

Covid19 Information Everyone Should Know June 2020, from Dr. Sumana Reddy

With so much information out there changing so quickly, and because some of it is confusing or contradictory, I thought that Acacia could provide a summary of the most important things you need to know about this new coronavirus, the facts that make a difference to your decisions and your friends and family's. By understanding the virus better, you will hopefully be able to make strong decisions around risk.

The virus: Coronavirus 2019 or Covid19. While it started in Wuhan, China at the end of last year as a cluster of cases of pneumonia, at this point it has spread all over the world. Just goes to show how much contact we have with one another and how contagious respiratory viruses can be. We actually had some other viruses a few years ago that were more deadly but less contagious (SARS and MERS), and Measles is also much much more contagious still. In spite of that, being in a room with a person who is positive for Covid19, without masks and especially if that person is talking loudly or singing, can spread the virus to most people in the room, and we have had a few situations where this has happened. It doesn't seem to matter that Covid19 has changed a bit on the way here. We can tell there are different strains of it now, but the main part that makes you sick should respond to a vaccine in the same way in spite of all the differences.

What it Causes : As far as we know, Covid19 seems to have worse effects on those who have inflammation in the body. Diseases like high blood pressure, diabetes, liver and heart disease and lung and kidney conditions along with medications that suppress the immune system, age over 60 and severe obesity (BMI over 40) all seem to increase the risk. While many people may not show symptoms immediately or at all, this disease has already taken over 300,000 lives in the world and nearly one in 3 of them are American. Five million have been infected worldwide. There's a lot we don't yet know, but this virus causes unique damage to the lungs and to other organs, including increased risk of clots. A part of the illness seems to be the body overreacting to the virus and causing a different wave of damage. This may be why some children and young people also have problems with it. One in 5 people over 80 who get the virus will be hospitalized, and half of them will die of it. One in 4 people who are hospitalized with infection are in their 50's, but most will recover and in this group 9 in 10 will recover at home. It's just a larger group. While children are only rarely really sick with it, some will have a severe illness that is different from adults and still being studied.

Symptoms: We are still not sure of the exact number since we are just beginning to test people who are well, but our best guess is that 1 in 3 people who gets Covid19 doesn't know it. These people can spread it without knowing they are contagious. While many protocols suggest that temperatures be checked for employees or others to prevent entry to those who are ill, fever may actually be only the 5th or 6th most common symptom of illness. Other common findings are tiredness and body aches, cough, chills, sore throat, shortness of breath and unusually, a loss of taste or smell is sometimes a signal in the early stages. It is very important to notify us for any of these symptoms if you or a family member have them. When ill, it appears that certain

exercises for deep breathing, and sleeping sometimes on the tummy can open up lungs. It also looks like people can be feeling well but have unusually low oxygen levels as checked on a pulse oximeter. For this reason it's being recommended to have a pulse oximeter on hand to check regularly when a person is ill with Covid19. We have purchased a few we can loan out if we are very concerned about a patient at home.

Masks and Distancing and Hand Washing/Sanitizing: Masks definitely decrease the risk of Covid19 spread. The most important reason to wear one is to keep your own droplets away from others as you breathe out, or cough or sneeze or even just talk loudly or sing. We now know that you can spread your droplets for quite a distance, a lot more than 6 feet and up to 26 feet when sneezing. Droplets can dry and the particles produced, even from just talking, can stay in the air for up to 14 minutes after a sneeze or talking. And this is why indoors, even 6 feet may not be enough. This is also why most contagion is from families and workplaces, not from objects or walking past people.

This video shows this quite nicely: <https://youtu.be/P27HRCIMf2U> Watching it will help you explain the why of masking to friends and family.

Children under 2 shouldn't wear masks. You will know if your child can tolerate one, some children with autism have an especially hard time. Start finding a well sized mask, and get your child used to keeping it on at home here and there so they can more safely return to school whenever that happens. Even if the schools don't require them, being able to wear a mask effectively will cut down on the risk of one child in a classroom affecting others. For everyone out in the community, family and friends, a fine cotton weave in layers is a good mask because the virus dries up on the surface of cotton, it's thought within 2-3 hours. The stretchy polyester materials may not be as good, because as far as we know the virus seems to live on them longer. Surgical masks are now becoming available to the public and come in childrens' sizes as well. But no mask works if it's under your nose! Watch for ear bands sagging and use another tie to cinch them back around the head if the mask keeps slipping down. And each time you touch your face, you will need to wash your hands for 20 seconds or use sanitizer properly on all surfaces of both hands. It's been shown that washing 10 times a day is 4 times more protective than washing twice a day. This is why it's a good idea to practice it all at home for half day stretches before first wearing a mask for an extended time at work or school. For family and friends who are at the highest risk, help them understand what masks work better and which are less effective. You can advise friends and family with the risk factors listed above to be extra careful about going out, and if they must, should mask and observe distancing very carefully, staying farther than 6 feet and avoiding situations where they would be any closer indoors. Remember that any mask that covers mouth and nose is much, much better than none at all!

