

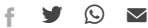


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THE WALL STREET JOURNAL.

How Deadly Is Covid-19? Researchers Are Getting Closer to an Answer

Brianna Abbott, Jason Douglas 5 hrs ago



© str/Agence France-Presse/Getty Images
 Researchers have estimated Covid-19 kills from around 0.3% to 1.5% of people infected.

Six months into the pandemic, researchers are homing in on an answer to one of the basic questions about the virus: How deadly is it?

Researchers, initially analyzing data from outbreaks on cruise ships and more recently from surveys of thousands of people in virus hot spots, have now conducted dozens of studies to calculate the infection fatality rate of Covid-19.

That research—examining deaths out of the total number of infections, which includes unreported cases—suggests that Covid-19 kills from around 0.3% to 1.5% of people infected. Most studies put the rate between 0.5% and 1.0%, meaning that for every 1,000 people who get infected, from five to 10 would die on average.

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The estimates suggest the new coronavirus is deadlier than the seasonal flu, though not as lethal as Ebola and other infectious diseases that have emerged in recent years. The coronavirus is killing more people than the deadlier diseases, however, in part because it is more infectious.

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“It’s not just what the infection-fatality rate is. It’s also how contagious the disease is, and Covid is very contagious,” said Eric Toner, an emergency medicine physician and senior scholar at Johns Hopkins Center for Health Security, who studies health-care preparedness for epidemics and infectious diseases. “It’s the combination of the fatality rate and the infectiousness that makes this such a dangerous disease.”

Health authorities and researchers have been working to gauge the death rate from the coronavirus to better understand the risk of the disease, estimate how many people might die and respond with the necessary public-health measures.

Pinpointing that rate has been challenging, however, because a significant chunk of cases have few to no symptoms or haven’t been tested. The rate also varies depending on factors such as a person’s age and the strength of a jurisdiction’s health-care system.

“It’s very difficult to measure, but robust studies are finding a clear signal in the noise,” said Timothy Russell, a research fellow at the London School of Hygiene and Tropical Medicine.

A study by Dr. Russell and colleagues published in February that examined data from China and an outbreak on the Diamond Princess cruise ship put the infection-fatality rate at around 0.6%.

More than 14.7 million people have been infected with SARS-CoV-2 across the globe, and over 609,000 people have died, with nearly a quarter of the fatalities in the U.S., according to data compiled by Johns Hopkins University. That means that among confirmed global cases, roughly 4.2% of those people died.

The percentage of deaths among people with confirmed infections is higher than the percentage of deaths among infections overall, researchers say, because so many milder and asymptomatic Covid-19 cases go missed.

In June, officials at the U.S. Centers for Disease Control and Prevention estimated that for every known case of Covid-19, roughly 10 more went unrecorded through the beginning of May.

"The hard bit really is to work out how many people have been infected," said Lucy Okell, who alongside colleagues at Imperial College London estimated the infection-fatality rate in China at 0.66% in a paper published in March.

To come up with an estimate for the fatality rate, some researchers take the known cases and numbers of deaths, then estimate the proportion missed or asymptomatic cases. Death tallies, however, might also miss undetected Covid-19 fatalities, and researchers must adjust for that as well.

Other researchers develop estimates based on results from antibody test surveys, which scan the blood of participants for signs of past infections.

Yet antibody testing data has its own flaws, as scientists work to understand the immune response to the virus. The researchers must also tweak their estimates to compensate for the risk of faulty test results or delays between infection and death.

No matter their approach, the researchers use complex mathematical models and statistical techniques to fine-tune their estimates.

An analysis of 26 different studies estimating the infection-fatality rate in different parts of the globe found an aggregate estimate of about 0.68%, with a range of 0.53% to 0.82%, according to a report posted in July on the preprint server medRxiv, which hasn't yet been reviewed by other researchers.

"To say that we will ever have one absolute true estimate is erroneous. We can get an idea of a trend, but we need to be mindful that this can change and vary," said Lea Merone, a public-health physician and health economist at James Cook University in Australia who co-wrote the paper. "It is context dependent."

The CDC is now using the report as the basis for its own best-estimate for the infection-fatality rate in its pandemic planning scenarios. The agency's estimate is 0.65% as of July 10, higher than its previous estimates.

The fatality rate for an individual varies, sometimes markedly, depending on factors such as age, sex and the presence of pre-existing medical conditions, studies show.

Researchers in the U.S. and Switzerland examined data from the Swiss city of Geneva to calculate fatality rates for different age groups. They found those over 65 had an infection-fatality rate of 5.6%—40 times the risk of someone in their 50s.

