# Study shows parks not only safe, but essential during the pandemic

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Parks played an important role for people seeking respite from the toll of social isolation during the pandemic, and according to new research from Drexel University, they did so without increasing the spread of

COVID-19. The study looked at how people used 22 parks in Philadelphia and New York during the height of the pandemic and it found no strong correlation between park use and the number of confirmed cases in surrounding neighborhoods.

Published in the *Journal of Extreme Events*, Drexel's study "Urban Park Usage During the COVID-19 Pandemic" surveyed park visitors over a three-month period from May to July 2020 at small and mid-size parks in New York and Philadelphia. And it compared park usage numbers to rates of COVID-19 transmission in the areas directly surrounding the parks.

"Despite early speculation that parks could become gathering points for large groups of people and contribute to transmission of COVID-19, our research did not find a strong correlation between COVID-19 cases in neighborhoods near parks and the number of people using them," said Franco Montalto, Ph.D., a professor in Drexel's College of Engineering who led the research team.

In the early months of the pandemic last spring, public health guidance recommended avoiding gathering in large groups outside. As a result, many municipalities closed public playgrounds with high-touch areas, like swings and sliding boards, out of an abundance of caution. But most public parks remained open and, according to the study, those in Philadelphia and New York continued to be used throughout the pandemic.

The researchers selected 22 small, urban parks, 15 in Philadelphia and seven in New York City, located in or near neighborhoods representing a variety of levels of relative population density and vulnerability, according to Census data and the CDC's Social Vulnerability Index—a tool that uses Census data to identify communities that could need support during natural disasters and crisis situations. This allowed the

team to account for these factors when examining the possibility of a link between park use and COVID-19 transmission.

What it found is that, regardless of city or social vulnerability of the adjacent neighborhoods, in areas that were more densely populated, parks tended to see more use. But this increased usage did not equate to higher transmission of COVID-19—which was more closely associated with the vulnerability of the neighborhoods, according to the study.

"Though a more extensive epidemiological study is required, this research provided no evidence that park usage contributed to COVID-19 spread," they wrote. "The number of park visitors increased with density in Philadelphia, as did the number of confirmed COVID-19 cases.

Citizen scientists assigned to each park observed how much and in what ways they were used and whether or not visitors were engaging in activities deemed to be "high-risk" for transmitting COVID-19, such as playing contact sports, not wearing a mask, or coughing without covering.

Overall, only a small percentage of park users—22.7% in Philadelphia and 1.2%, in New York—never wore masks, according to the study. The majority of park users that were observed did not engage in high-risk behaviors—only 0.7% in Philadelphia and 0.9% in New York were observed frequently coughing or spitting without covering their mouths. And just 1.6% and 12.9% of people were observed frequently participating in contact sports in Philadelphia and New York City, respectively.

"While the municipalities that did close parks during the pandemic likely did so out of an abundance of caution, our work shows no evidence to support closing the parks during the pandemic," Montalto said. "That people continued to visit parks during lockdowns and the early stages of

the pandemic underscores the evident value of parks as a respite for urban residents during the early phases of the pandemic."

**More information:** Bita Alizadehtazi et al, Urban Park Usage During the COVID-19 Pandemic, *Journal of Extreme Events* (2021). DOI: 10.1142/S2345737621500081

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