

Sat 10/24/2020 2:14 PM

To: [medicine@us.nature.com](mailto:medicine@us.nature.com)

Correction request for Nature-Medicine IHME paper, published on October 23

Dear Editors,

I am writing to call your attention to a number of unusual discrepancies that appeared in a recent *Nature-Medicine* article on COVID-19 modeling scenarios from the Institute for Health Metrics Evaluation (IHME).<sup>[1]</sup> This article placed heavy emphasis on the role of mask-wearing as a mitigation measure for the ongoing pandemic, and specifically identified mask compliance as an area where the United States could make substantial advances.

At two places in the article, the authors suggested that mask compliance in the United States remains at a startlingly low 49%, based on estimates dated to 21 September 2020. This specific statistic garnered widespread notice in the American press.<sup>[2]</sup> The IHME report further appears to have influenced Dr. Anthony Fauci's public statements on 24 October 2020 in which he lent support to a nationwide mask mandate.

The 49% mask compliance appears to be based upon outdated survey data, leading me to suspect that the IHME article contains a significant typographical error. This statistic is referenced twice in the IHME study. The first touts "a considerable population health benefit to mask use with great potential for uptake in the United States, where the national average for self-reported mask wearing was 49% as of 21 September 2020." The second reiterates "Mask use has emerged as a contentious issue in the United States with only 49% of US residents reporting that they 'always' wear a mask in public as of 21 September 2020."

In both instances the IHME source this statistic to their own model's website.<sup>[3]</sup> A review of this source indicates, however, that public mask use for the United States sat at a significantly higher rate of 68% as of 21 September, the stated date. This higher number is also consistent with more recent survey data, suggesting U.S. mask usage in public spaces has consistently hovered between 75 and 80% since mid-July 2020 - a figure much closer to the IHME's own targeted mask compliance rates.<sup>[4]</sup>

Upon closer investigation of the supplemental materials filed with *Nature*, it appears that the IHME paper erroneously reports an outdated statistic for its September 21 estimate. The supplemental file references an earlier crowd-sourced survey conducted by the data analytics firm PREMISE, encompassing a date range of 23 April 2020 to 26 June 2020.<sup>[5]</sup> The final PREMISE survey release from June, in turn, estimates U.S. mask compliance at about 49%.<sup>[6]</sup>

Survey findings from YouGov confirm that U.S. mask usage rates dramatically increased between mid-April and mid-July 2020 before plateauing at their present rate of 75-80%.<sup>[7]</sup> As a result, the IHME paper in its current form provides an outdated depiction of current mask use levels, while also implying significantly greater room for improving mask compliance in the United States than actually exists.

In light of these findings, it appears that a correction is warranted in your journal that will both update the current United States mask use estimates in the IHME article and clarify the sources used to reach these figures.

Sincerely,

Phillip W. Magness

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<sup>[1]</sup> IHME Team, “Modeling COVID-19 scenarios for the United States” *Nature – Medicine*, October 23, 2020.  
<https://www.nature.com/articles/s41591-020-1132-9>

<sup>[2]</sup> Deborah Netburn, “New forecasts show why masks are the easiest — and cheapest — way to save U.S. lives” *Los Angeles Times*, October 23, 2020

<sup>[3]</sup> <https://covid19.healthdata.org/global>

<sup>[4]</sup> For example, a YouGov survey on the same date indicated that 76% of Americans report wearing masks in public places  
<https://yougov.co.uk/topics/international/articles-reports/2020/06/08/international-covid-19-tracker-update-8-june>

<sup>[5]</sup> IHME Supplementary Information file, p. 19  
[https://static-content.springer.com/esm/art%3A10.1038%2Fs41591-020-1132-9/MediaObjects/41591\\_2020\\_1132\\_MOESM1\\_ESM.pdf](https://static-content.springer.com/esm/art%3A10.1038%2Fs41591-020-1132-9/MediaObjects/41591_2020_1132_MOESM1_ESM.pdf)

<sup>[6]</sup> <https://www.premise.com/covid-19/>

[7]

<https://yougov.co.uk/topics/international/articles-reports/2020/06/08/international-covid-19-tracker-update-8-june>