Quality and access to health care and treatment could shift the mortality rate. Better treatment in the future could push the rate down, but a situation in which a hospital system is overwhelmed can drive the rate up, said Gideon Meyerowitz-Katz, an epidemiologist at the University of Wollongong who co-wrote the July medRxiv paper.

An infection-fatality rate of roughly 0.6% is six times greater than the 0.1% estimate for seasonal influenza, which is based on CDC data. Though researchers point out the estimates are calculated in different ways and the flu estimate doesn't take asymptomatic cases into account.

Diseases such as SARS, or severe acute respiratory syndrome; MERS, or Middle East respiratory syndrome; and Ebola are much deadlier, with case fatality rates ranging from roughly 10% to 50%.

There have been far fewer deaths from those diseases than the new coronavirus and even the seasonal flu because they aren't nearly as infectious or widespread.

SARS and MERS have killed 774 and 858 people, respectively. More than 11,300 people have died from Ebola.

Also, many doctors worry Covid-19 might result in longer-term complications for some patients, especially those who have spent weeks in the hospital before being discharged.

"There's this narrative I think a lot of people have that you get the disease and you die, or you're fine. And that's not true," Dr. Toner said. "There's a large range of health-care consequences for people who get severely ill, not just death."

Write to Brianna Abbott at brianna.abbott@wsj.com and Jason Douglas at jason.douglas@wsj.com

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MICROSOFT NEWS POLL



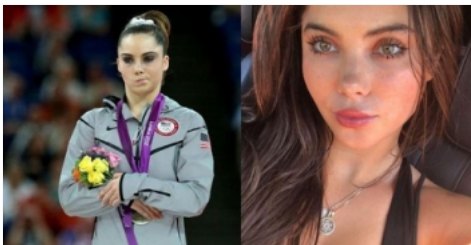
Do you think the recorded coronavirus-related death count is higher, lower, or no different than the actual one?

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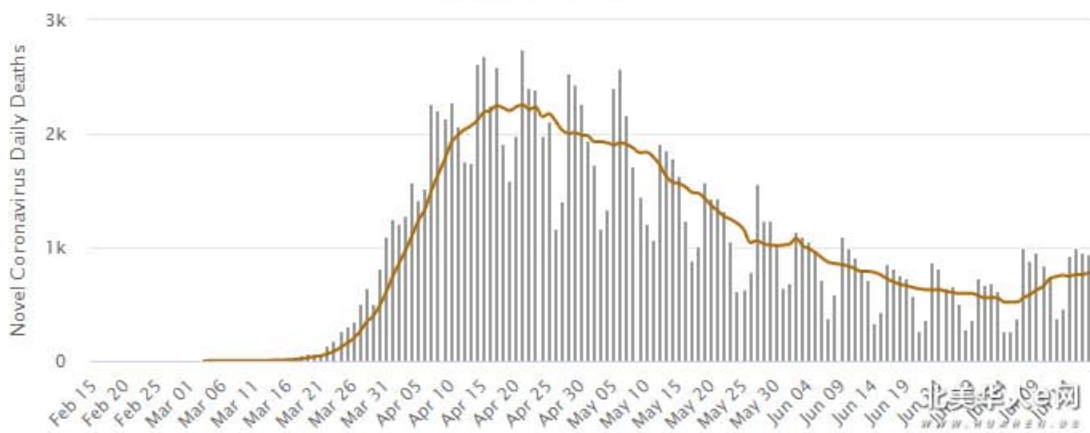
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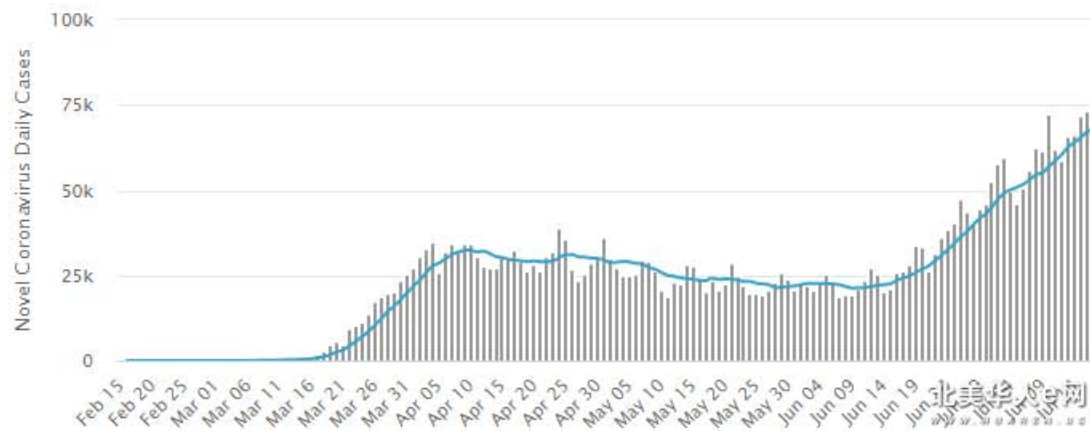
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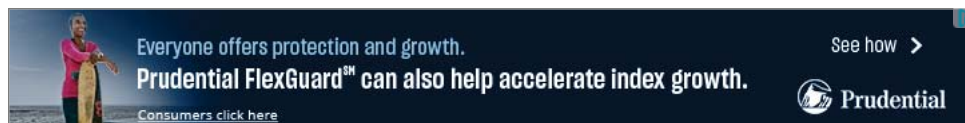
Deaths per Day
Data as of 0:00 GMT+8



