



## Episode 1: Mar 18, 2020 | COVID-19 fundamentals: some history, symptoms, definitions and facts

Guests: Dr. Jason Halperin and JoAnn Jose of CrescentCare

**Nick Van Sickles:** [00:00:16] Hello, everyone out there. We're about to get started, we'll wait till it gets to 1:30 on the dot, and we'll get going.

**Nick Van Sickles:** [00:00:30] Good afternoon, everyone, this is Dr. Nicholas Van Sickles; I'm the Chief Medical Officer at CrescentCare, a federally qualified health center here in New Orleans. I am here on this podcast to discuss the current pandemic of COVID-19 for everyone in our community, for our staff members, for patients and clients and for anyone out there who is listening. Our purpose is really to disseminate as much factual information as is possible. Today, we're actually going to be able to record this. This podcast will be on our web site. You can listen to it later. We're going to eventually enable the podcast to be able take text questions. We're still working on the tech part of that. But I'm really excited today. I have two of my colleagues with me today, both of whom are heroes to me and who are wonderful in every possible way. And both are infectious disease physicians. I think as infectious disease physicians, we have a unique role in this pandemic as this is part of our training. And even if it isn't part of our training, it's what people look to us to help them answer and help them move through in a time of crisis.

**Nick Van Sickles:** [00:01:37] So what I want to do today is going to have both physicians who are here with me today comment on a few aspects of this outbreak. I have Dr. Jason Halperin, who is an infectious disease physician here at CrescentCare, and he also works part time at Tulane with HIV outpatient program. And after I have Dr. JoAnn Jose with me, who is many know as a physician here at CrescentCare, our family at least knows her as well as a as a teacher and an educator in the school public health at Tulane. Have Jason talked a little bit about the clinical aspect and specifically about testing? There's been a lot of questions about testing. And then I'll have Dr. Jose

talk a little bit more about what we can do to really help ourselves during this pandemic, how to protect ourselves. What we've learned from other countries around the world and what we can apply here in United States to really keep ourselves safe and also give us a whole brief teaching lesson, because that's what she does. She's a teacher. So just let me start with you.

**Nick Van Sickles:** [00:02:32] Tell me a little bit about, you know, if people are wondering what are the symptoms of COVID-19? I've been asked that a lot. And I feel like sometimes I'm still struggling to understand the full spectrum disease. You've been kind of downstairs on the front lines for us, at least with many of our colleagues. What what are the symptoms of COVID-19? Tell everybody what you think.

**Jason Halperin:** [00:02:53] Sure. Thank you for doing this. There's so much we don't know. I think that's really important to put out there first. What we do know comes from some of the larger cohorts, specifically the experience in China and Italy, who's been publishing on their experiences. What we have to recognize is a bias is most of the data comes from hospitalized individuals. So we really don't know the earlier symptoms, but we know a lot more about the later symptoms. That said, there's been some really nice guidance from the Centers for Disease Control and Prevention, which are fever, or subjective fever. What is subjective fever? "Subjective" means that someone feels febrile; feels as if they have a fever—but they don't have the ability to take their own temperature. So even though it might not be documented, they feel as if they have a fever is really important as kind of a frontline physician. And I see this a lot. Someone says "Yesterday I felt like I had a fever, wasn't documented, but today I took Tylenol, I feel a lot better." So that to me would still be a subjective fever. So: a fever, cough—typically a dry cough—shortness of breath, and the other that we're starting to see in the earlier stages is pharyngitis.

**Nick Van Sickles:** [00:04:19] What is pharyngitis, for those who don't know?

**Jason Halperin:** [00:04:19] Sore throat. Thank you for keeping me honest. So of those four symptoms, we're really trying to lower our bar here and testing part of the importances. We are testing a population that is ambulatory, we call it, which is they're out and they're walking and they're still in the community. So we want to test early in the symptoms of disease, so that we can communicate as quickly as possible that they are

positive with this virus. And then we could make some recommendations on self-isolation and really not exposing anyone else in our community. So I typically look for two of those four symptoms to test. So fever, subjective fever, short of breath, cough, sore throat. And that's really driving our decision-making of who should be tested and how and when we should test at our testing site. And I know we'll get it. Keep yourself hydrated. Get your rest. And use Tylenol if you need, or another medication to bring down the symptoms. But that is the best recommendation for patients who do not require higher levels of care, meaning those who do not require hospitalization.

