

MWSP Ep 010 – 10 - A Coronavirus Update with Infectious Disease Expert, Dr. Suzanne Donovan

Announcer: From Curtco Media.

Bill Curtis: So you're on the plane. Everything's fine. Other than you've got no leg room, the food sucks and the guy in front of you just leaned back so hard, you're wearing your coffee. And then it happens. The guy behind you starts coughing or sneezing, blowing his nose and you're seat belted in. Hi. Welcome to a new episode of Medicine where still practicing.

Bill Curtis: We've brought Dr. Suzanne Donovan back to update us on the latest realities and clear up the rumors on Corona virus, and of course, my partner in crime, Dr. Steven Taback, is right across the table from me. How are you doing, Suzanne.

Dr. Suzanne Donovan: Very good. Thank you.

Bill Curtis: Do I need to worry about being on a plane with someone who's coughing and sneezing?

Dr. Suzanne Donovan: Well, I think in the United States, you're more likely to be exposed to other respiratory viruses. Covid or corona virus is primarily transmitted by droplets, which means if you're within six feet of the individual who's coughing, you're potentially exposed. I always like to carry a yellow surgical mask with me and hand it to the individual coughing as opposed to me putting on the mask, which doesn't really make a lot of sense.

Dr. Steven Taback: Saves on masks, too., for the general population.

Dr. Suzanne Donovan: Exactly.

Dr. Steven Taback: We already have a shortage going.

Dr. Suzanne Donovan: Significant shortage.

Bill Curtis: So the Trump appointee, that is the ultimate science for infectious disease and the true expert that is going to lead us in the fight against a virus like the coronavirus, Mike Pence. Is that a good idea?

Dr. Suzanne Donovan: Well, that was a surprise announcement was taken a little back because I was I wasn't aware that our vice president had a scientific background. In fact, his past history in his home state with other infectious diseases doesn't reflect well on his overall grasp of transmission dynamics and responding to outbreaks.

Dr. Steven Taback: And don't we already have a surgeon general or and also a secretary of health and human services that might have a little bit more information to bring to bear on the on the issue?

Dr. Suzanne Donovan: I think there's a tremendous wealth of experts in the United States. We can bring back Tom Frieden. You know, he's running a nonprofit for, I think, the Bloomberg Foundation. And he has been through probably 50 significant outbreaks. And certainly he would be a valuable resource to responding to this. We have Fauci who has also a very deep science background and a lot of experience with epidemics and pandemics. And we have a host of amazing scientists at the CDC. So this was a little bit of a surprise.

Dr. Steven Taback: But you doubt actually, when I think about it, that Mr. Pence is actually going to be the one who's going to be tabulating the data and making recommendations. He's probably going to be the figurehead spearheading the fight in the war on Corona. But he's going to have, you know, underneath him a whole team of experts.

Bill Curtis: But hasn't he told the scientists that before they make any announcements, it is kind of a clearing committee that includes Mike Pence,.

Dr. Steven Taback: For better or worse, actually. Right. Because there's so much panic right now. There's so much anxiety in the community. If you're using your power responsibly, you want to do something to mitigate the unwarranted angst. So if that's how his filter is going to be implemented, that's great if he's truly going to limit the information that the general public really needs to know, and if we're no longer going to

have an honest communication and honest reporting to the general public, as we expect in our democracy, then, you know, then it's a serious problem.

Dr. Suzanne Donovan: I think we can all agree there's been a lack of transparency during this current, I'm going to call a pandemic, because it's approaching a pandemic.

Bill Curtis: But it's what defines a pandemic.

Dr. Suzanne Donovan: Pandemic would be epidemic transmission on multiple continents. So we're not quite at epidemic transmission on multiple continents, but some of that is due to the fact that we haven't done great surveillance. So in the U.S., we talked on our last show that once you start identifying cases, one of the major underpinnings of a public health response to an epidemic is to identify new cases and do contact tracing.

Bill Curtis: And we're sitting here with these numbers that are thrown at us on the evening news. I think we're up to 80 or 100 cases in the U.S. and this many people have died. But the reality is we really have no idea how many cases are in the U.S. because so few people are being tested, right?

Dr. Suzanne Donovan: When this epidemic started in China. W.H.O. and other member countries really tried to accelerate the development of a test kit that would have great sensitivity for this new pathogen, now called Covid 19. Germany came up with the test that was adopted by the W.H.O. and the United States decided to go in their own direction and develop their own assay. We frequently do that. We have amazing scientists. I'm the biggest supporter of the CDC. However, that test that was developed by the CDC was beset by many problems, including a question recently of possible lab contamination. They sent that test kit out to regional labs. And we have a regional lab here in Los Angeles called the Los Angeles County Public Health Lab. There are other public health labs across the United States, and there was problems with both sensitivity and reliability with that test kit,.