Daily New Cases

Cases per Day
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POLITICO

'Everyone is lying': Trump questions public health experts on Twitter

By Quint Forgey 1 hr ago



President Donald Trump on Monday shared a handful of social media posts questioning the expertise of his own public health officials, including Dr. Anthony Fauci, and suggesting their scientific counsel was intended to thwart his political standing ahead of November's general election.



© Joshua Roberts/Getty Images President Donald Trump.

In a burst of early morning online activity, Trump retweeted messages from the politically conservative former game show personality Chuck Woolery — who had stints hosting "Wheel of Fortune" and "Love Connection" — which lamented the spread of the "most outrageous lies" regarding the coronavirus pandemic.

"Everyone is lying. The CDC, Media, Democrats, our Doctors, not all but most, that we are told to trust. I think it's all about the election and keeping the economy from coming back, which is about the election. I'm sick of it," Woolery wrote in a tweet shared by the president.

In another post Trump retweeted, Woolery claimed there exists "so much evidence, yes scientific evidence, that schools should open this fall. It's worldwide and it's overwhelming. BUT NO."

Trump also retweeted a message from Mark Young, Woolery's co-host on his "Blunt Force Truth" podcast, which asked: "So based on Dr. Fauci and the Democrats, I will need an ID card to go shopping but not to vote?"



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As the United States has posted peak numbers of daily Covid-19 infections in the past few weeks, the president's relationship with Fauci, the nation's top infectious disease expert, plummeted to a new nadir over the weekend.

The White House reportedly told various media outlets Saturday and Sunday that "several White House officials are concerned about the number of times Dr. Fauci has been wrong on things," and furnished a lengthy list of statements the widely respected immunologist made in the early days of the outbreak.

The type of smear effort launched by the Trump administration against one of its most public-facing, trusted members is traditionally reserved for political rivals, and came after the president expressed public dissatisfaction with Fauci in recent interviews.

Trump similarly targeted Fauci's colleague, CDC Director Dr. Robert Redfield, in a tweet last week that accused the public health agency's guidelines for reopening schools of being "very tough & expensive."

The president's push to return students to classrooms in the fall represents the latest front in his pressure campaign for a broad-based economic reopening, in spite of surging Covid-19 caseloads.

Video: White House works to discredit Dr. Fauci as coronavirus surges in U.S. (MSNBC)

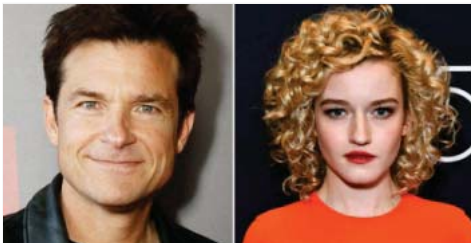
White House works to discredit Dr. Fauci as coronavirus surges in U.S.



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Dr. David Samadi 
@drdavidsamadi



Early detection of COVID is important. If you start having symptoms (fever, chills, cough, shortness of breath) you need to get treated. The treatment in the first stage is Hydroxychloroquine, Zinc, antibiotics plus a bronchodialator. The idea is to reduce inflammatory cells.

