Medical epidemiologist Hannah Kirking, MD, on concerns on how the virus spreads

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Featured topic and speakers

AMA Chief Experience Officer Todd Unger speaks to a medical epidemiologist at the CDC about misperceptions regarding how COVID-19 spreads from person-to-person and what safety measures one should practice.

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Speakers

- Hannah Kirking, MD, medical epidemiologist, Division of Viral Diseases, CDC

Transcript

**Unger:** Hello, this is the American Medical Association's COVID-19 update. Today we have a special update with the CDC's Dr. Hannah Kirking to clarify information about the types of spread with COVID-19. Dr. Kirking is a medical epidemiologist in the CDC's division of viral diseases. She's been working on the CDC's COVID-19 response since early January, specifically on the epidemiologic investigations. She joins us from Atlanta. I'm Todd Unger in Chicago.

Dr. Kirking, as states across the country open and we continue to see rising numbers in many of them, conversations about how COVID-19 spreads and what we can do to better contain the virus are particularly critical right now. One question that came, it's about transmission guidelines on surfaces, and I think there was some confusion regarding when the CDC edited its guidelines. Can you talk a little bit about that and clarify how likely is it that people will get COVID through touch?

**Dr. Kirking:** Yeah, Todd, I think that's a good question. I think to start with, and first and foremost,
COVID-19 is caused by SARS-CoV-2, which is a virus that spreads by respiratory droplets. And so primarily most cases are due to respiratory spread of this through human-to-human transmission. So wanted to put that out there, that an overwhelming majority is human to human.

Having said that, the question of transmission via surfaces has come up quite a bit, and there’s some data that’s starting to answer some of these questions, but definitely we have much more to learn with the role that surfaces make in terms of transmission. So specifically, I guess I would say, there are some studies out there. Many of them were done in a laboratory setting and not necessarily in the real world setting, and so there’s nuances with how to interpret the results from some of these studies.

I think most notably there was a study published in New England Journal of Medicine back in April, the study was done by the National Institutes of Health, and it looked at different surfaces and their ability to have the virus remain viable when on the surface. That study showed that the virus can remain viable for a certain amount of time. Depending on what the surface was, it was somewhere between eight hours and 72 hours.

Having said that, I think there’s some practical approaches that we definitely recommend, despite the fact that there’s some outstanding questions. I think coronaviruses are not particularly hardy viruses in the environment, such that if they are on surfaces, disinfections and/or time on the surface quickly does make them less viable. So, despite the questions still out there, we think this is a respiratory virus mostly, and if there are some surface transmissions, disinfection is probably very effective at taking care of virus and reducing transmission from that route.

**Unger:** So, based on what we know, what should physicians be communicating to their patients? Should I be wiping off my groceries and packages and take out containers? Or think about going out to a restaurant now, am I to be concerned about touching glasses and utensils and other kinds of shared items?

**Dr. Kirking:** Yeah, it's an important question because I think my colleagues or front-line providers are getting these kind of practical, “What do I do with this recommendation, how do I bring it into my life?” questions every day. I think, practically speaking, what I would say is that if you're getting packages, whether it's in the mail or carry out food or whatever it might be, or groceries, wiping it down if it's soiled is by all means very practical, and washing things before you eat them, continue to follow all of those regular recommendations. I don't know that you have to go through heroics to clean packages or do more, because I think that transmission risk from that is fairly limited. Having said that, going out and sharing utensils and dishes and plates and things like that, by all means clean them, restaurants or even in people's personal homes, hopefully are doing that all the time for all kinds of different pathogens. And so just maintaining an ongoing high level of quality of cleaning is the important part to that.

**Unger:** Okay. So you said before that the primary and most important mode of transmission for COVID-19 is through close contact from person-to-person. So can you elaborate on the science
behind this kind of transmission, and then what does it mean as states struggle with reopening?

Dr. Kirking: Yeah, I think with knowing that the primary form of transmission is person to person, I think what this means right now is that social distancing is the number one way to prevent transmission. And so the person to person transmission is essentially when someone talks or speaks or coughs they create little droplets, and that social distancing essentially limits your ability to be hit with anyone else’s droplet. If that droplet is either inhaled by someone or hits mucous membranes, that's when transmission occurs. So the mainstay remains social distancing, which means keeping six feet from other people, as well as minimizing the number of people that you come into contact with. The other thing that it means is wearing masks, or face coverings is what we should be calling them, that essentially reduces, if someone might be sick, whether they know it or not, it reduces their ability to transmit the virus to others. We call it source control typically.