Bill Curtis: But the German test was reliable?

Dr. Suzanne Donovan: The German test is reported reliable.

Bill Curtis: Do you think it's reliable?

Dr. Suzanne Donovan: I do believe it's reliable.

Bill Curtis: So help me understand what the CDC was deciding to do by going, as you said, a different way.

Dr. Suzanne Donovan: I think the CDC wanted to develop a test that would be more comprehensive and offer more information. And unfortunately, that test and the problems with the test slowed us down.

Bill Curtis: Days, weeks, months?

Dr. Suzanne Donovan: Oh six weeks, at least. California had 500 test kits for the entire state released to them.

Bill Curtis: So what's the point in releasing numbers of how many people have coronavirus? If we really aren't testing anybody. We are only testing individuals that have clear contact with a confirmed case, individuals that meet the criteria that come in with a significant pneumonia.

Bill Curtis: So fever isn't enough. Flu like symptoms?

Dr. Suzanne Donovan: A fever is not enough. If you go to your local E.R., urgent care with a fever, you will not get tested for Covid virus.

Dr. Steven Taback: But with a fever and a travel history, you certainly will.

Dr. Suzanne Donovan: If you have fever, cough and a travel history or fever or cough and contact. Right, they become much more strict as you go along. The criteria for testing, now those criteria are very dynamic. Just like this epidemic is very dynamic. As they develop more test kits those testing criteria are going to expand. In addition, because of the delays in developing this test kit, universities and other entities have started developing test kits in parallel and those will be used at some institutions.

Bill Curtis: Is the test a blood test? Is it a swab? How do you test.

Dr. Suzanne Donovan: That's a fantastic question. So when we get an individual that's confirmed, the initial test is a nasopharyngeal or oropharyngeal swab. So to break that down, I stick a swab deep into your nose so that you cry and you cough after I do it, which is why it's very important that I wear protective gear because that's a very high risk exposure for the health care worker. The oral.

Bill Curtis: I'm not going to enjoy it either, by the way.

Dr. Suzanne Donovan: No, you won't. The oropharyngeal swab is basically a throat culture that also tickles the throat. So the patient frequently will cough after that. If an individual is confirmed with coronavirus, then we test multiple sites. So we will do the nasopharyngeal. We will do the oropharyngeal. We will send stool, urine and blood.

Dr. Steven Taback: But you're testing multiple sites really for educational purposes to sort of see what areas shed virus to help you learn about transmission down the road. It doesn't do anything for that patient at the time that you're testing them to know that they have Corona in their stool and Corona in their nasopharynx does it?

Dr. Suzanne Donovan: I think there's so much we don't understand about the transmission dynamics of this virus. There are a lot of statements that are made about how infectious that is and how it's transmitted. But I believe the jury is still out. We know there is a possibility of transmission during pregnancy and that's only going to happen via the blood infecting the placenta. So for me, that is a very interesting question. The other question I have, which I doubt, but I wonder about if people that are viremic or have it in the blood, is there any risk of sexual transmission? And I hate to throw that out there, but that's not being looked at all.

Dr. Steven Taback: You would probably deduce that there is.

Dr. Suzanne Donovan: It appears from the data we have to date that the most predictive ways, no surprise is via the respiratory route. I do think the jury is out on stool transmission. When I'm talking about stool transmission, when you have a viral infection

in your gastrointestinal tract and you develop diarrhea, which some patients do, you don't wash your hands.

Dr. Steven Taback: Some people do not wash their hands. And then you are going to infect other people that you may touch. You may touch surfaces,.

Dr. Suzanne Donovan: Surfaces. So what we call fomites so fomites like this table here. I didn't wash my hands. I have corona virus. I touched the table and you touched the table. And you potentially are exposed because I didn't wash my hands. But I think it's very clear the primary route of transmission is from individuals coughing. I think everyone would agree with that.

Bill Curtis: Kissing?

Dr. Suzanne Donovan: I have no question that kissing is a role. If you look at spouses or partners of cases, they have a very high rate of secondary infection.

Dr. Steven Taback: Is there anything that can be deduced in this early stage to predict who might have the tendency to spiral downward and wind up being on a respirator? And is there anything that we can do to mitigate that risk that you can see this early in this new disease?

Dr. Suzanne Donovan: I actually just looked at that data. So there is the data. From China that's been published in New England Journal of Medicine and Landsat. And then we have some U.S. data. Preliminary U.S. data on the first fifteen cases in the United States. So it's very clear that the single most important predictor of patients dying or ending up in the ICU are older patients who have other conditions.