3:30 AM · Jul 8, 2020 · [Twitter Web App](#)

10.1K Retweets and comments **19.5K** Likes



Dr. David Samadi 
@drdavidsamadi · Jul 8



Replying to [@drdavidsamadi](#)
If this stage does not work, and the virus gets worse and replicates you have entered what I call the second stage. In that case Remdesivir is the best treatment. Remdesivir helps to reduce the viral load. It can help prevent the virus from spreading & duplicating even faster.



35



1K



2.4K



Dr. David Samadi 
@drdavidsamadi · Jul 8



Obviously, it's best to catch the disease early on before it takes over the whole system in the 3rd stage where it takes over the whole body. Many young people even should then take anticoagulants to help prevent more issues.



21



880



2.2K



Dr. David Samadi 
@drdavidsamadi · Jul 8



The fourth stage is what I would call when a patient must get intubated. This is bad. If you get here, it is not good. The majority of the patients who get intubated don't do well. Only around 20-30% make it. There you need traditional intubation treatments & the power of God.



70



900



2.4K



Skycaptain @1skycaptain · Jul 8



Replying to [@drdavidsamadi](#)
A retired LEO Friend was admitted to ICU in Seattle With Severe Respiratory Distress from Covid19 infection. He was immediately put on IV Cocktail of Zmax & Hydrochioriqine. He recovered in 2 Hours and Was Breathing Normally! This Response is Being Repeated All Over the World!



18



563



1.2K



Steve Ferguson @lsferguson · Jul 8



Hydroxychloroquine works



6



138



542



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Ann @Doodisgirl · Jul 8



Replying to [@drdavidsamadi](#)
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Those of us with physical disabilities are at higher risk of death from [#COVID](#)

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SuperElite_cpep @cpep · Jul 8



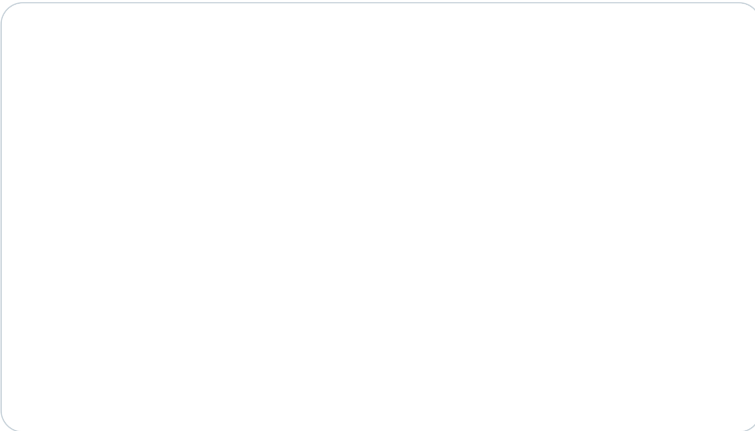
Dr. Richard Bartlett | ACWT Interview 7.2.20
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SoOrGal @ellen_HealthyHm · Jul 8

Replying to @drdavidsamadi
Another SBOP order in Oregon!



18 replies 56 retweets 38 likes



RIP KRIS MICKELL @TheT0wnFlooZie · Jul 8

I was going to ask, how when local gvts block physicians from prescribing HCQ!?

2 replies 16 likes



Red Pilled Jew @PatriotForLife9 · Jul 8

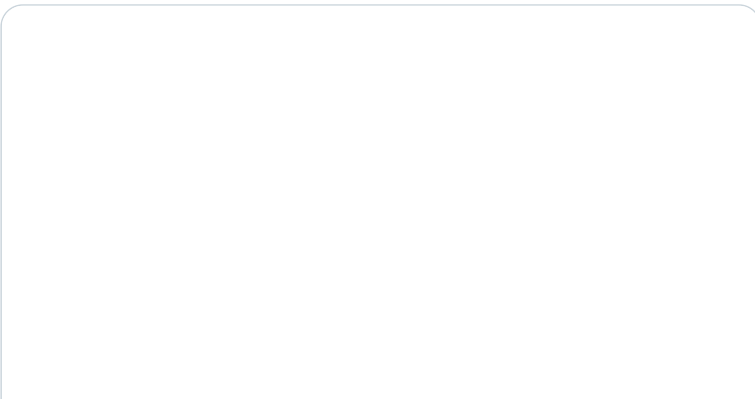
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1 reply 4 retweets 2 likes