Unger: Why do you think there's so much resistance to wearing face coverings at this point?

Dr. Kirking: I think it's a couple of things. I think culturally Americans aren't used to wearing face coverings and it's a major change to how we have operated in our normal everyday environments after some time. I think, from working in hospitals and health care settings where various times we do put on masks, it does get normal with time. I don't think about it when I'm in a hospital. And I think I'm getting to the point now in the world where I'm not thinking about it outside of the hospital either. But I think it's a cultural thing and an adjustment for everyone and I think as we’ve seen this pandemic change, I'm hopeful that we all start to realize and use the face coverings because it's a practical approach to reducing the transmission.

Unger: And is that guidance basically when you go outside and you're going to be near other people, wear a mask? Is it pretty straightforward like that?

Dr. Kirking: I think there's nuances to it. I think if you are going to be around people who are outside of your inner circle or your regular household contacts, wearing a mask is good practice. I think if you're outside, totally by yourself, that you probably don't need to wear the mask. If you’re able to maintain good social distancing practices and keep your distance from people, by all means, I think, use your decision-making skills on that. But if you’re going to come into contact with other people, or if you're in settings where you’re unable to maintain six feet distance, definitely the recommendation is to wear a face covering.

Unger: So we're now approaching mid July and we're obviously not seeing the decrease in numbers that we had hoped for, certainly in some states; can you take us through a few of the common high risk and low risk scenarios that can help people make more informed decisions throughout the summer?

Dr. Kirking: Yeah. I think the fact that it's summer is actually really nice right now. Summer is a good time to spend time outside, in my mind, and I think right now the number one thing that people can do
to still be able to enjoy their summer but reduce their risk is probably spend as much time outside as they can. Just by nature of how things will get distributed, if you're outside that reduces your risk quite a bit. I know personally I've been taking early morning walks around the park near my house, doing much more hiking and kayaking than normal, just because all of those activities lend themselves to keeping my distance from other people, but also maybe doing them in smaller groups. I think crowds are something that right now I would definitely recommend that we be avoiding, specifically indoor crowds or areas where people congregate, but also to some extent outdoors as well, just because you're unable to maintain that social distance of six feet if you're in a large group of people.

Dr. Kirking: I think on the higher end of the spectrum would be indoor activities with many people. And that's twofold; you can't maintain social distancing of six feet when you're with many people in an indoor setting. And then also your likelihood of coming into contact with people who you're less familiar with, or more people, which naturally would increase your risk, is heightened when you're indoors.

Unger: What else can physicians and the public do to help contain the virus at this point?

Dr. Kirking: The mainstay of what we're doing right now and trying to get people to do is maintain the social distancing, wear face coverings when needed or when appropriate. And the other thing we haven't talked a whole lot about is really good hand hygiene. Our hands are our way of interacting with the environment, and you asked questions about surface transmission and even surface transmission typically comes via our hands. And so it sounds like an old kindergarten adage, but "wash your hands" is still largely really good advice for us.

Unger: So I know that you've dealt with a lot of misinformation in the media and confusing guidance from a huge number of sources, it's been a challenge. Are there any other misperceptions that you want to clarify?

Dr. Kirking: I think the biggest thing just to clarify, and I don't know if it's a misperception or just an effort to be transparent about the various recommendations; in public health we're frequently very well accustomed to what we call a risk mitigation strategy or approach. And essentially what that means is any one intervention or strategy that we recommend is never going to be perfect, but it's going to do something to either do risk reduction, or reduce risk of transmission in this case. I had a medical school professor who once told us, on a multiple choice exam, the answer that says always or never is never the right answer, because the world doesn't operate in that way. It's never black and white. And I think right now with COVID, social distancing is probably not 100%, but it's pretty good. Face coverings are probably not 100%, but they're adding another layer of protection. Being outdoors might be a way of adding a third layer to reduce risk. And so sometimes, when it seems we want to an easy fix for this pandemic, I don't think we have one, and therefore layering on the different strategies is really what will help us reduce transmission and hopefully keep more people safe.

Unger: Well, thank you very much for being with us here today. I'm sure you've got your hands full,
so to speak. We appreciate you sharing your perspectives and guidance and clarifying those misperceptions.

That's it for today’s COVID-19 update. We’ll be back tomorrow with another segment. For updated resources on COVID-19, go to ama-assn.org/covid-19. Thanks for joining us today and take care.

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