Dr. Steven Taback: Define older.

Dr. Suzanne Donovan: Well, I hate to say it, but.

Dr. Steven Taback: We are it

Dr. Suzanne Donovan: Speak for yourself! it's probably over 50,.

Dr. Steven Taback: Over 50,.

Dr. Suzanne Donovan: Over 50. But the mortality rate goes up every 10 years that you're over 50.

Dr. Steven Taback: So one more thing to deduce from what you were talking about, that those people who are at greatest risk of winding up in intensive care, it's the elderly, the infirm, looking to the general public and what an individual may do. Is there anything that a general, the general public, a healthy individual, or even those people who may not be at their optimal health, is there anything that they can do to optimize our immunity to help stave off infection?

Dr. Suzanne Donovan: Well, I'm going to say it again. Frequent hand hygiene or frequent hand-washing.

Dr. Steven Taback: But that doesn't improve your immunity.

Dr. Suzanne Donovan: I think this is where you're going. There's some very limited data on whether zinc can prevent introduction of corona virus into respiratory cells.

Dr. Steven Taback: Correct. And one of the things that we strive to do on this show is to separate fact from fiction.

Dr. Suzanne Donovan: Right.

Dr. Steven Taback: Can we look at the data if there is data, even if it's anecdotal reports and try to decipher the veracity of the information.

Dr. Suzanne Donovan: So there is no clinical data that zinc in humans prevents corona virus infection. So remember, when people get sick from Corona virus, we don't really worry about people that have a cough and a mild fever and no fever and or otherwise healthy. We worry about people that develop pneumonia and the pneumonia that develops in individuals with coronavirus involves typically the lower lobes of of the lungs and has a very distinctive appearance if you do a CAT scan. By the time they get that

sick, giving zinc is not going to make a big difference. This is a disease that primarily, as Steve mentioned, affects older individuals. That's very different from pandemic flu in 1919 and H1N1, where I saw 25 year olds end up on a ventilator within 12 hours. We're not seeing that with young patients. This is a disease that really is going to cause its biggest impact on the frail elderly.

Bill Curtis: On that note, we're going to take a quick break. We'll be right back.

Promo HU: I want to learn everything that there is to know about the filmmaking process. I think part of art is hearing from the artists who create it and the number of different visions, the number of different qualifications that have to go into making any film is insurmountable. And hearing those stories can be just as exciting and insightful as the movies themselves. Certain movies or certain scores certain actors have shaped who I am as a person. I have such appreciation for the things that people produce and the work that goes into it. Whether it's the writer who came up with this story in general, or how the filmmakers were able to take that from the page and put it onto screen and then from the actors themselves who are able to kind of bring that all to life. All of it is what I want to hear, because it makes me love my favorite movies even more. I'm Scott Tallal. If you love movies like I do you're going to love Hollywood UNSCRIPTED.

Bill Curtis: We're back with host Dr. Steven Taback and our very special guest, Infectious disease specialist Dr. Suzanne Donovan.

Dr. Suzanne Donovan: When you are dealing with an epidemic, the first phase of an epidemic response is called containment. Containment is based on doing surveillance for cases with having a test to diagnose it and then doing contact tracing. We have been the slowest response, I think, of of all the countries that have had significant disease, including European countries.

Dr. Steven Taback: Now, very disheartening, because if you remember our first show, we asked you what do you think the penetration of the virus will be in this country? And you were very certain.

Dr. Suzanne Donovan: I was very optimistic,.

Dr. Steven Taback: Right, very optimistic that we were going to be ahead of the curve. Our CDC is far better than that of China's.

Bill Curtis: Because you were proud of the controls, right?

Dr. Steven Taback: I was proud of the fact that, listen, I'm a very patriotic person. We have, I believe, the best health care delivery system, you know, in the world.

Dr. Suzanne Donovan: We are the leaders in public, in the public health response epidemics, both in the U.S.

Dr. Steven Taback: and worldwide

Dr. Suzanne Donovan: And in internationally. To be honest, I'm a little gobsmacked. I hope as we expand testing, which we are going to in the coming weeks,.

Dr. Steven Taback: Then maybe we can get ahead of the curve again.

Dr. Suzanne Donovan: No, I hope I'm wrong and there's not a lot of community transmission.

Bill Curtis: Tell me a story. Someone walks in the front door of your hospital. What happens?

