[00:00:00] Dr. Nicholas Van Sickles
All right. Good afternoon, everybody. This is Dr. Nicholas Van Sickels, I am the chief medical officer at Crescent Care, a federally qualified health center here in New Orleans, and we are doing this podcast roughly three times a week to discuss issues related to the ongoing COVID-19 pandemic, how it affects our community, our clients, our patients and anybody who might be listening. Today is Science Friday. So we started Science Friday a couple of weeks ago and it's been really popular. And I think looking at the questions that have come online, I think this is a really good one to keep doing. And we are very lucky to have Dr. Jo-Ann Jose's back on the podcast. Jo-Ann is a colleague of mine. And for those of you who didn't listen, the first one, she is not only a physician and a physician educator here at Crescent Care, she has some students come with her, too, but she's also a teacher. And that's one thing that I think is really a nice combination to have for a podcast. So I will let Jo-Ann reintroduce herself. Please go ahead.

[00:00:59] Dr. Jo-Ann Jose
So my name is Jo-Ann Jose. I'm an infectious disease physician and I also have a Master's in public health. I do mostly HIV outpatient work here at Crescent Care, but I also work at Tulane. And part of my job there is to teach at the School of Public Health in the Department of Tropical Medicine.

[00:01:15] Dr. Nicholas Van Sickles
Well, thank you, Jo-Ann. So I will be full disclosure, because I'm all about honesty: Jo-Ann helped- actually didn't just help- came up with the questions for today. So I'm going to go over them and Jo-Ann is going to answer them because I think they are wonderful questions she came up with. And it really highlights some of the key points in this pandemic that have been talked about a lot in the media, especially with the overload of media we get every day. It's hard for me to keep up even. But to maybe level set everyone, why don't we start with what earth is going on? Can you recap everything for us, Jo-Ann, and kind of tell us how we got here and where we are and then we'll get into like some of the other things.

[00:03:05] Dr. Nicholas Van Sickles
So, yeah, those are pretty staggering numbers. What are we seeing in the U.S.? Are we seeing it all across the country now, or are we seeing in certain hotspots? I know we're seeing it here in New Orleans quite a bit. And we hear a ton about New York, who is really having a very difficult time with the COVID-19 cases. What are we seeing in different areas, regions of the U.S.?
recognized. And there are some reasons why their curve is actually flatter compared to places like New York, where it's really like the epicenter of this illness in the U.S. right now. There are lots and lots of people sick in New York. The hospitals are really, really busy with people who have COVID. And then here in the south, New Orleans is considered an epicenter as well. Our numbers are high. Our health care system is very, very busy caring for COVID patients right now. And it's important to understand that the regional impact that New Orleans has because of things like Mardi Gras and other public events, we have a lot of people coming here and then going away again. So it's quite possible that we will be the epicenter of the south.

[00:04:20] Dr. Nicholas Van Sickles
What is social distancing?

[00:04:22] Dr. Jo-Ann Jose
Yes. So social distancing is maintaining some separation from other people for the purposes of trying to slow the spread of this virus, which is transmissible from person to person.

[00:04:35] Dr. Nicholas Van Sickles
So you mentioned that New York is still an epicenter and then Washington is where it started. And their curve was flatter. Why is that and why isn't social distancing working?

[00:04:47] Dr. Jo-Ann Jose
Yeah. So this is a great question, but it's actually the wrong question. So there are several right questions that we can derive from that wrong one. So the first one is: Did we actually socially distance? And the good news as there is good news and bad news. Spoiler alert. The good news is that a lot of us did, right? It's this unbelievable, like enormous act of global solidarity and cooperation for people to kind of recognize that social distancing is important, and for a lot of us to go ahead and do it. In a time of like emotional pain and economic pain, so many people have done the right thing. And by doing the right thing, they have made a significant impact on our epidemic curve. Not everyone social distanced, as I'm sure we've noticed in our media reports. Social distancing is kind of like a group project where everyone gets graded on the work of the group. So even though you did a great job, if someone else didn't that still has an impact on what our kind of curve looks like as a society. So then the second question that derives from why didn't social distancing work is: Did it work if we did it? And the answer is that, yes, it did. If we look at the data from California and Washington, which were the first states to report community transmission of this virus, and then the first cases or the first states to mandate staying home, there is a flatter curve in those areas compared to places where social distancing happened later. People are still getting sick in those places. To be clear, like they absolutely still have cases, but the sick are not overwhelming the medical system. So if you remember back to the first episode of this podcast when we talked about what flattening...

