excess mortality associated with the COVID-19 pandemic. Mar 2022. <https://www.who.int/publications/m/item/methods-for-estimating-the-excess-mortality-associated-with-the-covid-19-pandemic>
- 3 UK Government. Coronavirus in the UK. <https://coronavirus.data.gov.uk/details/deaths>
- 4 Grimley N, Cornish J, Stylianou N. Covid: World's true pandemic death toll nearly 15 million, says WHO. *BBC News*. 2022 May 5. <https://www.bbc.com/news/health-61327778>
- 5 COVID-19 Excess Mortality Collaborators. Estimating excess mortality due to the COVID-19 pandemic: a systematic analysis of COVID-19-related mortality, 2020-21. *Lancet* 2022;399:1513-36. doi: 10.1016/S0140-6736(21)02796-3. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)02796-3/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)02796-3/fulltext). pmid: 35279232

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