Dr. Suzanne Donovan: At the entrance of our hospital we have signage in multiple languages that asks if they've recently traveled and if they have a fever or a cough. If they do, they report it to the individual at the entrance and they are masked. They're then escorted to our urgent care or emergency room. So we have a measles plan that actually looks at the path of travel, which I developed from every point of entry into the institution. So if they're in the O.B. clinic and they're identified as a suspect, we have a path to travel to get them to a triage area. If they are in the lobby, we have a path of travel. If they are in urgent care, we have a path of travel. So we are adapting our measles plan for the path of travel for our patients.

Dr. Steven Taback: But it's not just one person coming into the ER at a time. Let's say you have 10 people coming in with a cough and a fever. 10 people get masks, but you can't bring 10 people back into the E.R. if you're already full. What do you do with those people at that time?

Dr. Suzanne Donovan: So at point of entry to our E.R., our triage area does get a travel history and they actually determine if that individual's a suspect. If they're a suspect, they are put in a negative pressure, which means the air is sucked out of the hallway, up through a dedicated vent. So there's no contamination. And they're rushed to the emergency room. They're masked, they're put in that room. And then they're gonna be evaluated to see if they're Covid suspect in the future, if we end up getting a surge, we will likely activate our pandemic flu plan and adapt it for Covid because they're both.

Dr. Steven Taback: Very similar. Right. I mean, the transmission is similar.

Dr. Suzanne Donovan: It's very similar And the plan is to have an external and outside screening site, which is what we did for measles,.

Bill Curtis: Put them in a tent

Dr. Suzanne Donovan: We have a tent. We did that for measles. We evaluate them outside. If it's determined that they may be a covered suspect, then we have a pathway of what we're going to do with those individuals. So if you are someone that looks like you may have Corona virus, but you look well, you don't look really sick. You'll get swabbed. And per CDC and Los Angeles County public health guidelines, you'll be sent home to home to isolation and public health will follow up with you and your test result.

Dr. Steven Taback: Rightly so.

Dr. Suzanne Donovan: Rightly so. Right. There should be a mechanism in place by each institution, in each clinic to disseminate the information that if you have a fever and cough, but you're not short of breath, you're not feeling dizzy, that you stay at home and take care of yourself, you know, push the fluids, take Tylenol for fever. If you have a high fever or you're very short of breath, then, yes, it's reasonable to come in. And if it's

deemed that you need to be admitted, you will be screened if we have community transmission for Covid.

Bill Curtis: Let's talk about health care workers that are at urgent cares because this is probably a place that's even more susceptible than a hospital, because everybody who has a cold or a cough or a flu or anything or a hangnail goes to an urgent care. Now, you have a bunch of workers that are in an environment where you really are a target. How should they handle themselves now?

Dr. Steven Taback: Same way, right?

Dr. Suzanne Donovan: The same way. You know, science trumps fear every single time. If you remember, if you understand the dynamics of transmission of this virus and there's a lot we don't know, but we do know the single most important predictor is transmission from patients that are coughing or have respiratory symptoms. We also know that most hospital or urgent care associated transmission from patient to health care worker is associated with a lack of what we call hand hygiene or just washing your hands. So if health care workers get in the habit of masking patients that are coughing and washing their hands, they will prevent the bulk of hospital and urgent care associated infections.

Bill Curtis: I realize even though we don't have good numbers, because not enough people in the U.S. have been tested. So we have no idea how many cases there really are.

Dr. Suzanne Donovan: That's correct.

Bill Curtis: Even though that's the case, it's still comparatively small to the flu. So. Right? Right? The flu is huge.

Dr. Suzanne Donovan: Without question. But I would make an argument every hospital should be tracking what's called influenza like illnesses. It's called ILI's and they should be tracking then confirmed cases. It's very easy for you to look at your ILI's. And then your confirmed cases. And then look at the gap. I suspect if public health in Los Angeles County looked at the gap at hospitals' ILI's and confirmed cases in their urgent cares in

their hospitals, they're going to see a dramatic increase in the ones that we don't have an explanation of what the patient has. I think this virus has already been here in Los Angeles,.

Dr. Steven Taback: Which is in actuality a good thing relative to the panic factor.

Dr. Suzanne Donovan: Yes.

Dr. Steven Taback: So let me talk just two things about panic.

Dr. Suzanne Donovan: yes, Exactly.

Dr. Steven Taback: We have identified the fact that panic has never saved lives. So panic serves no purpose. So try not to panic. Number one. Number two, the idea that perhaps this virus is already widespread, penetrating in this environment, we're not saying that it is, I own on some level, hope that it is- Now, don't get me wrong, listen carefully. I hope that it is because it would imply that the vast majority of infections are subclinical, mild, of no consequence to the individual's life and well-being at all. And it totally shifts the data to a virus which is not nearly as deadly as we think is.