[00:06:21] Dr. Nicholas Van Sickles
Yeah, I was going to bring that up. If you could mention again.

[00:06:23] Dr. Jo-Ann Jose
Yeah. So the idea of flattening the curve is not to prevent all illness because that's just not possible anymore. Like people will certainly get sick. The idea of flattening the curve is to prevent everyone getting sick at the same time and completely overwhelming the health care system so that we have to kind of share our scarce resources or maybe run out of those scarce resources.

[00:06:42] Dr. Nicholas Van Sickles
Which is why we're seeing these reports of different ways to like fix the ventilators so you can share piping and tubings and electricity in the ventilator shortage, correct?

[00:06:51] Dr. Jo-Ann Jose
Yeah, exactly. And also why we're building field hospitals. So Grant Park in Chicago is having a field hospital built. New York is doing them in Central Park. We're doing one in our convention center here. So we're basically expanding our capacity to be able to take care of sick people as they kind of come in.

[00:07:08] Dr. Nicholas Van Sickles
Have they, do you know, have they had to do that in Seattle as much?

[00:07:12] Dr. Jo-Ann Jose
So they haven't had to do it in Seattle as much because they were very early with their stay at home order and they enforced it really well. And they were able to kind of do a lot of public health work to try and flatten that curve enough to where you still have a really difficult situation in Washington, but it's not the way that New York looks right now.

[00:07:30] Dr. Nicholas Van Sickles
Do you think in looking at states... So one of the things that they've highlighted in a lot of media recently, and that you brought up, is the south. You know, New Orleans, we might see as a future major epicenter. I think here we're
starting to see at least our governor did put a closed shut-down order and people are doing as best they can. We could talk about that and debate about that. But what about the other states in the south that are not, have not implemented these orders? Do you think there’s hope for them to still do it?

[00:08:01] Dr. Jo-Ann Jose
Yes, but it’s important to recognize a couple of things. So the the longer we wait to start social distancing, the smaller its impact is likely to be. It doesn't mean it doesn't have impact if you do it late. You absolutely should do it late if you haven't already. But it will be that much harder to kind of overcome not having done it earlier. So a good example of that would be states like Florida and Georgia, which waited a really long time to issue those stay-at-home orders. There’s an article in The New York Times that showed where people were still kind of gathering and refusing to social distance, even though we knew this virus was out and about and starting to infect people. And those those places where people were still traveling were overwhelmingly in places where there was no stay-at-home order. So the stay-at-home order really does make a difference as to whether or not people will stay at home.

[00:08:50] Dr. Nicholas Van Sickles
So President Jose would declare a stay-at-home order for every state?

[00:08:54] Dr. Jo-Ann Jose
I would, yes.

[00:08:56] Dr. Nicholas Van Sickles
I love that. All right. So 2024...?

[00:08:59] Dr. Jo-Ann Jose
Yes.

[00:08:59] Dr. Nicholas Van Sickles
Alright, got it. When can we stop the social distancing?

[00:09:03] Dr. Jo-Ann Jose
So this is really hard because...

[00:09:05] Dr. Nicholas Van Sickles
People here ask me that. They are like, “When can we bring people back to the clinic? When can we go back to life?” And not in way... They don’t want to rush it. They mean it really well. They’re just trying to figure out how do we how do we re-engage in society.