Mask anxiety: (I am surprised that I can't find much online on how to handle the situation where you feel anxious or don't tolerate a mask over your face well. If you come across anything let's add it here). This is common. And understandable. The closer to an N95 a mask is, the more chance that you will feel this way. I came across medical students online advising each other 10

years ago and saying 'just loosen it so you can breathe from under!' It's a good reason not to trust online advice, and I'm sure you can understand why not to do that!

In general, if we want maximum protection where we can't spread droplets to others or breathe in a germ ourselves, we will be breathing through a filter all the time. To do this without feeling claustrophobic, it's good to slow the breathing. Remind yourself that air does filter through the mask and you are getting oxygen. Anxiety worsens the feeling of inability to breathe, and reminding yourself that you can breathe, and observing the pace of your breathing helps. Heat can worsen the feeling of suffocation. It may be useful to go for a rigid mask, or one that doesn't touch the nose and mouth. And there's no substitute for putting it on for practice and just getting used to it.

Surfaces : Droplets from breathing are expelled into the air and eventually hit surfaces and the particles of virus in the droplets settle down. What we don't know yet is whether the virus that settles is active after a point. We can find traces in environments, especially indoors, but the virus dries up after a while, and so finding traces of the virus is different from knowing for certain the active virus can stay on that surface and infect someone else. We know that it lasts longer on steel or plastic and dries up and becomes inactive faster on cotton or cardboard. While it's important to disinfect surfaces often in high risk settings, the risk in a grocery store seems to be coming more from people breathing out particles and others breathing them directly in than from touching surfaces. When everyone masks, both types of spread can be avoided.

Testing: There are three types of tests, each type with multiple brand names, some reviewed and approved by the FDA and others not. The antigen test is the quick one with results in 10 minutes. This test, if positive, is fairly trustworthy. But if it's negative, it's not very accurate. As the amount of virus increases there is more chance it will turn positive, but cases could be missed. The PCR test is another nasal swab test. The results take longer to get back. This test seems fairly reliable as far as the main brands go. But in the early stages of infection, again it might be negative and if tested a few days later, would turn positive as the amount of virus being released by the body goes higher.

The antibody test is the most complicated one to understand. There are many different brands, and we are still trying to figure out how best to use this test. Knowing someone has had the Covid19 virus infection already and that their body has made antibodies, showing they have been through it, doesn't tell us what to do with that information. Can we consider them safe from reinfection? We aren't sure yet. Can we let them go around safely, not worrying about the disease? No because some people will get a positive test that is false. Right now, the biggest use is so we can look at what group of people might have had the disease already. Some people can donate their blood with the antibodies, and we may be able to use the plasma to treat people who are very sick with the virus.

Next Steps: We hope to develop ways to track the contacts of those who have the infection, testing them and isolating them, so that the infection can't spread as easily. Our shelter in place orders have made a big difference to slowing spread, saving the lives of thousands in the US.

As we open up, we should realize that the risk of exposure will increase, in some places dramatically. To minimize this, we should continue to avoid too much time spent inside crowded buildings, watching the amount of contacts we have. Meeting other family or friends is best outdoors, and without sharing food. For example two groups of people could each bring their own food. Limiting interactions to just a few people and keeping it exclusive would be best. This goes for sexual partners as well.

Now, companies are racing to find a vaccine, this time with support from governments around the world including ours. If a safe vaccine is found and enough people can get it, we will be able to proceed with more confidence in group situations.

Until such a vaccine or a reliable treatment is available, it's easy for us to get frustrated and tired of the changes we are making to our lives. We want to go back to the way things were. If we take too many chances though, experts in how infections spread are telling us that there's a chance we will see new waves of illnesses. This is especially true in places like Monterey County where we have been relatively lower in incidence compared to big urban areas and places where distancing took longer to achieve. That's why each of us understanding why we are making these changes, and 'thinking like the virus', can help prevent new infections as we open up.

We will hope to keep updating this document as we learn more. We have set up a variety of protocols that allow us to provide patient care as safely as possible. Our staff wear masks at all times, each exam room is used only once every 2 or 3 hours, and we are providing care by video visit and outside our office to the extent we can. We want to have individual conversations about risk, work and family life and your social relationships to help you and family members stay safe. Here also is a list of books to present information to children in an age appropriate way. [ADD LINK](#)

Please don't hesitate to talk to one of our doctors or PAs if you have further questions, we are here to support you.