



## LETTERS

## COVID-19

## Covid-19 fatality is likely overestimated

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The final case fatality rate (CFR) from SARS-CoV-2, the virus that causes covid-19, will likely be lower than those initially reported.<sup>1</sup> Previous reviews of H1N1 and SARS show the systematic inflation of early mortality estimates.<sup>2,3</sup> Early estimates of H1N1's mortality were susceptible to uncertainty about asymptomatic and subclinical infections, heterogeneity in approaches to diagnostic testing, and biases in confounding, selection, detection, reporting, and so on.<sup>2,3</sup> These biases are difficult to overcome early in a pandemic.<sup>3</sup>

We read Xu and colleagues' report of 62 cases of covid-19 outside of Wuhan, China, with interest, as no patients died in the study period.<sup>5</sup> Compared with a report of the 72 314 cases throughout China, the marked differences in outcomes from Hubei (the province of which Wuhan is the capital) compared with all other provinces are worth a brief discussion.<sup>4</sup>

The CFR in China (through 11 February) is reported as 2.3%.<sup>1,5</sup> The CFR among the initial Wuhan cohort was reported as 4.3%, with a rate of 2.9% in Hubei province.<sup>1,5</sup> But outside Hubei the CFR has been 0.4%. Deaths occurred only in cases deemed "critical." Importantly, the CFR from these reports is from infected, syndromic people presenting to healthcare facilities, with higher CFRs among older patients in hospital (8%-14.8% in the Wuhan cohort).

As accessibility and availability of testing for the novel coronavirus increases, the measured CFR will continue to drop, especially as subclinical and mild cases are identified.<sup>6-8</sup>

Alternatively, the CFR might not fall as much as in previous epidemics and pandemics, given the prolonged disease course of covid-19 or if mitigation measures or hospital resources prove inadequate.<sup>9-12</sup>

As with other pandemics, the final CFR for covid-19 will be determined after the pandemic and should not distract from the

importance of aggressive, early mitigation to minimise spread of infection.

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Full response at: <https://www.bmj.com/content/368/bmj.m606/rr-5>.

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