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Born to Run... With a Mask On?

I am not a big fan of the terms “new normal,” “uncertain times” or “unprecedented,” as they all seem to be overused and thrown at us daily for the past six months to describe COVID-19. I prefer “temporary setback.” Just like an injury, in time we will be able to get back to our regular lives (someday). We have had to change the way we live, work and function, but especially the way we exercise. Gyms have moved equipment outside or we have purchased our own to use at home. And we have been enjoying the great outdoors. This has prompted questions about wearing a mask while exercising outdoors.

I have read many opinion pieces regarding masks and outdoor exercise. I have read about runners being confronted and harassed for not wearing a mask. Some runners say they absolutely will not wear a mask because it affects their performance and breathing. Others believe they are likely to be infected and become gravely ill if a runner without a mask passes them on the sidewalk or street. While there may not be a “right” answer, let’s let science do the talking.

First, your chances of becoming infected by the virus are very low if you maintain a level of cleanliness by routinely washing your hands, practicing social distancing and wearing a mask while around others, particularly in indoor spaces. As of the end of August, numbers indicate 1.8% of Americans have been infected by COVID-19 (verified by testing). Of the 1.8% infected, 3% have died.

Some athletes insist that wearing a mask while running decreases their oxygen levels, restricts air flow and/or results in oral infections. But there have been no studies or proof that masks decrease oxygen levels in the blood or affect running performance.

A physician in the United Kingdom ran a 35K wearing a mask to test this for himself. He monitored his oxygen levels every so often during his run and noted that his oxygen level never went below 98%. For reference, a level of 95% or higher is normal in a healthy individual. There is no proof that masks increase or put an individual at risk for oral or pulmonary (lung) infections.

Yes, the masks can sometimes be restricting and leave you with the sensation that air flow is decreased, especially when sweat saturates the mask. So, if you are wearing a mask on a long run, I would recommend taking along an extra one so you can replace the wet one if necessary. The only minimally significant downside to wearing a mask while running (besides being uncomfortable) is a slight increase in mucus in your nasal passages, which can cause decreased air flow if you are breathing through your nose.

The big question that remains centers on the force of exhalation while running and whether it spreads the virus farther. It is true that forceful breathing spreads respiratory droplets farther than normal breathing. When you factor in running and wind speed, droplet spread can increase significantly. A study showed that a runner’s respiratory droplets can be detected nearly 30 feet away, given the right conditions!

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But again, before you let that information scare you, let's address the science. Continuous unmasked contact of 15 minutes or more with an infected person will increase your risk of infection. But a brief unmasked encounter, particularly if you are outside, poses minimal risk. Here is an analogy: If you decide to run through a lawn sprinkler, you will get a few drops of water on you. The chances of you becoming soaking wet are miniscule. If you decide to stand right next to the sprinkler for 15 minutes, then you will become dripping wet. Likewise, running past an unmasked individual who may be infected poses a risk, but that risk is infinitesimal.

We don't know everything about COVID-19, so we need to rely on the science of what we do know. The most important recommendation is that if you feel sick or off, do not run and potentially expose others. In fact, don't even go out in public. Get tested to determine whether or not you are infected. If you want to wear a mask while you exercise, no harm will come to you or your training. If someone is running without a mask, there is no reason to think the world is coming to an end.

The best thing to do while you are exercising outside is to maintain as much social distancing as you can. Additionally, wash your hands before and after you run or exercise. If you need to cough or sneeze while running, cover your mouth with your arm. If you are uncomfortable and concerned because there are too many other runners on your route, now would be a good time to start running at a different time or in a different place.

If you have any questions or concerns regarding an injury or pain, please reach out to one of our experienced sports medicine physicians at Corewell Health Medical Group Orthopedics at (616) 267- 8860. You can also find more information about our orthopedic program and providers on our [website](#).
