

Epidemiologists Say CDC Exaggerated Outdoor COVID Risks

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STORY AT-A-GLANCE

- › The CDC released a misleading and inaccurate statistic about the rate of outdoor COVID-19 transmission, placing it at a “hugely exaggerated” 10%
- › A study from Ireland analyzed 232,164 cases of COVID-19; only 262 resulted from outdoor transmission – a transmission rate of just 0.1%
- › In a Chinese study, researchers analyzed 318 outbreaks with three or more cases, comprising 1,245 confirmed cases; all of them occurred indoors
- › Separate research revealed that even if 10% of the population is infected, it would take an average of 31.5 days of continuous outdoor exposure for a person to inhale enough virus to get infected – and even then the dose would only cause infection in 63% of those exposed
- › Even though transmission risk is extremely low outdoors, the CDC still advises unvaccinated people, including children and those with natural COVID-19 immunity from prior infection, to continue to wear masks outdoors in many cases

Only about 52% of the U.S. public says they have trust in the U.S. Centers for Disease Control and Prevention, according to a recent Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health poll.¹

After the year we’ve just had, I’m surprised it’s that many. The latest CDC blunder came when it released a misleading and inaccurate statistic about the rate of outdoor COVID-19 transmission, placing it at a “hugely exaggerated” 10%.²

The error was egregious enough that it prompted The New York Times to release what it described as "a special edition of the newsletter on a misleading CDC statistic," featuring a number of epidemiologists who say the CDC's reports on outdoor transmission risk for COVID-19 vastly overestimate the risk.³

Initially, the CDC stated that unvaccinated people should wear masks in most outdoor settings and vaccinated people should continue to wear them at "large public venues."

The CDC updated their guidelines May 13, 2021, to state that vaccinated individuals no longer need to wear a mask outdoors and in most spaces indoors,⁴ but implies that unvaccinated people, including children and those with natural COVID-19 immunity from previous infection, must continue to do so in many cases, even outdoors.

Vaccinated or not, and with a mask or without, however, the rate of outdoor transmission of COVID-19 is typically extremely low – and it's time the CDC's guidance acknowledged this.

Outdoor COVID Transmission Makes Up Less Than 1% of Cases

In a White House press briefing held April 27, 2021, Dr. Rochelle Walensky, CDC director, stated, "There's increasing data that suggests that most of transmission is happening indoors rather than outdoors; less than 10 percent of documented transmission, in many studies, have occurred outdoors."⁵ But as noted by David Leonhardt in his article for The New York Times:⁶

"Saying that less than 10 percent of Covid transmission occurs outdoors is akin to saying that sharks attack fewer than 20,000 swimmers a year. (The actual worldwide number is around 150.) It's both true and deceiving. This isn't just a gotcha math issue. It is an example of how the C.D.C. is struggling to communicate effectively, and leaving many people confused about what's truly risky."

Going outdoors mask-free is not an example of a risky activity, regardless of vaccination status, because the transmission rate in most outdoor settings is extremely low – far

lower than the 10% rate the CDC reported.

Nonetheless, the CDC still recommends that children at summer camps wear masks virtually “at all times” except when eating, drinking or swimming, as should all camp operators and staff, even if they’re vaccinated⁷ – and despite research showing **masks are ineffective**.

There’s also the growing realization that nanoplastics and other pollutants, such as lead, antimony and copper, in **disposable face masks** are poised to be an environmental health crisis and likely pose a health risk to those who inhale them for long periods of time, such as children being forced to wear them during school and summer camp.⁸

What’s more, Dr. Muge Cevik, a virologist at the University of St. Andrews, told The New York Times that the CDC’s 10% benchmark is “a huge exaggeration.” “In truth, the share of transmission that has occurred outdoors seems to be below 1 percent and may be below 0.1 percent, multiple epidemiologists told me,” Leonhardt said.⁹

Dr. Monica Gandhi, an infectious diseases and HIV doctor at UCSF, tweeted several examples of studies showing the low rate of outdoor COVID transmission.^{10,11}

Research Supports Negligible Rates of Outdoor Transmission

One study cited by Gandhi took place in China, with researchers analyzing 318 outbreaks with three or more cases, comprising 1,245 confirmed cases.¹² All of them occurred indoors. Even when the criteria were widened to include 7,324 cases, only one outdoor “outbreak” could be found, and it only involved two people:

“Our study does not rule out outdoor transmission of the virus. However, among our 7324 identified cases in China with sufficient descriptions, only one outdoor outbreak involving two cases occurred in a village in Shangqiu, Henan. A 27-year-old man had a conversation outdoors with an individual who had returned from Wuhan on January 25 and had symptom onset on February 1. This outbreak involved only two cases.”

Another extensive review from the Canterbury Christ Church University's Centre for Sport, Physical Education & Activity Research stated, "There are very few examples of outdoor transmission of COVID-19 in everyday life, suggesting a very low risk."¹³ They added:

"The science of transmission of COVID-19 concludes the risk of COVID-19 infection is low outdoors ... if normal conventions of personal space and natural social distancing are not breached."