**Nick Van Sickles:** [00:05:47] Thank you, Jason. I think what you're talking about now is really important and I think this is what we want to know. Ok. Sorry if I went out there. I the sound is ... we're working on some of the tech stuff still with our our podcast. The sound occasionally is dropping. Dr. Halperin was just reviewing. Right now we have the treatment is really focused on Tylenol, on rest. We think maybe it's better to avoid some of the anti-inflammatories like Advil or ibuprofen or naproxen and focus on Tylenol, sleep, hydration, and the majority of people are getting better. But what he mentioned, and I want to just re-emphasize is that some people are getting really sick. And I think this is something that we want to avoid because we we really don't want anyone to die. Right?

**Nick Van Sickles:** [00:06:41] And and I think this is a good point where we can transition over to you, Dr. Jose, just to kind of reintroduce you a little bit since we've been talking Dr. Halperin. Some know you as a as both an infectious disease physician and a educator of medical students, of health care professionals and public health professionals in the School of Public Health have a rather unique lens on both seeing it on the ground and being an educator more than really any of us do. So I'd like to kind of see if you could start by level-setting everyone in the podcast with some definitions and talk about your background and then kind of go and tell us what's worked, other countries, what hasn't worked and what we can do to really help us in America. And that's easy, right? Just go and do it.

**JoAnn Jose:** [00:07:32] Ok. So my background is that I grew up in other countries. I grew up in India and Zambia. And then I immigrated to the U.S. with my family. I'm an infectious disease doctor, but I also have a master's degree in public health with a concentration in tropical medicine. So kind of what I've been doing for the last few years

is teaching at the School of Public Health with a focus on parasitology and then also teaching in my other capacity as a physician. So teaching is something I'm really passionate about. I'm really excited to kind of get us going on what the terms we need to know and kind of how to interpret the enormous volume of information that's being thrown at us all the time. So I think let's start in the most logical and easy place, which is defining a couple of terms. So first of all, what is a coronavirus?

**Nick Van Sickles:** [00:08:14] It seems like a really good question. Yeah. What is that?

**JoAnn Jose:** [00:08:16] The question I get a lot. So this is a family of seven known viruses that can infect people. There are three really significant ones. There was SARS CoV, which came out in 2002 in Asia and then MERS-CoV, which kind of involved the Middle East in 2012. And then, of course, this one that we're all living through. So these are a family of related viruses. They are zoonotic, which means they come from animals and transmit to people.

**JoAnn Jose:** [00:08:42] So SARS in 2002 was thought to come from civet cats. MERS came from camels. And this one we're not sure about yet. A lot of the experts in the field think that it probably came from a population of bats. There are some other people who think that it came from this little animal called a pangolin, which is a little bit of a cross between anteater and an armadillo in appearance. And I think the point is that we don't really know, but it doesn't really matter for what we're doing right now. At some point, someone will be very interested in this and we'll figure it out. But for right now, what we kind of want to know is how big of a deal is this and what are these terms that are being thrown around? So an outbreak is a sudden increase in a number of cases of disease in a particular place and time. So this was an outbreak in Wuhan in late December when we suddenly noticed a cluster of people getting severe pneumonia is due to this novel coronavirus. Then an epidemic is a large outbreak that spreads among the population or in our region. Until recently, we were thinking that this particular infection is experiencing an epidemic and then a pandemic, which is something that the W.H.O. recently declared, is an epidemic that has become rampant in multiple countries and continents at the same time. So we are currently living through a pandemic.

**Nick Van Sickles:** [00:09:56] So Dr. Jose I want to ask you real quick with your knowledge of epidemiology, is there any reason to ... that word *pandemic* ... should you

be more scared because it's a pandemic versus an epidemic? That's one question I've gotten a lot. Or is it just that it's more geography?

