

[Health](#)

A year into the pandemic, it's even more clear that it's safer to be outside.



Beachgoers soak up the sun on Clearwater Beach, Fla., during spring break last month. (Octavio Jones/Reuters)

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The photos of Clearwater Beach, Fla., went viral last spring: people crowded on the sand, seemingly unconcerned about the deadly new contagion coursing across the world. Local officials, accused of fueling a public health crisis, [quickly shut](#) 35 miles of county beaches and left them closed for weeks.

What a difference a year makes. The beaches were even busier this year, but officials say there were no talks of closure. There was also far less outcry.

And with good reason, according to many scientists and public health experts, who say that the outdoor spaces now warming under spring sun should be viewed as havens in the battle against a stubborn virus and restriction-induced fatigue. For more than a year, the vast majority of documented coronavirus clusters have been linked to [indoor](#) or indoor-outdoor settings — households, [meatpacking plants](#), nursing homes and restaurants. Near-absent are examples of transmission at beaches and other open spaces where breezes disperse airborne particles, distancing is easier, and humidity and sunlight render the coronavirus less viable.

Beaches and parks “are some of the safest places you can gather,” said Linsey Marr, an expert on airborne virus transmission at Virginia Tech. “Outdoors now is even safer than before, because we have more people who are vaccinated and who have already had covid-19.”

Evidence that the [coronavirus](#) transmitted less effectively outside emerged early in the pandemic. And as the nation settles into its second year with the virus, that understanding is increasingly recognized in public policies. [Ballparks are welcoming fans](#). Open-air graduations and county fairs are being planned. Outdoor gathering limits are [rising or being dropped](#) altogether. The playgrounds and public lands that were off-limits last spring are mostly open.

Even so, public health guidance about the outdoors remains cautious: Stay distanced, avoid crowds and wear a mask — even, in many jurisdictions, on beaches and trails. Experts say that is because it remains unclear precisely how much less risky outdoor activities are, in part because it is so difficult to trace contacts of strangers who were near each other at public events. More contagious [variants](#) are also “working against us,” Marr said.

What’s more, some lower-risk outdoor activities, such as beach-going or partially filled stadiums, are often connected to far riskier ones, like public transportation or visiting bars. When [Miami Beach imposed a curfew](#) last month, officials cast blame on crowds of revelers, not sunbathers.

Nooshin Razani, an associate professor of epidemiology and biostatistics at the University of California at San Francisco, studies the connection between nature and human health, and has long advised park agencies. As the pandemic progressed, Razani said, she realized these agencies needed “a bit more nuanced guidance than just, ‘It’s safer outside,’ ” she said.

In a [systematic review](#) of published studies on transmission of the novel coronavirus and other respiratory viruses, Razani and colleagues found that less than 10 percent of cases described were spread outdoors. But they also found frustratingly few papers that detailed the settings or clearly compared indoor and outdoor situations.

“Our takeaway from this is that it’s not impossible to get an infection outdoors, even though from what is published, clearly the proportion of when that happens is much lower,” Razani said. She added: “If you are going to a beach — which is a beautiful thing — you should avoid times when it’s crowded, and have your mask, and have a Plan B.”

‘We need to have a bit more of a harm-reduction approach’

Early contact tracing studies detected far more indoor transmission of the coronavirus than outdoor. One [study in Japan](#) found that the virus was nearly 19 times more likely to be spread in a closed environment; six of the seven cases the researchers identified as “superspreaders” transmitted it indoors. The study did not describe where the cases took place.

Another [study](#) last spring, of 318 outbreaks in China involving three or more cases, found that all occurred indoors. The authors identified just one outdoor outbreak involving a man who had a conversation with a person who had returned from Wuhan, where the novel coronavirus was first detected.

Since then, case investigations have tied most major clusters or superspreader events — a term that has no agreed-upon definition but can involve only single digits of cases — to indoor or indoor-outdoor occasions, experts say. Among the most prominent examples in the latter category: the [Sturgis, S.D., motorcycle rally](#), a 10-day event that seeded hundreds of cases across several states last summer but also involved unmasked crowds inside packed bars and concert venues.

