

FACE COVERING Q&A from Dr. Allison Ward-Moore

Associate Professor, Anatomy and Physiology
McLennan Community College

Wearing a face covering also called “masking” may be the most important thing the average person can do to help reduce the transmission of COVID-19, the disease caused by the novel coronavirus CoV2. Many people feel uncomfortable following the advice (it does feel weird to wear a mask in public!) and aren’t sure of the necessity, effectiveness, or safety of the practice. Technically masks (surgical and N95 masks) should be reserved for healthcare workers. Facial coverings are what we are requiring at MCC. These can be homemade or purchased but should cover the mouth and nose. Hopefully, I can give you some good information about facial coverings that will help answer common questions and concerns that I hear most often about the practice of wearing a face covering.

Are masks really effective at decreasing the spread? I heard it doesn’t protect the wearer of the mask, and I feel fine.

Masks and facial coverings help to decrease the amount of respiratory droplets and possibly aerosols (airborne particles) generated by the wearer, so they do not do much to protect the wearer. However, asymptomatic (never develops symptoms) and presymptomatic (before a person develops symptoms such as fever or cough) transmission appears to be a major source of spread of the virus that causes COVID. This is unlike many other viruses which are mostly transmitted to others once someone is symptomatic or sick. Wearing a mask protects others, a sacrificial act of the individual’s comfort to protect those around them ‘just in case’. This is why a doctor wears a mask during surgery. They are protecting the patient. This study shows how implementing masking/facial coverings is helping to reduce spread of COVID: www.healthaffairs.org/doi/10.1377/hlthaff.2020.00818. An excerpt from it:

“Even organizations that have not yet recommended widespread community use of facial masks for COVID-19 mitigation (i.e. everyone without symptoms should use a face mask outside of their home), such as the World Health Organization, strongly recommend that symptomatic individuals wear them.⁵ Since mask wearing by infected individuals can reduce transmission risk, and because of the high proportion of asymptomatic infected individuals and transmissions, there appears to be a strong case for the effectiveness of widespread use of face masks in reducing the spread of COVID-19.”

Can’t I just stay 6 feet away from people?

Social distancing isn’t enough. We know how hard it is, how poorly we do this despite our best intentions, and mounting evidence shows that the virus may stay airborne long enough to infect others particularly the longer we are in contact with each other. This story about an

office building cluster (which has a link to the journal it was published in) illustrates this fact. www.businessinsider.com/south-korean-call-center-covid-19-outbreak-seating-chart-2020-4.

Here are some other articles if you're interested.

<https://www.scientificamerican.com/article/how-coronavirus-spreads-through-the-air-what-we-know-so-far1/>

<https://science.sciencemag.org/content/early/2020/06/08/science.abc6197>

<https://science.sciencemag.org/content/early/2020/06/08/science.abc6197>

Why were masks not suggested at the start of the epidemic?

Because 'masks' were in short supply and the amount of airborne transmission was unknown, officials didn't recommend masks and instead focused on social distancing. As data showed transmission despite social distancing and we saw how effective masking orders were in some countries, facial coverings were recommended. Wearing a mask protects others in case you are presymptomatic or asymptomatic. The more people wear them, the more protection we all have from the disease. Surgical masks and N95 respirators are still being reserved for health care workers.

Are there risks associated with wearing masks for many hours?

Maybe you've seen stories on social media about how unhealthy it is to wear a face covering or mask for long periods of time. I can vouch for how annoying it is to wear a surgical mask for 8-12 hours a day as I did it many days in a row while in residency, but I can assure you there are no risks for wearing masks for long periods of time. All OR nurses, anesthesiologists, surgical techs, and surgeons who do this day in and day out have no long term effects of wearing masks.

But it is so hard to communicate with a mask on!

There are challenges to communication with a mask. The OR is loud and speech is muffled with a mask but somehow the OR staff manages to communicate in high risk settings. We can learn to communicate with masks on. It just takes time and practice! Speaking more slowly and clearly helps. It is hard to project with a mask on but it can be done.

People don't wear them correctly, and it makes them ineffective.

This is partially true, and it personally drives me crazy to see people wearing them incorrectly at the store. So many pull them down and expose their nose. Not helpful. However, it doesn't make them ineffective, but less effective. Besides, how else will we learn to use them correctly except by wearing them and practicing? In our MCC community, we will help each other by gentle correction when mistakes happen and reminders to wash hands or use sanitizer when

we accidentally touch them. Face coverings can hold onto all kinds of germs so hands should be washed or sanitized after touching them.

How exactly is COVID transmitted from person to person?

Since this is a new or novel virus, this has been an important area of research. The previously known coronaviruses all have slightly different transmission characteristics and that made figuring this one a little tricky. The short answer is that the virus is spread three ways: 1. From touching contaminated objects and then touching your mouth, nose or eyes 2. From respiratory droplets depositing in your mouth, nose or eyes and 3. From inhaling particles of virus floating in the air. The longer answer follows. The virus enters the body through the mucous membranes, eyes, nose and mouth (which leads to the lungs). Many viruses such as colds and flu are spread mostly by hands touching contaminated surfaces (including other hands!) and then touching the mucous membranes. Sometimes viruses enter the body when smallish droplets expelled by someone land on the mucous membranes. Social distancing helps decrease the chance of this (6 feet away). Sometimes viruses infect through very small particles in the air itself which are inhaled, which is commonly called aerosol or airborne transmission. This is not a common way viruses are spread, and the more airborne a virus is, the more infectious or transmissible. Mounting evidence suggests that CoV2 is transmitted this way. This probably isn't the main way but it does to some extent, more so than influenza. It is very difficult to pinpoint which is the most important route of transmission but being in closed spaces for long periods of time appears to increase transmission. This is worrisome for those in offices and classroom settings! It's why MCC is requiring facial coverings. We know we can't eliminate the risks, but reducing them by limiting the number of people in a classroom, social distancing, cleaning surfaces before and after class, and wearing masks will help to reduce the risks. We all want a safer learning environment. While there may be circumstances that need to be addressed on a case by case, we must all do our part to help slow the spread. Until there is a vaccine, be kind and courageous. Wear a mask.

Dr. Allison Ward-Smith is a board certified Obstetrician/Gynecologist (OB/Gyn). She currently teaches Anatomy and Physiology at MCC. Dr. Ward-Smith obtained her MD from Medical College of Georgia in 1999 and completed her OB/Gyn residency at Vanderbilt University Medical Center in 2003. While not an infectious disease expert or epidemiologist, she has been following journal articles, medical news, and physician forums to stay up to date as much as possible on COVID 19 virus, concentrating on how it is transmitted and how to prevent its spread, to better inform her students and help protect her friends, family, and community.