Statistical lies used to justify continued inaction, paint the US epidemic as nearly over

Don Barrett
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"Lies, damned lies, and statistics"—popularized by Mark Twain

As the number of confirmed coronavirus cases in the United States surpasses 200,000 and the number of dead nears 5,000, increasingly sophisticated justifications are being made for the continued inadequacy of the federal government's response to the pandemic. One of the most recent is a study from the Institute for Health Metrics and Evaluation (IHME), which paints the massive outbreak in the country as nearly over, with two weeks to go until the worst is past.

The IHME paper, "Forecasting COVID-19 impact on hospital bed-days, ICU-days, ventilator-days and deaths by US state in the next 4 months," was led by Chris Murray at the University of Washington in Seattle. Its main claim is that the resources needed to fight the spreading disease will "peak" on April 15. During this time, it estimates that there will only be 64,000 extra hospital beds needed nationally and only 15,000 ventilators. The paper also seeks to prepare its readers to expect some 84,000 deaths.

These figures contrast sharply with earlier estimates done by London's Imperial College, as well as those by the White House's own health officials. The former predicts 1.1 million dead in the United States even using its most optimistic scenario, while the latest minimum casualty estimates from Deborah Birx, the Coronavirus Task Force Response Coordinator, is 100,000 to 240,000.

The report also conflicts with the requests from cities around the country for 139,000 ventilators and millions of test kits and pieces of personal protective equipment, noted in the recent survey of 213 cities by the US Conference of Mayors. The IHME study tries to bury these and other grimmer predictions of the course of the coronavirus by stating that "these projections imply that there would be millions of deaths in the United States," and claiming such models "can overestimate health service need by not taking into account behavioral change and government-mandated action."

This has not stopped the Trump administration, including Birx, from seizing on the new report in an effort to downplay the seriousness of the pandemic. Birx herself yesterday noted that the task force's estimates had "the same numbers" as the ones in the IHME report. As a result, local and state health officials have also begun using this model to revise downward the number of deaths they will face while the national media has largely accepted this new account uncritically.

It is also being promoted to establish the justification for sending people back to work not when Trump originally proposed, after Easter Sunday, but by the first week of May. The IHME study is in line with the calls from both Trump himself and many from the corporate and financial elite to "get America back to work," in order to continue generating billions in profits. The catastrophic number of lives that will be lost to the virus will just be the price of doing business.

The IHME is a project constructed at the University of Washington with approximately $400 million in ongoing funding from the Bill & Melinda Gates Foundation. Since its founding in 2007, it has faced criticism from many angles. After it published its first major study in 2010, the leading medical journal the *Lancet* editorialized that the IHME "struggled to generate support, legitimacy, and acceptance for their findings."

A 2019 paper in the journal *Global Policy* examined the political connections of the IHME, and noted the "growing conflict between the expertise and norms of

national and intergovernmental statistical production on the one hand, and the distinct epistemologies and logics of new non-state data actors. … In the world of development, as indeed in other realms, measurement is never an innocent matter where as it were, the facts speak for themselves." With significant foresight, the paper notes that "measures…are contested matters because they are linked with…the outcomes [institutions] aspire to."

Such statements are further borne out with a closer look at the study itself. While the estimated number of dead, for instance, is given as a 95 percent chance of being between 38,242 and 162,106, the estimations themselves are based on mathematical sophistry.

Here are the central unsupported assumptions of the IHME forecast:

• That the "curve" of deaths, its early exponential rise, its inflection, and then its leveling out at its end result, is best modeled by the unexamined assumption that the rate at which the death rate first rises is precisely the same as the rate at which it later falls off—and that it will fall off—in each modeled state.

• That the death rate rises, inflects, and falls in the same way that it did in Wuhan, with the same political decisions being made—isolating individuals within their homes, etc.—at the same "thresholds" of deaths. From this they conclude that peak daily deaths will occur 27 days after the implementation of social distancing. There is no analysis of the differences in the Chinese response, which involved a massive effort to test and trace contacts of the infected as well as the harshly enforced quarantine of nearly 60 million people.

• That the profound difference in approach between China and the US (and indeed, the major Western governments) is of little significance, that tracing the contacts of each case, testing and quarantining them either is not a defining epidemiological choice, or will "naturally" happen as thresholds are reached. The word "tracing" never occurs in the report, and testing is only mentioned to justify the use of death rates as the basis of modeling, not to critique the model as a whole.

The authors then conclude that if they are wrong, a major reason will be the "question of adherence to social distancing mandates," whether "it is fundamentally different in the US compared to Wuhan." In other words, if they're wrong, it's because the American working class isn't obeying, not because the measures taken are inadequate.

None of these assumptions survive a comparison with the reality of the European countries' experience: Italy and Spain, which belatedly took heroic measures of isolation, have perhaps stabilized daily new cases, which continue at around 5,000 and 7,000 a day, respectively, but without widespread testing and tracing, have not demonstrated that this is adequate to begin a sustained drop in cases. It is too early to tell whether Germany, France and the UK have stabilized a growth in new cases with their measures to date. In any event, none shows the symmetric rapid "Wuhan-like" decline that marked the template to which US states are supposedly being fitted.

Nor, it must be mentioned, does the experience of New York City, Detroit, Seattle or New Orleans match the model. In each of these major metropolitan areas within the US, hospital systems are already disintegrating under the pressure of tens of thousands of cases. Even the IHME's estimate of 84,000 deaths implies (at a 1 percent fatality rate) about 8.4 million cases nationally, a situation during which medical care in the US would essentially collapse.

The IHME report also does not address the fact that without testing and tracing, taken to the point of containment and then maintained, social isolation and major industrial closures must be maintained essentially indefinitely. Only one of two things would permit these to be relaxed long-term without exponential growth: widespread vaccination or an immunity purchased by near-universal infection—at immense cost in human life.

Workers must be on their guard. As the coronavirus crisis intensifies, more supposedly scientific studies will emerge attempting to justify a back-to-work order, claiming that the danger has passed.