A [database of published studies and government and media reports](#) on coronavirus clusters identified worldwide through August was compiled by researchers at the London School of Hygiene and Tropical Medicine. It found that 96 percent were associated with indoor settings, though they noted that few reports have emerged from low- and lower-middle-income countries. The rare outdoor examples, the researchers wrote, were mostly associated with mass gatherings, including a market and a rally.

There is no evidence yet that the most high-profile U.S. outdoor mass gatherings of 2020 — the racial justice gatherings after the police killing of [George Floyd](#) — amounted to superspreading events. But research on whether they fueled coronavirus spread in surrounding areas has led to mixed conclusions. Two studies have found [no](#) increases [in cases](#) in jurisdictions with many demonstrators; [another](#) found “abnormal growth” in infection rates of eight cities with large numbers of protesters.

Another [paper](#) examined the effects of 18 of President Donald Trump’s campaign rallies, 15 of which were outdoors, and found that they may have significantly increased cases in the counties that hosted them.

Muge Cevik, an infectious-disease and virology expert at the University of St. Andrews in Scotland, said connecting a large event with local infection rates is difficult, because many other activities can contribute.

But Cevik said there is ample evidence that passing by “strangers and casual contact is very low risk” outdoors, and even that walking past others on crowded streets is safe. Eating with other people, without socially distancing, may be the highest-risk outdoor activity, she said. And everyone should beware the barbecue where “people also chat in the kitchen,” Cevik said.

Cevik said she is skeptical of blanket outdoor mask mandates and thinks authorities should focus instead on measures such as ventilation improvements in high-risk workplaces or paid time off for [essential workers](#) who must quarantine. An overemphasis on the possibility of outdoor spread might drive gatherings indoors, she said.

“We need to have a bit more of a harm-reduction approach, where we basically encourage people to spend more time outdoors safely,” Cevik said. “Given the very low risk of transmission outdoors, I think outdoor mask use, from a public perspective, seems arbitrary, and I think it affects the public’s trust and willingness to engage in much higher-yield interventions. We want people to be much more vigilant in indoor spaces.”



A group enjoys a picnic in Regent’s Park in London, where lockdown measures this spring closed tennis courts and golf courses and limited outdoor meetups. (Neil Hall/EPA-EFE/Shutterstock)

'Hey, if you're in a public setting, wear a mask.'

In Pinellas County, Fla., officials closed the beaches last spring “because there were a lot of unknowns,” said Steve Hayes, president and CEO of Visit St. Pete/Clearwater, the county’s tourism bureau. “How the virus was being transmitted, we weren’t sure.”

Closure is not on the table this year, he said. Instead teams of “stewards” are handing out \$25 gift cards to visitors spotted complying with the county’s four-pronged guidance: “Mask up, spread out, wash your hands and be patient and kind.” Coronavirus cases are on the rise in the county, as they are across much of Florida, but Hayes said county officials viewed the spring break season as a success.

Last year, [video of a Memorial Day weekend gathering](#) at the Lake of the Ozarks, where people gathered tightly together in a pool outside a bar, alarmed health authorities. Randall Williams, director of the Missouri Department of Health and Senior Services, said an extensive tracing effort found no major coronavirus clusters connected to the weekend, though a few individuals were infected.

“From that event that attracted national attention, we didn’t see any kind of spreader or superspreader event,” Williams said. But the department still hasn’t changed its message about masking, distancing and avoiding crowds, because even though transmission occurs less outdoors than indoors, Williams said, “we don’t think it is enough less that we would recommend different guidance.”

Nirav Shah, director of the Maine Centers for Disease Control and Prevention, said the early China and Japan studies convinced him last year that the state should embrace what he called a “European summer” — closing streets for outdoor dining and encouraging residents to take advantage of Maine’s lush forests and dramatic coastline. The state traced no case clusters to outdoor-only settings, he said.

