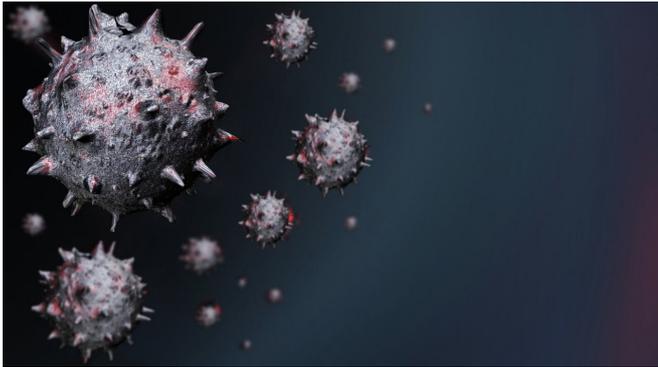


Australian study suggests true COVID-19 infection rate is 6.2 times higher than official tallies (Update)

18 November 2020, by Bob Yirka



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A trio of researchers with Ikigai Research, Australian National University and the University of Melbourne respectively, has found evidence that suggests the true COVID-19 infection rate for 15 selected countries is on average 6.2 times higher than official tallies have listed. In their paper published in the journal *Royal Society Open Science*, Steven Phipps, Quentin Grafton and Tom Kompas describe analyzing infection data from 15 similar countries and using it to estimate true infection rates.

The current resurgence of the global pandemic has very starkly highlighted the fact that it is far from over. Millions of people the world over have been infected and over 1 million have died, yet medical scientists are still not in agreement on true [infection](#) rates. Instead, most countries and even local jurisdictions publish "known" numbers of infections and use such figures to determine infection rates. In this new effort, the researchers suggest that such an approach leaves out many people that become infected but never show up on official tallies. To gain a better perspective on true

rates of infection, the researchers chose to focus on 15 countries that have similar approaches to testing, diagnosing and treatment of the disease—all of them developed western countries except for Korea.

To make better estimates of true infection rates for each of the countries in their study, the researchers used a technique called "backcasting" by which they studied official numbers of infections along with [death rates](#) (both known to be from COVID-19 and from unknown causes above what was normal for given areas). They also used what are believed to be survival rates for the disease. Data was then ported to a computer model that provided graphs showing true estimated infection rates for all 15 countries and for all of them averaged together.

The graphs showed high variation between detection rates, from 5.7 for Italy, to 39.1 for South Korea. The researchers also note that in all cases, the true estimated number of people infected with the virus was higher than the numbers given for each country. As an example, they found that for Australia, the true estimated infection rate (for people that recovered) was approximately five times higher than official estimates at the end of August. That would translate to 0.48% of the population having been infected, which would mean 130,000 people—far more than the government there has reported.

More information: Steven J. Phipps et al. Robust estimates of the true (population) infection rate for COVID-19: a backcasting approach, *Royal Society Open Science* (2020). [DOI: 10.1098/rsos.200909](https://doi.org/10.1098/rsos.200909)

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