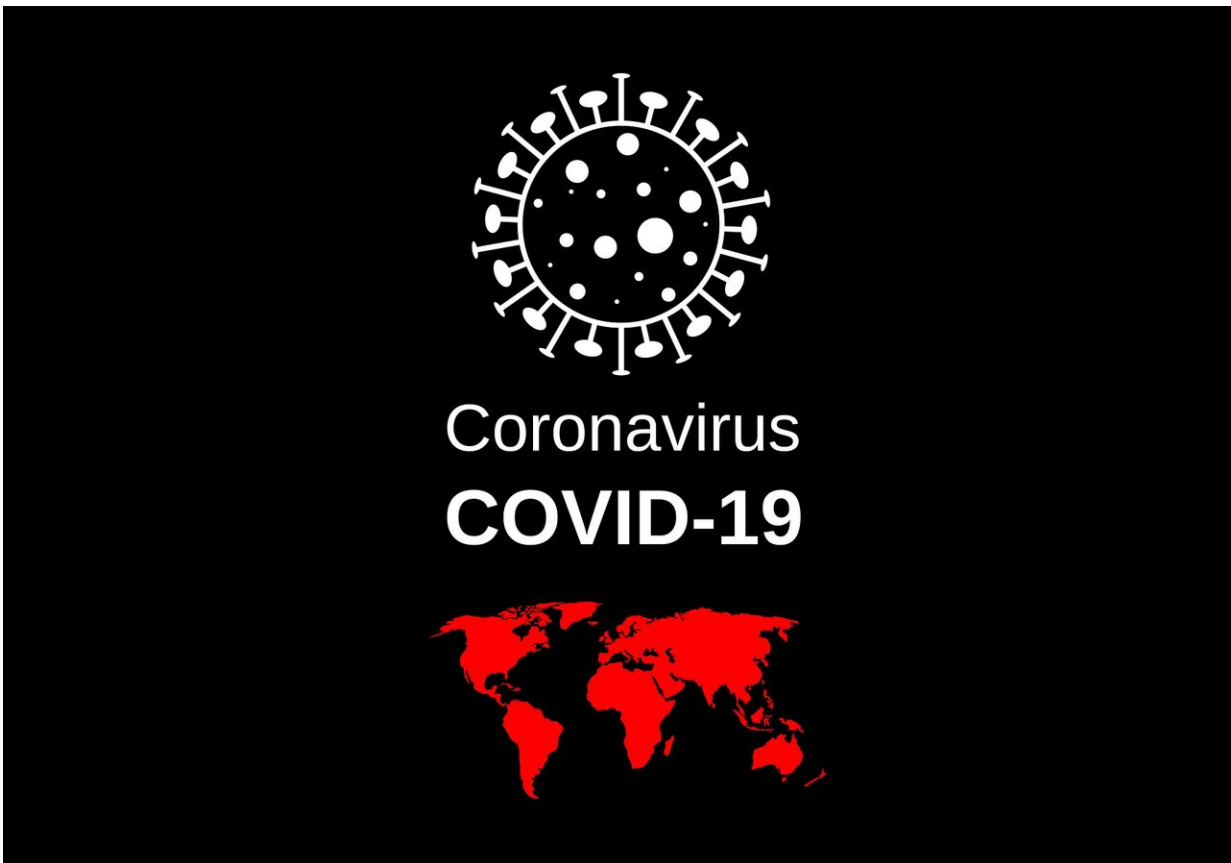


# Look to precision public health to address the perfect storm fueling COVID-19 mortality

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The interaction of COVID-19 with co-existing non-communicable diseases (NCDs) is a perfect storm, particularly for communities of poverty, according to a new [opinion piece published](#) by Columbia

Mailman School of Public Health researchers in the journal *British Medical Journal*. While primarily targeting the elderly, NCDs and underlying metabolic conditions- obesity, hypertension, kidney disease, and diabetes in younger people, are all associated with higher risk of severe illness, hospitalization and death from COVID-19.

Of particular concern, note the authors, is the association with obesity—a disease of poverty. In the U.S. and Mexico, more than one third of people 15 years and older are obese. South Africa, Costa Rica, Colombia, Brazil, Hungary, and Chile report rates of more than 20 percent.

"The global response has been to treat COVID-19 as a vertical disease rather than addressing the full ecosystem of the COVID-19 response or its interaction with the NCD pandemic or poverty," said Nina Schwalbe, an adjunct professor in the Heilbrunn Department of Population and Family Health at Columbia Mailman School. "This is particularly urgent given that poverty is now both a driver of COVID-mortality and an outcome of the response. Rather than relying on a vertical approach, it is time to switch gears—assess risks, target prevention, and engage community in the response and to build synergies across care platforms."

Lockdown and social distancing have caused health service disruptions resulting in an overall worsening of health outcomes, noted Juan Pablo Gutierrez, professor at the Center for Policy, Population Health and Research at the National Autonomous University of Mexico School of Medicine "For the poor, in particular, these measures further exacerbated [food insecurity](#) and reduced access to social services. Instead of applying blunt tools such as lockdowns to the entire population, we must urgently target those at risk."

"With nearly half a billion people projected to fall into extreme poverty due to the COVID-response, loss of income, high out-of-pocket costs for

health care, food insecurity, increased unemployment levels, and lower educational attainment will all have a direct effect on morbidity and mortality worldwide," noted Schwalbe, who is also visiting fellow at the United Nations University—International Institute for Global Health.

To address the interaction between COVID-19 mortality and the NCD pandemic will require adhering to the tenets of "precision public health," and the authors recommend the following:

- Use data and better data sharing to focus interventions on risk reduction for those most susceptible.
- Move from a vertical approach to build synergies across care platforms, in particular between NCDs and infectious diseases.
- Provide the socioeconomically vulnerable with the means to mitigate the pandemic response effects on poverty. An example of such a strategy is underway in Pakistan, where the government has provided over 80 million people with emergency cash transfers.

"In the global response to COVID to date, we have witnessed mass fear and confusion as well as a tremendous misallocation of resources as a result of targeting the entire population rather than those most at risk," said Schwalbe. "However, as COVID-19 continues to spread and there is talk of a second wave, it is not too late to apply the tools of precision, evidence-based public health to address the underlying drivers of morbidity and mortality—and this means focusing prevention efforts on people suffering from NCDs."

**More information:** [blogs.bmj.com/bmj/2020/06/10/n ... -19-a-perfect-storm/](https://blogs.bmj.com/bmj/2020/06/10/n...-19-a-perfect-storm/)

Provided by Columbia University's Mailman School of Public Health

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