Thread Reader App @threadreaderapp · Jul 8

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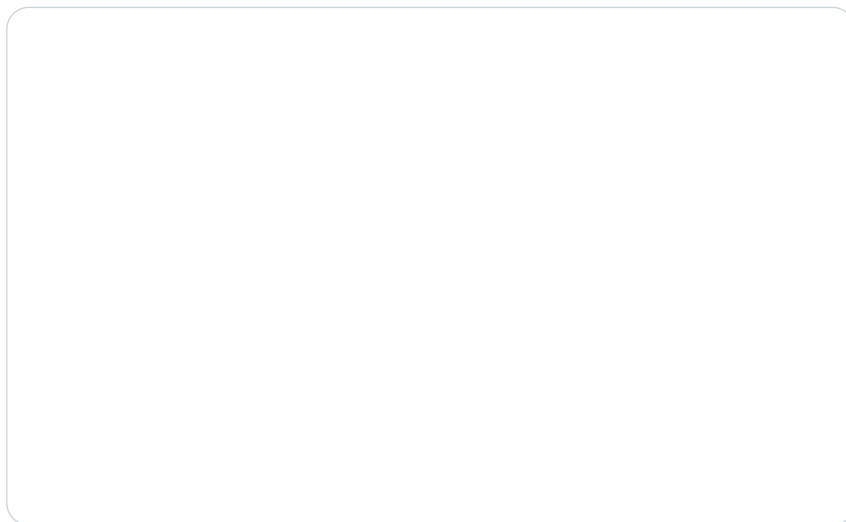
Dr. David Samadi
 @drdavidsamadi



Please explain to me why mandatory masks were not implemented around March 22nd if they were serious about stopping the spread.

If they were thought to be effective, they should've been used from Day One.

Implementing them at this point in time does next to nothing.



2:05 PM · Jul 9, 2020 · Twitter Web App

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Jonathan @jcho710 · 23h
Replying to @drdavidsamadi



Jonathan @jcho710 · Jun 19

"An N-95 mask filters out particulate matter larger than .3 microns. So the question then is how big is a COVID particle. A COVID particle is about .1 micron....this idea of people doing anything particularly useful w...a mask is just LOONEY TUNES." - Sen. Dr. Scott Jenson, M.D.

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8 95 142

Jonathan @jcho710 · 23h

Jonathan @jcho710 · Jul 5

Please bookmark/save this thread to share w anyone caught in mask dogma, & who fail to see thru the mainstream, far left COVID-19 hysteria. Instead of indiv opinion, I've used major medical journals & clear, widely-referenced studies & explanations to show why masks don't work. twitter.com/jcho710/status...

11 20

Dr. Vaughn @dvaughnmd · 23h

Replying to [@drdavidsamadi](#)

Exactly. If face masks work, they should have been mandated 5 months ago. Death rates are going down even as cases are going up. It's all about conditioning us to be controlled at this point. As a physician, I am having NONE of this.

24 140 495

stan @Vortmax29 · 20h

God Bless you and thank you so much for speaking out.

5

Sterling214 @Sterling2143 · 23h

Replying to [@drdavidsamadi](#)