[00:09:16] Dr. Jo-Ann Jose
I think there’s a point to be made that neglecting chronic medical conditions and neglecting like other things about our lives has a cost to it as well. So it doesn't stop, unfortunately, when this happened. Sadly, they didn't get the memo that something emergent is happening. So I think it's really important to understand that this is really hard and there’s no easy answer to this. If this is going to work, we have to keep doing it for at least a few more weeks and maybe even longer than that, depending on what our epidemic curve looks like.

[00:09:45] Dr. Nicholas Van Sickles
Is there a good metric that you can use to do that, or is it just really slowly... and I know this is so tough, right, because there always lags in the testing results and all the other problems that just compounded this issue of the delay in figure out where you are on the curve, rather. But is there a good metric or anything we can use to help figure out when we should start opening things up? Or is it just kind of watching and seeing where we see a decline and then making educated decision about how to open things back up?

[00:10:11] Dr. Jo-Ann Jose
I think there's so many moving parts that it's really hard to use one of those parts as the indicator for this. I think Dr. Fauci made the point in an interview with The Daily. Yesterday he made the point that what he kind of looks at are the number of infected, the number of dead and the number of recovered, and kind of tries to make a complex, educated guess about where those numbers need to be in order for us to open up the country again. The thing that complicates all of this is this current intensity of what we’re doing. This is obviously not going to be sustainable for a very long period of time. But I think it’s important to realize that we might experience waves in which we have to do maybe more strict measures and then be able to loosen those measures depending on how things go. So basically, no one knows the answer to that question. There are really smart people working on it and people working on trying to come up with modeling. But we’ll talk about why there are some pitfalls with modeling and why we really have to kind of figure out the answer to that question as we’re going along.

[00:11:08] Dr. Nicholas Van Sickles
No, that's helpful. I think it's good. I feel like along the lines of this pandemic with things changing so much, all we can do is be like you are right now. Just being completely honest and transparent that we don't necessarily know. This is what we're looking at and these are the next steps possibly. And that's the best thing we can offer people, even though it's really frustrating not being able to give an answer.
It's really frustrating, I think, because so rarely in medicine do we not have an answer. Or at least be able to make an educated guess. This is a completely new infection that the world has never seen before. It's only, you know, four months old. So there's a lot we don't know and there's a lot that we will discover that will change the plans that we have tentatively made to deal with it.

So what about testing? I talked about this just a minute ago. Like the testing kind of complicates this because of so much delay. What is the deal with testing? You know, there's this new thing, and you and I talked about this right before if we should discuss this. But asymptomatic spread, testing that, the delay in testing results. What is going on? I mean, our Governor has been very upset about this, our City Health Commissioners are very upset about the delay in testing results. Just talk for a minute about testing.

Okay. When we're talking about testing, there's a couple of different things that we can say. So the first thing to say, and this comes up a lot in like public coverage of this whole situation, is that we had our first case the same day that South Korea had their first case. South Korea ramped up testing immediately. They did a really great job of making testing available and then tracking anyone who was positive, actually using their cell phone data, which sounds really creepy, but was very useful from a public health perspective. And they were able to really have a very, very flat curve with really great treatment and management of any infected people and helping prevent them spreading their illness to other people. We have not had that here. So the same day, but much larger population, right? And maybe more logistical hurdles as well as a less integrated public health system. Like 50 states instead of one kind of federalized response. But putting all of that aside, the deal with testing is that we don't have enough tests right now. We have more than we had last week or the week before, which is great. But the test is taking a while to come back, which is always really annoying, right? That increases anxiety. And it also is keeping us from having information that people use to make decisions. It's one thing to be told you are positive and you need to isolate yourself at home. It's another thing to be told this will take seven days to come back. But you should isolate at home.

Yeah, we've you know, we've had our own frustrations. So people get their test results back quickly. Some people don't. And there's really no rhyme or reason to it. It's been very frustrating. And in a way it's good to hear that it's happening in the rest of the country because you feel like, okay, it's not just me. But at the same time, that's not good.