Leonhardt also cited cases in Singapore¹⁴ that were classified as outdoor transmission, but it turned out that very broad definitions were used to define "outdoors."

For some studies, an indoor case referred only to transmissions that occurred in mass accommodation, such as nursing homes, and residential facilities, while all other settings were deemed to be outdoors, which included "workplace, health care, education, social events, travel, catering, leisure and shopping."¹⁵ "I understand why the researchers preferred a broad definition," Leonhardt wrote:¹⁶

"They wanted to avoid missing instances of outdoor transmission and mistakenly suggesting that the outdoors was safer than it really was. But the approach had a big downside. It meant that the researchers counted many instances of indoors transmission as outdoors. And yet even with this approach, they found a minuscule share of total transmission to have occurred outdoors."

Perhaps most revealing of all is a study Gandhi shared from Ireland, which analyzed 232,164 cases of COVID-19. Only 262 resulted from outdoor transmission, which is just 0.1% of the total.¹⁷ The Irish Times also spoke with Mike Weed, a professor at the University of Canterbury, who evaluated 27,000 COVID-19 cases, finding that those associated with outdoor transmission were "so small to be insignificant."¹⁸

'Outdoor Masks Should Not Have Been Mandated at All'

Cevik, the University of St. Andrews virologist, told The New York Times in April 2021, “I think it’s a bit too much to ask people to put the mask on when they go out for a walk or jogging or cycling ... I think outdoor masks should not have been mandated at all. It’s not where the infection and transmission occurs.”¹⁹

In February 2021, a group of Italian researchers used mathematical models to calculate the concentration of SARS-CoV-2 in outdoor air along with the risk of outdoor airborne transmission.²⁰ They found very low average outdoor concentrations of SARS-CoV-2 in public areas (<1 RNA copy/m³) “excluding crowded zones, even in the worst-case scenario and assuming a number of infects up to 25% of population.”

Further, even if 10% of the population is infected, they found it would take an average of 31.5 days of continuous outdoor exposure for a person to inhale enough virus to get infected – and even then the dose would only cause infection in 63% of those exposed.^{21,22}

Despite the science showing the miniscule risk of catching COVID-19 outdoors, the CDC only recently stated that vaccinated individuals could shed their masks in outdoor settings – raising questions about their faith in the vaccines’ effectiveness – and is still advising everyone else to wear them in many cases. But as Leonhardt stated about the CDC’s initial guidelines:²³

“These recommendations would be more grounded in science if anywhere close to 10 percent of Covid transmission were occurring outdoors. But it is not. There is not a single documented Covid infection anywhere in the world from casual outdoor interactions, such as walking past someone on a street or eating at a nearby table.”

Where’s the Guidance for Those With Natural COVID Immunity?

In their latest guidance, the CDC makes it clear that their expectation is for everyone to get vaccinated. “If you are fully vaccinated, find new guidelines for fully vaccinated people,” they advise, linking to their recent update, and “If you are not vaccinated, find a vaccine,” linking to ways to find a COVID-19 vaccine near you.²⁴

A sizeable percentage of the population, however, has made it clear that they have no intention of getting vaccinated with an **experimental gene therapy**. Everyone has their own reasons for this decision, including an unknown **risk of side effects** and death, but for some, their reasoning is that they've already had COVID-19 and therefore have natural immunity.

If you've had COVID-19, you have some level of immunity against the virus. It's unknown how long it lasts, just as it's unknown how long protection from the vaccine lasts.

Even the CDC admits that it's rare to get sick again if you've **already had COVID-19**, yet they say those who have recovered from COVID-19 should still get vaccinated.²⁵ If they don't, they should still mask up in virtually every setting, according to CDC's logic, even though they have immunity that's likely superior to that provided by the vaccine.

Robust natural immunity has been demonstrated for at least eight months after infection in more than 95% of people who have recovered from COVID-19.^{26,27} A Nature study also demonstrated robust natural immunity in people who recovered from SARS and SARS-CoV-2.²⁸

What's more, Dr. Hooman Noorchashm, a cardiac surgeon and patient advocate, has repeatedly warned the FDA that prescreening for SARS-CoV-2 viral proteins may reduce the risk of injuries and deaths following vaccination, as the vaccine may trigger an adverse immune response in those who have already been infected with the virus.²⁹

Without such screening, he wrote in one letter to the FDA, "this indiscriminate vaccination is a clear and present danger to a subset of the already infected."³⁰

Unfortunately, the CDC's guidance gives the impression of only two options if you want to get back to "normal" pre-COVID life: Get vaccinated ... or get vaccinated. In so doing, they've — literally overnight — pushed us into a world in which only the **"impure" unvaccinated individuals** must be masked, creating a new form of segregation and second-class citizens.

Sources and References

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