4 31 43

The Deceived Renegade @will_atlarge · 20h

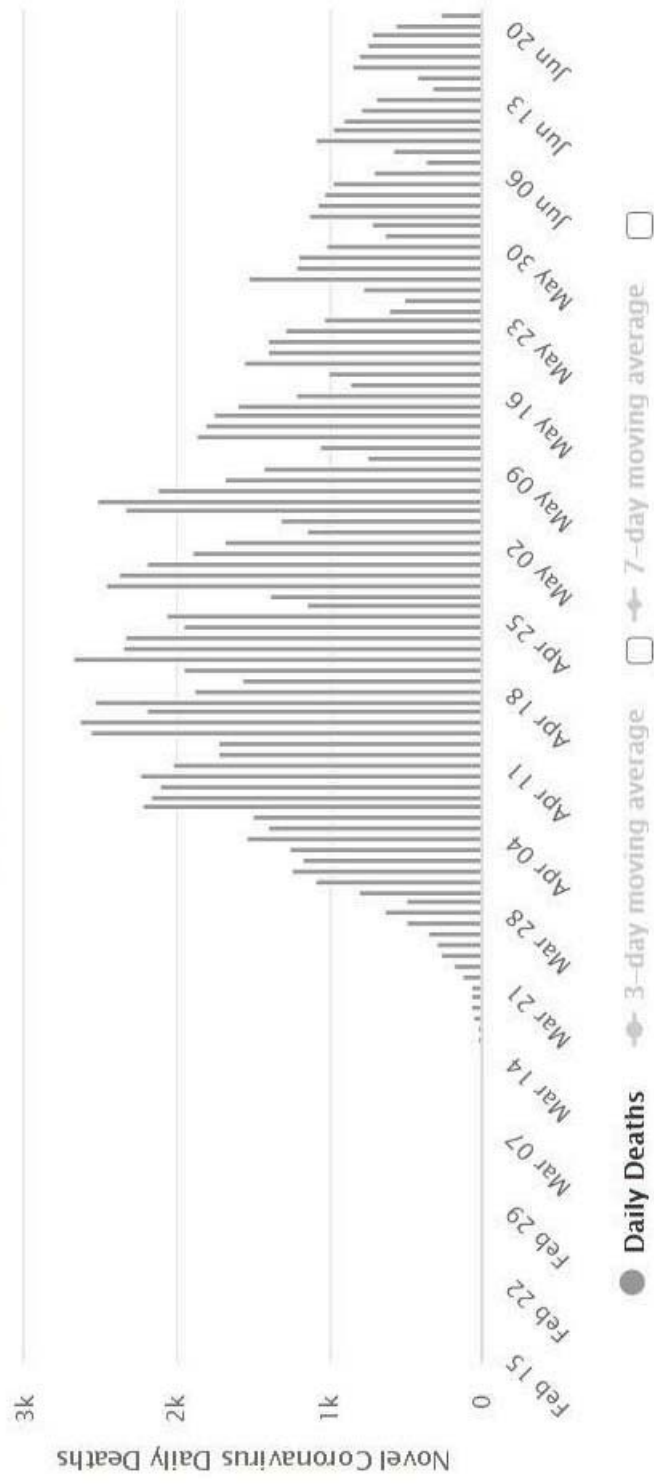
Those insisting or publicly shaming others to wear it else they'll have blood on their hands is evidence that none of their brain cells are on active duty.

5 19

Daily New Deaths in the United States

Daily Deaths

Deaths per Day
Data as of 0:00 GMT+8



Coronavirus is weakening and may die out without a vaccine, expert claims

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Jimmy Nsubuga

Sunday 21 Jun 2020 5:06 pm



1.2k SHARES



Professor Matteo Bassetti has claimed the virus could be dying out (picture: lung-health.org/Getty)

The Covid-19 pandemic could end without the need for a vaccine, an Italian expert has said.

Professor Matteo Bassetti, an infectious diseases specialist, claims **coronavirus** has gone from being an 'aggressive tiger' to a 'wild cat'.

He added we may not need a vaccine for the virus, which has killed 465,000 worldwide, because it could die out by itself.

This claim has been disputed by other experts.





Professor Bassetti Matteo works at San Martino General Hospital in Genoa (Picture: lung-health.org)

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Prof Bassetti **told the Sunday Telegraph**: 'It was like an aggressive tiger in March and April but now it's like a wild cat.'

'Even elderly patients, aged 80 or 90, are now sitting up in bed and they are breathing without help.'

'The same patients would have died in two or three days before.'

He said he thought the virus was changing in severity over the past four weeks, which meant it could be weakening.

Prof Bassetti added there could be several explanations for this, including lockdowns causing people to be exposed to smaller doses of Covid-19.

The expert from San Martino General Hospital, in Genoa, was previously criticised for making similar claims at the start of the month.

In response to his previous statement, Columbia University's Dr Angela Rasmussen tweeted: 'There is no evidence that the virus is losing potency anywhere.'



15





Italy has the fourth highest coronavirus death toll (Picture: Getty Images)

University of Glasgow's Dr Oscar MacLean added: 'Making these claims on the basis of anecdotal observations from swab tests is dangerous.'

'Whilst weakening of the virus through mutations is theoretically possible, it is not something we should expect, and any claims of this nature would need to be verified in a more systematic way.'

'Without significantly stronger evidence, no one should unnecessarily downplay the danger this highly virulent virus poses, and risk the ongoing society-wide response.'

Italy reported 49 deaths from Covid-19 on Saturday, compared with 47 a day earlier, the Civil Protection Agency said, while the daily tally of new cases rose to 262 from 251 on Friday.

The country's death toll since the outbreak came to light on February 21 now stands at 34,610, the agency said, the world's fourth-highest after the United States, Brazil and Britain.

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Coronavirus has downgraded from 'tiger to wild cat' and could die out without vaccine

Infectious diseases specialist Prof Matteo Bassetti says Covid-19 has been losing its virulence

By Phoebe Southworth

20 June 2020 • 12:13pm



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Coronavirus has downgraded from a "tiger to a wild cat" and could die out on its own without

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