No, that's really not good. So I think the bottom line is like, what does the testing fiasco mean for you, right? As a person who is maybe experiencing symptoms or at risk of getting sick, and I think the answer is, if you are feeling sick and you meet criteria for testing-- and right now in Louisiana, the testing criteria are fever, plus one of the following: cough, shortness of breath or sore throat. There are some places that are starting to use loss of taste or smell as a criteria. But not everywhere is doing that yet. So if you meet those criteria, go ahead and get tested. There's multiple places where you could get tested and we can maybe post links to like where the testing can happen. If you don't meet those criteria, stay home, pretend as if you have it and isolate accordingly, and just really closely monitor yourself for those symptoms to develop. If you have severe symptoms and feel like you need emergent care, the most common reason for people to need that is that they're having a lot of trouble breathing on their own. Then obviously go to the emergency room and they will help. If you have a positive contact, so let's say your family member or your friend or someone else that you have reasonably close contact with, was positive, but you yourself do not have symptoms, the thing to do is to stay home and monitor yourself for symptoms. And then get tested as soon as you develop any symptoms that are concerning.

Do you find ...You helped us with this. You've been helping to test. Do you find talking to somebody or knowing that positive test result is helpful?

I do think it is helpful. So I think it's one thing to sort of have this kind of amorphous anxiety about whether or not you have this or maybe it's allergy season right now. So lots of people have like a cough or a sore throat. It's a relief to know no, I don't have COVID, or it's sometimes a relief to know yes, I do have COVID. Because now you have an explanation and you can do what you need to do to try and monitor yourself and make sure that you're safe, but also keep everyone else in your environment safe.
No, I agree. It does help people kind of reinforce like, oh, I do have it. Okay. I need to be careful about people that might be at risk. You might pay more attention to some of those at-risk groups that you hadn't thought about that you interact with on a regular basis. Yeah, I like that.

[00:16:10] Dr. Jo-Ann Jose
And then I think there's some data, this is the concerning part, to suggest that up to 1 in 4 people who have COVID-19 are asymptomatic, which means they don't know it. And nor does anyone else because they don't look sick. This is a marked departure from other epidemics of coronaviruses, both SARS and MERS. If you got those, you were really sick. People noticed right away. So then there's this question of what do we do about all these people who are walking around and have no idea that they are themselves infected and maybe putting other people at risk. And it's not really clear what we should do about that right now. And the CDC is maybe going to come out with some guidelines to help us figure it out.

[00:16:44] Dr. Nicholas Van Sickles
So President Jose doesn't have an answer to that?

[00:16:46] Dr. Jo-Ann Jose
I mean, I do, yes.

[00:16:48] Dr. Nicholas Van Sickles
I love it. Okay. Well, we might come back to that. See, I feel like we should do what you say and the world will be a better place. So we talked about the tests. Do we know why they're taking so long to come back, exactly?

[00:17:03] Dr. Jo-Ann Jose
We do, and it's very unfortunate. It's because we don't have enough of them. So ideally in like a perfect world, we would just test everyone. That way we would know who has it and who doesn't. And if someone's in the incubation period, we would test them every day until we know whether or not they turned positive. But we just don't have the capacity to do that. Right now we have enough tests to test sick people.

[00:17:24] Dr. Nicholas Van Sickles
And it would take seven to eight days to get back anyway.

[00:17:25] Dr. Jo-Ann Jose
Yes. So there's this huge lag, because there's lots of people doing testing and the facilities have not yet kind of caught up to that demand. I mean, keep in mind that they are still having to do other processing of tests, right? Because all of the other medical stuff didn't just stop. There are certainly people who still need labs done. There are certainly people who still need information that their doctors use to make decisions about their care. So the labs are a little bit overwhelmed and we don't have enough testing to be able to offer universal testing right now.

[00:17:55] Dr. Nicholas Van Sickles
One question I've gotten a lot lately is what about the antibody tests? Tell us about those.

