Does mask-wearing make a difference in the spread of COVID-19?

Key Points

- Wisconsin’s COVID-19 curve has not been flattened and the state now has one of the worst COVID-19 outbreaks in the nation
- COVID-19 transmission occurs primarily through airborne droplets and the amount of exposure can be effectively reduced by wearing a mask, even if made from cloth
- The amount of exposure to COVID-19 relates to infection risk and even masks made from cloth can reduce viral exposure at least 80%

Distancing measures, stay-at-home orders, and masks have effectively flattened the COVID-19 curve in many states across the US, but Wisconsin is not one of them. In the week after May 24th, Wisconsin has seen a 19% increase in COVID-19 cases, with only Virginia and Alabama experiencing worse outbreaks over that time. In the past week, Wisconsin has set multiple new records for COVID-19 cases and deaths, and that alarming trend will only continue if citizens do not take individual precautions to slow the spread of the virus. Wearing a mask for protection has become one of the most politicized and polarizing topics of the pandemic, but the scientific evidence is clear: masks work. A quick trip to the grocery store or any public place will display the divide, and in Wisconsin it appears there is a significant portion of the population not wearing masks in public spaces. What is the evidence they work?

COVID-19 can spread through respiratory droplets that are passed directly from person-to-person, but some droplets produced by humans are so small that they may remain airborne for hours. Additionally, identifying infected individuals can be extremely challenging because people can be highly contagious for several days before any symptoms occur. For these reasons, masks are essential for reducing the amount of viral transmission and exposure as even those made of cloth are at least 80% effective. Importantly, the amount of COVID-19 exposure relates to one’s
Does mask-wearing make a difference in the spread of COVID-19?

likelihood to become sick\textsuperscript{9}, reinforcing the importance of masks as a critical barrier between the wearer and the outside world. It is not surprising, then, the countries that have implemented universal mask wearing (e.g. Taiwan, Hong Kong, and South Korea) have been some of the most effective in stopping the spread of COVID-19.

So, where should you wear a mask? In any public place, wear a mask. Anyone can be unknowingly infected, and with the amount of COVID-19 exposure playing a significant role in infection risk, mask-wearing is essential to help slow the spread of COVID-19.

Figure 2: COVID-19 exposure and transmission is minimized through universal mask-wearing. Graphic: Prather et al., 2020.

References

Does mask-wearing make a difference in the spread of COVID-19?


