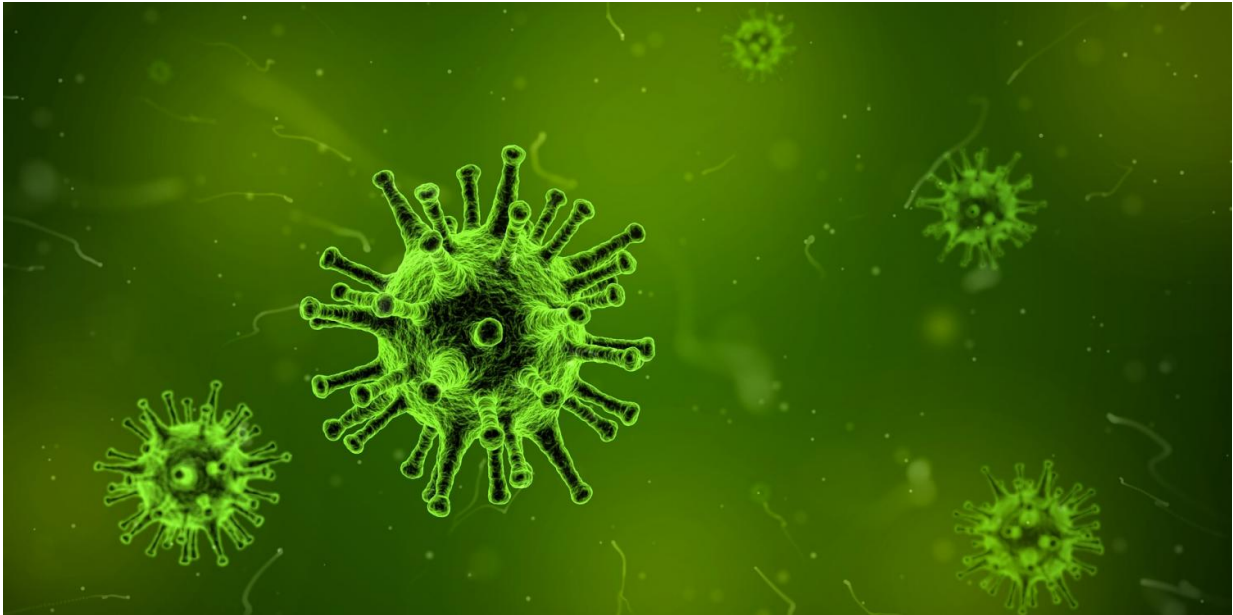


Is 6 feet of social distancing really enough?

May 8 2020, by Catherine Marfin



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By now, Americans are familiar with the rule: Stay six feet away from other people for your best chance of preventing the spread of COVID-19.

Even as Texas begins to reopen more businesses, social distancing is still being emphasized. But some officials' guidelines for how much space to keep between yourself and others has varied.

The U.S. Centers for Disease Control and Prevention has recommended

at least a six-foot gap. The World Health Organization has recommended half that distance—and only when people are coughing or sneezing.

However, other [health experts](#) have said even more space may be needed in some situations.

So how much social distancing is enough? Here's what you need to know.

Where does the six-foot rule come from?

Health experts have said the recommendation for six feet of social distancing comes from studies of diseases in the 1930s and 1940s, mainly the work of William F. Wells, who studied tuberculosis.

COVID-19 is believed to be spread mainly through large respiratory [droplets](#) produced when people cough or sneeze. The droplets typically travel three to six feet.

Health experts say that because the droplets are larger and can usually be seen with the naked eye, gravity will cause them to fall to the ground within that distance.

Why are some health experts concerned about the six-foot rule?

There are questions about whether the [virus](#) can be transmitted through microscopic droplets, called aerosols, which linger in the air.

Health experts have pointed to studies and incidents that suggest there's a risk the virus can linger. One study in the *New England Journal of Medicine* suggested COVID-19 can live in the air as long as three hours

in the right conditions.

Experts also expressed concern about aerosol transmission. After about 60 choir members gathered for a practice in Mount Vernon, Wash., and dozens of them contracted the virus,

A study published in the *Journal of the American Medical Association* in late March found that droplets that were produced when someone coughs or sneezes can travel up to 27 feet. The study wasn't conducted on the COVID-19 virus specifically, and droplets survive and fall at different rates depending on their size and factors such as temperature, humidity and air currents.

The study could have implications for the novel [coronavirus](#), but there's still a lot that isn't known about the disease, such as how much of the virus survives in [smaller particles](#) and how much of a living virus it takes to make someone sick, health experts say. Even if the virus lingers in respiratory droplets in the air, health experts still can't say whether the droplets hold enough of the virus to cause concern.

"The question is not how far the germs can travel, but how far can they travel before they're no longer a threat," Dr. Paul Pottinger, an infectious disease professor at the University of Washington School of Medicine told U.S. TODAY. "The smaller the germ particles, the lower the risk that they might infect somebody who would breathe them in or get them stuck in their nose or their mouth."

What about social distancing when you exercise?

Because of the varying theories about aerosol transmission, questions have been raised about safe social distances outdoors.

Some experts say the risk of transmission outside is low because air flow

dilutes any air expelled air. Generally, health experts say you're safer engaging in outdoor activities than indoor ones, where air flow can be restricted, people are close together and frequently touched items are abundant.

"Usually there's a lot more social distancing outside," Dr. Kevin Winthrop, a professor of infectious diseases in epidemiology and [public health](#) at Oregon Health & Science University in Portland, told National Public Radio. "And environmental factors like wind and UV (radiation, which degrades most viruses) make it less likely you're going to come in contact with viral particles."

But one recent study found that when people walk briskly or run, their bodies creates wakes of air that can carry respiratory droplets up to 15 feet.

The study hasn't been peer-reviewed or published, and it has significant limitations. For example, it didn't focus on the risk of infection or the COVID-19 virus specifically.

"The results look reasonable," Linsey Marr, a professor at Virginia Tech who studies air flow, told *The New York Times*. "Common sense and this study suggest that if someone is walking or running, we need to allow for more space around them."

Other health experts say allowing more space makes sense because people breathe heavier and harder when they're exercising.

"The mnemonic I like to use is double your distance," Dr. Ben Levine, a professor of Medicine and Cardiology at the University of Texas Southwestern Medical Center in Dallas, told NPR. "The greater volume and rate of breathing that occurs during exercise has the risk of spreading droplets farther ... I think it's reasonable (to increase [social](#)

[distancing](#)) based on the known changes in breathing during exercise."

So, is six feet enough?

Many health experts say six feet of distance is a good minimum to aim for, based on what is known about the virus's main method of transmission.

Health experts also recommend taking personal factors into account, such as how vulnerable an individual is and how well air is flowing.

"Everything is about probability," Dr. Harvey Fineberg, the head of the Standing Committee on Emerging Infectious Diseases and 21st Century Health Threats at the National Academies of Sciences, Engineering and Medicine, told The New York Times. "Three feet is better than nothing. Six feet is better than three feet. At that point, the larger drops have pretty much fallen down. Maybe if you're out of spitting range, that could be even safer, but six [feet](#) is a pretty good number."

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