[00:17:59] Dr. Jo-Ann Jose
The antibody tests are really interesting. Serology is what that is called. And it's a way to look for antibodies that your body has made against COVID. If they're present, and there's a big if here, because COVID is not the only - or SARS-COVII - is not the only coronavirus. So we have to make sure that when we're looking for the antibodies, we're looking for antibodies specifically to this novel virus. But if they're present, you were infected and recovered and presumably have some degree of immunity, which would be a really useful piece of information to have. Because those tests are- we could maybe use them to identify donors for convalescent plasma. So like, let's say I got sick and I recovered and I had some immunity. And then you got sick and you were really seriously sick in the ICU. Getting my blood with the antibodies in it might actually give you an edge to fight off the infection. There is some data for that from China and there's some studies ongoing in various epicenters here in the U.S. looking at the use of that convalescent plasma. So that would be the immediate kind of therapeutic use of these tests. And then the other thing is that we might, if we knew that you had been exposed, were sick, maybe or maybe not sick and then recovered and had immunity, you might be OK to go to work or you might require less kind of like protection when you do go to work.

[00:19:17] Dr. Nicholas Van Sickles
Do you think that there could be a laboratory-based way to determine an end of social distancing, if you were to do a lot of testing in the community?

[00:19:25] Dr. Jo-Ann Jose
That would be the hope. But we would need a really good test and we would need to know that test was very reliable. And right now we just don't have that yet. Available to everybody. Yep.

[00:19:34] Dr. Nicholas Van Sickles
Available to everybody, which has been a problem. All right. Treatments. There's been a lot about this lately. And, you know, I just talked about this before with one of your patients. The FDA approved chloroquine and
hydroxychloroquine. I know a lot of people talked about whether or not to use ibuprofen or Tylenol. How do I treat it? I'm a doctor, I see someone with COVID-19 right now. How do I treat them? That and then we'll talk with the hospital, too.

[00:20:05] Dr. Jo-Ann Jose
Ok. If you are seeing someone in the outpatient setting who is mostly fine and is not requiring assistance of breathing or anything like that, do nothing. All they have to do is monitor and make sure that they are not getting worse by giving themselves things in the outpatient world. So I had a patient who called me today because he is running out of a medicine that he needs because everyone is kind of hoarding it because they think they need it for COVID. That drug, Plaquenil or hydroxychloroquine, has very limited data, and that limited data is only available for people who are seriously and critically ill. So by hoarding that medication, people are actually denying it to people like my patients who need it to deal with their other medical conditions which didn't stop. Which did not stop, sadly. They did not get the memo that they needed to like calm down and go away. So what we now have is the situation in which there is no prophylaxis for COVID-19 that we know of. So prophylaxis is taking medicine to prevent the infection from happening. There is no treatment that is indicated in the outpatient world. And then inpatient in the hospital, there are some things that we can try. There is not robust evidence for those things yet and there are still ongoing trials for all of them. There's been a couple of a HIV medicines that people tried. Neither of those were shown to have any benefit. There is a new drug that Gilead has on the market called Remdesivir, which is currently undergoing clinical trials and will hopefully have some data from that in the next few weeks or months and then we can kind of go from there. But right now, I would not hoard anything. And then I would really just pay attention to the studies.

[00:21:37] Dr. Nicholas Van Sickles
So, out-patient: do nothing and stay home, hydrate, maybe stuff to help with your fevers, eat your normal diet, don't hoard drugs. Hydrate well.

[00:21:47] Dr. Jo-Ann Jose
Yes. Hydrate well.

[00:21:48] Dr. Nicholas Van Sickles
Fever makes you lose fluids. You know, you sweat. Your metabolism is up. So definitely hydrate. Hospital: looks like we're going to have to wait, but they're definitely trying lots of things.

[00:21:58] Dr. Jo-Ann Jose
Yes. Which is really is like what we want them to do, right? We want them to try things in the most severely ill people and figure out if those things work or not. And then a scale those up as appropriate.

[00:22:08] Dr. Nicholas Van Sickles
Ok. All right. That's good to know. Vaccine. I want a vaccine. I want everyone to have the vaccine. I want it now because I feel like that would help us. Can you solve that problem for me? Where are we?