**JoAnn Jose:** [00:10:13] It's really more that it's just geography. Like I think before the WHO actually called this a pandemic, it really was displaying all of the characteristics of a pandemic. And I think the terminology also matters in terms of our public health response. Like we're able to mobilize more resources. We're able to declare emergencies. We're able to do all kinds of things that we wouldn't be able to do if we didn't use that particular terminology. So. So it's really more of an issue of geography and terminology. And it really doesn't impact how we deal with it in our lives now, except that it maybe explains why we're taking such serious measures, too.

**Nick Van Sickles:** [00:10:46] It's good to point out. OK.

**JoAnn Jose:** [00:10:49] And then I think the other set of definitions that I wanted to cover has to do with isolation and quarantine. Quarantine is kind of a scary word. Like for some people, it brings up these kinds of visions of being in like some sort of dark cell underground. That's not what isolation is. So let's talk really quickly about what that means. So isolation is just a term that refers to keeping those who are sick or infected away from people who are not. So that basically just means trying to figure out who is healthy and who is not in the population and keeping those two factions apart so that the people who are sick can't infect the people who are healthy. And then quarantine is actually restricting the movement of people who seem healthy but might have been exposed to the virus. So that is kind of what is accomplished with a travel ban or like when the cruise ships docked and all of those people had to go stay in a hotel for 14 days like that is quarantine, because we're keeping a population of probably healthy people, but who have had an exposure to the virus apart from the general population of people that we assume are healthy.

**Nick Van Sickles:** [00:11:49] So are we quarantining now, in New Orleans?

**JoAnn Jose:** [00:11:51] So we're not quarantining now. We're sort of voluntarily isolating. Is how I would put it, hopefully we are voluntarily isolating.

**Nick Van Sickles:** [00:11:58] I'll let you explain more and kind of get into why, what your opinion on what we should be doing is. I think it's valuable for people to understand that, to hear that and then know what to do. So please keep going.

**JoAnn Jose:** [00:12:10] Yeah. So initially when this was an outbreak and then an epidemic, we had a lot of we were asking people like, where have you traveled? Because we had an expectation that travel was a risk factor, but as the epidemic kind of progresses, that stops being as important of a risk factor because of something called community transmission, which is where the virus is already in the community and spreading among people. And so we're not able to really pin down who traveled or who had contact with who. And now we are in that stage that it is already here. Like the number of cases that we've seen, we already have people here without any travel history who are infected. So community transmission is happening right now. And it's also happening among people who are asymptomatic, which means they have no symptoms whatsoever. They don't know they're sick and no one else knows they're sick, but they're still spreading the virus to other people.

**Nick Van Sickles:** [00:12:55] So, Dr. Halpern, are you even asking people when it downstairs if they've traveled to Italy, to China, to anywhere?

**Jason Halperin:** [00:13:01] When we first were testing, that was something we asked. But now, just like Dr. Jose alluded to, there's no reason and probably most important question is, are you here? You know, the answer is, I am here and there is a risk of community exposure. So we are concerned. We are having transmissions in our community, just as Dr. Jose said.

**JoAnn Jose:** [00:13:24] And then I think our last term that we want to define is the case fatality rate or CFR. So this is the number of people who are known to be infected, who have a confirmed infection, who die. So it's important to understand that this number changes over the course of an epidemic. We won't know the final CFR for this particular epidemic until it's all said and done. And we have done all the math. So really, when when we're looking at these numbers, it's really low for some countries, it's very high for others. It seems to change a little bit from time to time. So it's tempting for people to think that this is like some sort of fake number or it's not a reliable number. And what I really want you to understand is how the number actually works. So the number of

confirmed cases depends on the people who are being tested, right? As Dr. Halprin just mentioned, if we don't test people, we don't know how many people are infected, which means we can't calculate a correct case fatality rate. And then the number of people who die—that that number also changes depending on reports every day. So that's why the number is slightly different from time to time. Currently, the case fatality rate in China is about 4 percent. In Italy, it's about 7.3 percent. In Iran, it's about 6 percent. And in South Korea, it's about .9 percent.

