

Jeff Bernhard:

Hi, I'm Jeff Bernhard, senior vice president of commercial markets at Highmark. Welcome to Hitting a Higher Mark. In this podcast, we explore topics that are transforming how healthcare is delivered and paid for. Over the next few weeks, we're launching a mini series covering hot topics surrounding the COVID-19 pandemic. Today, we will be specifically discussing how masks and social distancing work to slow the spread of the virus, as well as the potential availability of a coronavirus vaccine. We have a special guest here today with me to provide expertise on these very important topics. Please welcome Dr. Don Whiting, the chief medical officer of Allegheny Health Network, and Dr. Whiting is also a neurosurgeon with Allegheny Health Network. Don welcome, and thank you for joining us today. Let's get started on today's topic.

Jeff Bernhard:

So Don, the first question I have for you is during these unprecedented times in our country, I think the number one concern a lot of people have is how do we keep ourselves and our loved ones safe from contracting coronavirus? One of the simplest things we can do is wear a mask. How does a mask effectively prevent the spread of COVID-19?

Dr. Don Whiting:

Jeff, thanks for inviting me. It's always a pleasure to talk with you. Masks are really the cornerstone of preventing the spread of the disease. What it does is prevent the person who's wearing the mask from spreading whatever they have and because the virus can be spread by asymptomatic people, you really never know who has it. So by somebody wearing a mask, they're doing it to protect you or your family or whoever, but that's how it does it. It keeps people from spreading the disease.

Jeff Bernhard:

Makes perfect sense. So what are the main differences between cloth masks and medical masks? Is one more effective than the other? And then what about those clear face shields and eye goggles, can you kind of talk about each?

Dr. Don Whiting:

Absolutely. So when it comes to masks, there's a variety of masks. Some people wear bandanas, some people wear a surgical mask and some people make masks. The thing about the mask, the most effective cloth mask is one that has layers. So there's an outer layer inner layer and then sort of filter layer in the middle. And that's the one that actually the government put out in the beginning for people who are making them at home. That prevents about 95% of the spread of the wearer. Bandanas are more like 20 to 25%, so it's not quite as effective. Double layering the bandana can affect that. Surgical masks are about the same 90 to 95% prevention. Then there's the N95 mask, and by definition, that's a fitted mask and that's designed to prevent 95% of the bacteria from getting out or virus.

Dr. Don Whiting:

There's the clear face shields that go around the forehead and down over the entire face are another form of protection. There's some debate in our medical literature to potentially use that instead of masks. There's no data to show that it's as effective. Although it seems like it does prevent some degree of spread but because you can go around it. It's not as effective as a mask, but additively goggles or a shield on top of a mask, increase the protection because it can get in besides ... That's more to protect

you from getting it rather than the mask preventing you from others, because it can't get in through your eyes and other orifices other than just over the nose and mouth. So that shield protects that.

Jeff Bernhard:

Good point, Don. Most people aren't used to the sensation, wearing a mask and covering their nose and mouth, and it feels like it affects their breathing. So does a mask impact the amount of oxygen someone takes or can they get lightheaded from the CO2 that they're breathing out, staying in their mask? Or is that just all myth?

Dr. Don Whiting:

If the mask is a well-designed mask, like surgical masks or the ones that people make, it should not inhibit your oxygenation. There is an anxiety factor sometimes with that, wearing a mask, whether it's claustrophobia or whatever that can give you that sensation. But even our infectious disease doctor goes out in his yard and plays baseball with his seven year old, makes the seven year old wear the mask to prove that it doesn't affect anything. And the kid doesn't slow down at all.

Jeff Bernhard:

You mentioned the risk of contracting the COVID-19 virus from an asymptomatic patient who does not realize they're carrying the virus. What are the different thresholds of the symptoms a person may have?

Dr. Don Whiting:

That's an excellent question, Jeff. COVID can present anywhere from no symptoms at all, but still having the virus to a mild flu like syndrome with fever, chills, or just a runny nose. All the way to muscle aches or now, people are even seeing neurologic symptoms or cardiac symptoms. And so just about anything that's unusual should be evaluated.

Jeff Bernhard:

And in addition to wearing a mask, we know it's important to social distance at least six feet away from others. That's what everybody's been talking about. That's what we've been taught. So how does social distancing prevent that spread of COVID-19 virus? And why is this six feet the magic number?

Dr. Don Whiting:

Six feet came out as a magic number early on, based on the distance that someone speaking would spread their particles. Really there's evidence since then that uncovered mouths and people coughing can go 13 or 15 feet or whatever, but that's where the mask helps maintain six feet being a good distance to not get contaminated when you're near somebody. It's also time-related. So the distance and more than about 15 minutes increases the risk.

Jeff Bernhard:

Thanks. We've been hearing a lot about different vaccine trials recently. What's the current status of a potential vaccine and what impact will it have on creating a new normal once it's widely available?

Dr. Don Whiting:

That's also a very, very good question. Saying vaccine is like saying antibiotic, if you have an infection, you have to have a specific antibiotic. So there's a lot of people working on vaccines, but so far they're still figuring out if it has an effect on COVID-19 that's sustainable. So the stage where we are is that there's probably about 15 or 20 different vaccines that have promise that are getting to the larger scale trials and they're being fast tracked. And with any scientific study, there's going to be some flaws and how effective this comes out. But the bottom line is, there probably ought to be a vaccine by first quarter of 2021. But when it gets commercially available to the masses probably will be further down the road because of production and supply. Likely we're going to be through ... What we're doing now into the spring. Then we'll get into the summer where it kind of lightens up like it did here. And during that time people get vaccinated. So the next flu season, 2021 flu season should be a safer one because of vaccine.

Jeff Bernhard:

Interesting. So Don, I read a stat the other day that ... It was a poll that said only 40% of Americans would take the vaccine if something became available by first quarter of next year. So my question for you is the following, let's just use the number 40%. If the total number of people at whatever point in time, 2022 or 21 or 22, if the total amount of people that get vaccinated is 40% of the American population. And let's say 25% have antibodies because they had it already. So what's that magic number between vaccinations and those that have the antibodies to develop herd immunity within a country, let's say. Is it 65% of the population, 70%?

Dr. Don Whiting:

That's a great question. Some of the data coming out of New York, where they have about 20% of people, 15 to 20% that have antibodies are finding that it's less contagious because of that amount of immunity. Most people say around 60 to 70% gives you herd immunity.

Jeff Bernhard:

Interesting. So we've got a ways to go. Dr. Whiting I want to thank you for joining me to discuss the importance of wearing masks and practicing social distancing. By following these two simple recommendations, we can protect ourselves, our loved ones and our communities from contracting and spreading coronavirus. For more information on this topic, please visit ahn.org/coronavirus or cdc.gov. Be sure to tune in next week where we will be joined by Dr. Susan Manzi, to discuss how businesses can safely open to their employees and customers. So I'm Jeff Bernhard with Dr. Don Whiting and thanks for listening to Hitting a Higher Mark.