[00:22:21] Dr. Jo-Ann Jose
So let's talk about what a vaccine is first. So a vaccine is a substance that's used to stimulate the production of antibodies and provide immunity against disease. So we take a piece of a microbe or its products or a synthetic equivalent and we introduce that into the immune system, which creates a response without making the person sick. That is the ideal vaccine, right? We'd certainly don't want vaccines to make people sick. Then when your body encounters the microbe like in the wild, as it were, it revs up its memory of what happened when it got the vaccine and it fights off the infection, hopefully again without making you sick or by significantly reducing the severity of your illness. So the question, and this is really like the million dollar question, is when will we have a COVID-19 vaccine? And there are several promising targets, which is the good news. There is an unprecedented level of scientific collaboration and cooperation. Lots of people and lots of different countries working, lots of different companies who are trying to figure this out together and sharing information with each other without kind of regard to profit and credit, which is really inspiring to me. And then we have to like, so here's what we have to do. We have to figure out the target. We have to make the vaccine. We have to try it to make sure that it's safe in humans and that it actually does what it's supposed to do, because we certainly don't want the vaccine to hurt people. And then we have to scale up the production so that we can deploy it all over the world. That is a process that takes a long time. Sometimes vaccine development takes years. Our best estimate for how long this will take is about 18 months, maybe longer.

[00:23:57] Dr. Nicholas Van Sickles
So a while till we get a vaccine. If that's the case, and I'm going to hope that we're faster than that, but I agree with you knowing vaccine development is probably gonna take 18 months. What are we looking at for COVID-19, in terms of seasonal variation? Is it going to peak? And if we flatten the curve, go down and slowly trickle out like SARS and MERS, or is it going to keep going and we're just going to see it in the winter months, like we see the other coronaviruses and the flu and things like that? In the absence of a vaccine for another 18 months?

[00:24:36] Dr. Jo-Ann Jose
No one knows. I think our best guess is that this issue isn't really going away anytime soon. We won't have the
current level of intensity hopefully for too much longer, but we'll probably have like waves of COVID infection. We might have seasonal variation. Kind of depends on what happens in the next few months. We're gonna be dealing with COVID for a while, but hopefully not in the state that we are in now where everything is shut down and people are really hurting from being alone and at home all the time and also from like the economic impact of all this.

[00:25:07] Dr. Nicholas Van Sickles
I think you brought up the really important other parts of COVID. I think it's the actual disease state itself and all that stuff is definitely frightening for a lot of people who might be in risk categories. But the other stuff surrounding it is just tough, even just the social distancing part, which you are correct and I agree with you, a hundred percent. That's what we have to do right now. We have to. But it's tough for a lot of people. It's really hard to not get out of their houses. We talked about this before and maybe we can go into this in a little bit more detail. The normal health problems didn't stop. What do people do? What is the best way for someone with chronic high blood pressure or diabetes or HIV or any chronic medical condition? What is the best thing for them to do right now? What are some things they can do for their health to keep themselves healthy while they're not coming into the clinic or not doing the normal habits?

[00:26:05] Dr. Jo-Ann Jose
I think there are some things that health care systems can do. And then there's things that people can do individually. So the health care system can do some stopgap measures, including longer refills, delaying labs or figuring out a way for people to get them if we can't delay them. And then using Telehealth, which a lot of places have really done extraordinary work on trying to expand their Telehealth capabilities so that they can still talk to people and sometimes even see people, but not risk their social distancing piece of things. Elective procedures are on hold for right now, which means all of the stuff that was supposed to happen, the needs that were supposed to get replaced, sometimes biopsies that were supposed to be done, the specialty visits that were going to be done, all of that stuff has come to a halt. Which can be really difficult for people who have been waiting a long time to be able to do that. And I think the other thing that's really important is that our health care system tends to use the E.R. too much. It's because of structural issues with our system, with people not having access to primary care and stuff like that. But we really should be using the E.R. for emergent reasons only. Your risk of picking up COVID in an E.R. is fairly high. So it's really important to try and avoid the E.R. unless you absolutely have to go there. And this situation will continue to evolve over time. I think what individual people can do is take their medicines, go to their Telehealth appointments if their clinic is able to offer that, and then don't go too far from your normal life. Like don't eat Cheetos all the time or, you know, anything else that we attempted to do when we're really stressed out. I mean, I have conversations with people when I do Telehealth visits all the time where they're like, "I was doing great on all the things you told me to do, the exercising, eating right. And now I'm like so stressed out, I'm eating everything in sight." And I understand that, like, none of us is exempt from that. But we kind of have to. That's all that we can do. We can control what is right in front of us and what is given to us to control. And I think that's what people can work on is the small scale of what can I control about my situation. Because this is terrifying. There's a lot about this that is not under individual control and is really scary to be living through. But I find it really helpful for me, and I think other people do as well, to focus on what we actually can do during this time, including taking care of ourselves.