**Nick Van Sickles:** [00:14:36] Do we know what it is here?

**JoAnn Jose:** [00:14:38] We don't because we don't have enough data. We haven't been testing. So we don't have enough information to really be able to calculate that number.

**Nick Van Sickles:** [00:14:44] Very scary, too. So I think all we hear right is that we hear people that are dying in the hospital. And that, I think is a point to help push the community to do what's right, but also is pretty scary when you read about in the paper. So I'm really happy you kind of outline that definition. I think having people who are listening understand that it does change and why it's maybe not defined is really important. So please continue. This is great.

**JoAnn Jose:** [00:15:10] Yeah. So when we're looking at the case fatality rates. So one question that people ask me a lot by text, by social media, like, by carrier pigeon ... people are always like, "well, why is it so low in some places and so high in other places?" And here's here's how you should kind of think about that number. It is extremely low in some places. They have done enormous amounts of kind of ambient testing. So like everyone who has any symptoms get to gets tested in somewhere like South Korea because they had a really great response and they immediately kind of had a lot of tests available and then used those tests to great effect. So they're seeing all of these mild cases that we're not even able to test right now because of our issue with the ability to test. And so they're basically being able to kind of find out that of the number of confirmed cases they have, the vast majority of them are mild or asymptomatic, which is kind of in line with what Dr. Helprin was explaining earlier. But in places where the response was late and we were not able to get a good testing algorithm in place, somewhere like Italy, for example, the case fatality rate is going to

look really, really high because we started testing later and we tested the most severely ill and the more severely ill people are unfortunately more likely to die.

**JoAnn Jose:** [00:16:19] So that's kind of why the case fatality rate is so different between a place like South Korea, which has really great control of their epidemic versus a place like Italy where things are a little bit more chaotic and disorganized at the moment. And it's also really important to understand that that the curve is different for each country. But it's also possible to kind of look at the situation and say, what is my curve going to look like a week or two from now? And the most important thing to kind of realize is that you have an impact on that. We all do. Like with our behavior, we change our curve. So it's really important to understand that it's not like people are speaking to you from the future when they're telling you what's happening in Italy versus what's happening in South Korea. They are telling you possible outcomes and you have an influence on that outcome.

**Nick Van Sickles:** [00:17:03] So this this is really helpful, Dr. Jose. I think this is what you've defined and just the way it kind of sets a rate, a really good table for what we can do. So do you mind kind of—I think we talked about the clinical side, the individual side... Do you mind touching a little bit on what did South Korea do besides just testing? What did China do? What what can we do? You know, and this is irrespective of politics or governments. This is it's a disease and it's public health. So it really doesn't care if you're Republican or a Democrat or whatever type of society you're outlined to be. Right. So what what can we do to really protect each other and what really do we need to do? And I'm putting you in the hot seat in your opinion, and you make the choice decision maker!

**JoAnn Jose:** [00:17:45] Ok, let's do it. So I think what's most important to realize, like at the baseline is that the virus, the microbe does not care about who you are or how old you are or any of the other things that you might really think are important about your identity. It doesn't care about national borders. It doesn't check your papers. You can't spin it. So it's really important to recognize that this is an equal opportunity pathogen like it will come for all of us. And like the way that it kind of behaves and the way that our curve looks really depends on how good we are to each other now and how how able we are to kind of pull ourselves together and do things for the common good that might be inconvenient for any one of us, taken just separately. So I think there are some



things that we can do to make the curve better. There's this movement or a hashtag of flattening the curve. And it's really important to understand what that means. Right. So what it kind of talks about is that without any protective measures, the curve of an outbreak, the number of people who get sick plotted against the time since the first case. There is a really sharp peak because a lot of people get infected at the same time. A lot of people get really sick at the same time. And unfortunately, without proper measures, people will die around the same time. So that curve has a very sharp peak. And what that practically means is that it overwhelms health care systems.