Dr. Suzanne Donovan: Very similar to H1N1. And when we saw that and the reason why that's important for us to have this data is our approach to the U.S. epidemic is going to be different. Without, you know, without data, we have no idea how to approach this.

Dr. Steven Taback: Exactly. So we're making guesses. We're doing the best we can with the limited information that we have. But don't jump the gun with this data because this data is so skewed and it's incomplete. It's not purposefully skewed. It's skewed because we don't have enough testing available. We don't have enough data available. So you see this in statistics all the time that 100 percent of the time so and so missed this test. Well, how many patients have you have you tested. Will it was one that got missed. So with an end of one, 100 percent failure, what does that mean? So because you don't know what the relative values are, a hundred cases. If this is the only cases that we have in this country are 100 cases and we have six deaths. Yeah, that's frightening. That's a 6 percent mortality. But that's not reality. So don't jump the gun on

this data. Don't get don't get panic-stricken based on doing these calculations because we don't have all the answers.

Bill Curtis: Clearly, if you watch the news, this is something that the media is excited to talk about. So what should I change about my own actions under these circumstances? Not panicking. But should I change the way I think and act a little bit?

Dr. Steven Taback: You want to take care of yourself. You want to stay healthy as best you can. You want to try to avoid people who are coughing and don't let them cough on your, you know, in your face. If you have a fever, you want to sort of isolate yourself so you're not infecting other people. I would stop touching your hands, your hands to your nose. Your mouth. You don't want to increase your risk of infection that way. We're doing the fist bump instead of shaking hands. Nothing wrong with that. I think that's a good idea to be a little more cautious. But should you sequester yourself in your house, not go to dinner? No. You're going to still live your life. You're just going to do it a little bit more cautiously and a little bit more aseptically if we can.

Dr. Suzanne Donovan: I would just add to that, if, you know, there is a country that is having ongoing outbreak transmission and those countries are listed on the CDC Website, or you can go to the Johns Hopkins Website, which has a very dynamic, outstanding map to show you where the cases are. You're increasing your chance of exposure. It's fine to travel, but travel wisely.

Dr. Steven Taback: Exactly.

Dr. Suzanne Donovan: Unless you're me, because I actually like to go to places with outbreaks.

Bill Curtis: Right. I know there's something wrong with you. Certainly, Suzanne, if I'm home and I feel sick, should I separate myself from my spouse?

Dr. Suzanne Donovan: I think just like other respiratory viruses, you understand how they're transmitted. They're transmitted by coughing on someone within six feet, by not washing your hands and touching surfaces. So you follow that. You wash your hands frequently. If you're coughing, you cough into your elbow. You try to what we call social

distance yourself. You don't have to go into the garage. You don't have to go into the basement or the backyard in a tent. But you do need to be aware of your behavior.

Dr. Steven Taback: You've got to be reasonable. I mean, we're not going to quarantine the whole world because they have a cough, especially when 99 percent of what's out there is not Corona virus. It's simple respiratory viruses that befall most of us in the winter months.

Dr. Suzanne Donovan: But, Dr. Tabak, what do you think about now, the recommendations from the CDC to go to telecommuting, which I'm hoping for. And, you know, don't go to conferences and big work related events. Do you think that's a good idea?

Dr. Steven Taback: Well, it's an interesting question. I think there's nothing wrong with that other than the fact that it fuels the panic. I think the risk of contracting the disease is low. Relatively speaking, the risk of dying from the disease is exceedingly low. And I think it might be a little excessive to say to the public, stop going to group events.

Bill Curtis: So, honey, if you're listening, apparently I don't have to stay in the garage. Dr. Suzanne Donovan, thank you so much for coming back. And I have no doubt as this progresses, we're going to ask you to come back again. And, of course, Dr. Steven Taback, as always, you are a font of knowledge that we really appreciate and you'll keep us cool, calm. And in my case, I guess just a little less panicked.

Dr. Steven Taback: That's totally cool. And it's great to be here. And Dr. Donovan, it's wonderful seeing you again.

Dr. Suzanne Donovan: Thank you.

Bill Curtis: Thanks so much for coming in. Come back to Medicine. We're still Practicing next time. We'll see you soon. If you like what you hear, please tell your friends. And let us know how we're doing by leaving a comment. It really helps if you give us a five star rating and we really appreciate it. You can also subscribe to the show on Apple podcast, Stitcher or wherever you listen to your favorite podcast. This episode was produced and edited by Mike Thomas. Audio Engineering by Michael Kennedy.

And the theme music was composed and performed by Celeste and Eric Dick. Thanks for listening.

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