**JoAnn Jose:** [00:19:00] So if you have so many people sick at one time and they all go rushing to the hospital, actually the best way to think about this is kind of the situation in grocery stores over the weekend, right? So let's say that you ran out of toilet paper and you went to the grocery store this weekend, would you have found toilet paper? Probably not without like fighting MMA-style in the parking lot. So think about that and think about if the thing that people are fighting over is ICU beds and ventilators in the hospital. So that's the way to kind of think about this, is that we don't want the resources to be scarce when the most number of people need them. So then what do we do to make that curve flutter so that we are still having people get sick—There's no way to avoid that at this point—People will become ill, but we want to have them get sick in a kind of more staggered way so that the health care system is not overwhelmed. That is what it means to flatten the curve. So instead of a sharp peak, we have a very gradual peak so that we're not overwhelming our health care system. So in order to do that, there are some things that we should all be doing right now and taking incredibly seriously, even though it's not intuitive and it seems inconvenient and annoying. So the first thing is not panicking, just being careful, being well-informed, using your good sources of information and maybe combating the people in your life ... the second cousin who like believes things about copper bands or whatever and just being able to to combat that panic and anxiety inducing misinformation with good information of your own. And then the second thing is to maintain good hygiene practices. Right? Wash your hands. And there's a specific way to wash your hands. There's a really fun Vietnamese video on how to do it. You can like Google, how to wash hands, and you'll come up with lots and lots of things. But you want to get soap like all over your hands. You want to do it for a relatively long period of time. You should be able to sing Happy Birthday once, slowly or twice quickly in your head while you're doing it. And then you want to do that often, more often than you think you need to. Don't touch your face.

Humans are evolutionarily programmed to touch our faces for some reason. So we touch our faces a lot. I did. I saw this some little experiment that someone did where they gave their kid like paint and then watched how much paint they got on their face because of how often they're touching their face. So we are all guilty of that. Like I do it so many times a day. And now when you have to be aware of maybe not doing that, it's like really hard because, you know, things feel itchy and you're like, I'm just going crazy here.

**JoAnn Jose:** [00:21:17] So don't touch your face. And then if you're sick, even if you're sick just a little bit and you don't think you have COVID-19, stay home. You might be fine. You might be that 80 percent of people who are perfectly fine and just get better and then go back to their regularly scheduled life. But you don't know how much virus you're dropping in the environment. You don't know who else is picking that up. And you don't know if they're going to be OK when they get sick. So it's really important to stay home if you're sick. And then right now, the CDC is telling us to do something called social distancing. Yeah. Which sounds kind of like unpleasant and Orwellian. And really the term I prefer is "physical distancing" because you shouldn't be isolating yourself from your friends and family. You just need to be physically apart from them. So when you're in a place with other people, you should ideally be about six feet apart from them at all times. So like in public, at the grocery store, on public transit, if possible, in public spaces, you should try to be at least six feet from other people. You should make sure that you're not going to large gatherings of more than 10 people. So I understand that most people do not view 10 people as a large gathering, but for the next few months, we're going to view it as a large gathering. So we have to kind of stay away from large gatherings of people. We don't want to be in crowded restaurants or bars or airplanes. We don't want to travel unless we absolutely have to. And by doing all of that, we will limit the spread of the virus and hopefully give our society as a whole, our public health infrastructure a chance to flatten that curve so that we have fewer deaths and fewer infections.

**Nick Van Sickles:** [00:22:43] So I guess let me ask you this, Dr. Jones. Like you're giving this great advice and people have been giving this advice. So why was it necessary to just shut down everything?

**JoAnn Jose:** [00:22:53] Because people didn't follow the advice, unfortunately. So it's really hard for young and healthy people to understand that their actions, when they feel fine and everyone else around them feels fine, are possibly contributing to an epidemic. So a good example of this is I was getting my car worked on over the weekend and in the waiting room at this place was empty. And the gentleman, the only other gentleman who was in the space decided that he wanted to sit right next to me. And so I kind of explained very gently that I did not think that was a good idea, given what was going on. And could we please, like, separate a little bit? And, you know, I was expecting maybe just a sort of oh, I hadn't thought about that. I'll, like, move. But instead what I got was like a screaming, like like anger fest because he was like, "I'm not sick. And I don't appreciate you telling me that I am." But of course, that's not what I'm saying, right? I don't think that you're sick. I just want us to all to be safe. We have to be safe all the time in order to be able to kind of get around this curve.

**Nick Van Sickles:** [00:23:49] Now, that's true. I think that's a great point. And I think some of these things touch on a lot of feelings in human society. You know, when somebody tells us they don't want to sit next to us, you're right. It is an explanation, but it might cause some feelings to be unearthed. And we don't know where that person is coming from. So if we all do it, acknowledge it and acknowledge our emotions about it and explain it. I think it really does help us all.

**JoAnn Jose:** [00:24:12] I think it's important to understand that being in a sort of social distancing situation can be hard on a lot of people. Yeah, it can be hard on people for whom home is not necessarily the safest place in their lives. It can be hard on people for whom, you know, being without other people is is really difficult. They have a really good friend who's an introvert who says she's been planning for this her whole life. But most of us don't do very well without social contact. So it's really important too, while you're physically distancing yourself from people that you increase the other ways that you socially communicate with people.

**JoAnn Jose:** [00:24:41] So like use your face time and your Skype and all that stuff to full effect text people, call them like reach out to them, make sure that the most vulnerable members of your community have what they need to feel good during this time.

**Nick Van Sickles:** [00:24:53] So the we're about 30 minutes to the last thing. And again, I apologize for any tech issues that we've had today. This will be recorded. So we'll be able to listen to it later.

**Nick Van Sickles:** [00:25:04] But a lot of information put out there says that "if you're sick or feeling ill, call your doctor." And I know personally I've been a little bit frustrated by that because I feel like, you know, not all of us in medicine were trained to combat a pandemic. And even if we were somewhat trained for that, we have not seen a pandemic like this one. And so I think I'd like to see if I can get both of y'all, and I'm hoping you have the same message to tell everyone ... who should they go to for information? What is it? What are reliable sources that they can go to for not only looking for symptoms, not only looking for what they can do to protect themselves, but how can they protect their house? How can they protect the most vulnerable? What can they do for their own kind of mental and behavioral health when they're feeling down from being isolated because they listen to Dr. Jose.

**Jason Halperin:** [00:25:58] I'll let you go. Oh, no, you go first.

**JoAnn Jose:** [00:26:00] So the CDC Web page uncovered 19 has literally everything that you've just asked about is addressed in detail. I think this is a really good time, actually, to acknowledge the amazing work that people at the CDC do. They have like teams and teams of people whose job it is to help figure out outbreaks and then figure out response and create accessible, like friendly information for people to use when they're deciding what to do. So there's a wealth of information on that page, bookmark it visit it frequently, and follow what it says to do there.

**Nick Van Sickles:** [00:26:28] Yeah, I think it's it's written in a nice way so that we can all understand it. I mean, I prefer to read things that are quick, easy, simple to read and act on for my own health. And I have looked at it, too. Dr. Halprin, any other thoughts on resources that you have?

**Jason Halperin:** [00:26:43] No, I would agree. I'd go to the CDC, say probably many, many, many times a day, as everyone else in this room does. And it's how I keep up to date to communicate to my patients. I am also recognizing the importance or if if I haven't already, it helps me think again of the importance of local media. So, you know,

there's been so many questions coming about how the city is confronting this pandemic. So I've been going to the Times-Picayune, the NOLA.com Web site. But, you know, I think it's really important when you use other media sources to go back to the CDC site to check yourself, because in a way, it's the best way to even question what you might be seeing in other media.

**Nick Van Sickles:** [00:27:41] All right. Well, thank you all for joining us. Thank you for coming today. It's really fun to hear both of you discuss all of these different aspects. We can keep ourselves and keep our communities healthy and even acknowledge that we all are doing this, too, or practicing the same thing. So we're not just preaching that. We're practicing it. We will conclude for today, but we're back tomorrow. Again, my apologies for the tech issues, but we'll have this recorded and up on our website, so people can listen to it later. Thank you all so much.

**Jason Halperin:** [00:28:07] Thank you.

**JoAnn Jose:** [00:28:08] Thank you.

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