[00:28:20] Dr. Nicholas Van Sickles
That's great advice. I like the way you frame just what the individual could do and the healthcare system can do. And I think all of us scrambled pretty quickly to try and get some of these Telehealth things up. I was really happy and I think it's worth mentioning, again, people should ask their provider for 90 day fills in their medications. Because that's how you don't go to the pharmacy. See if the pharmacy can ship their meds to them if they have an address where they can receive meds. It really is a way to kind of keep things going, keep your blood pressure under control, your diabetes under control. And that is Doctor Jose said, trying to get the habits that you might be tempted to do with your stress level, try to convert them into other healthy habits. I've been advising a lot, I don't know if you've been doing this too, I'm sure you have, a lot of exercise. We're fortunate in New Orleans right now to have beautiful weather. So it's my moment to strike to get people their outdoor walk and keep their social distancing so we can still do that. It is really therapeutic, I think, and also good for the body.

[00:29:19] Dr. Jo-Ann Jose
I agree.

[00:29:20] Dr. Nicholas Van Sickles
A couple other aspects of this that I want to touch on. The economy and the economic aspect, and then social life, social connections. You mentioned to me before this, a virtual kind of happy hour you had with your friends. How are people going to navigate those two things? You're a physician and an educator, so I don't expect you to have all the economic solutions. But it is worth hearing because I know patients bring it up to you.

[00:29:45] Dr. Jo-Ann Jose
Definitely not an economist. But I think this is an unprecedented time of economic pain for people. Our unemployment numbers were insane, like 6.6 million people this week alone and 3.3 last week. So that's like 10 million people who don't have a job right now. That is really terrifying and scary. I think the government is doing some things to help out. Like I think the first stimulus bill that passed should hopefully be able to get some relief to
people fairly quickly. And I think there will need to be more. There's no question that we'll need to continue supporting our population during this time. I think there are some local initiatives like preventing evictions right now until we kind of have a better idea of what's going on. And then a lot of local groups have stepped up to do volunteering and helping people and making sure that, for example, the elderly don't have to go physically into the grocery store where they might be at risk for picking up COVID. So I think communities are coming together in this really kind of inspiring way, but it's painful for sure. And it's not going to stop being painful for a little while. And we just have to kind of remember that and support each other. And then I think as far as social life goes, that's it's hard to like be in your house all by yourself. It is really hard to do that. So I think there are some things that we can do to help with that. So we all have, a lot of us have, a phone. A lot of us have Internet or computers at home. And we can use all of the things that are in those machines to communicate with each other. We can also kind of do social distancing visits like someone came by and saw me last week and we maintained distance. But it was really nice to see someone and like wave at them. So I think things like that, just figuring out creative and novel ways to remain connected to people. I mean, if you're in your house and you're not working right now, now might be a great time to reconnect with someone that you haven't talked to in a while. It might be a good time to kind of do some fun activities with your with your children or your family. Yeah. It's a really stressful time, but I think there's also some opportunities to be found. And this is a difficult time for everybody. And it's incredibly taxing on mental health. So like making sure that you have the space and the resources to be able to kind of give yourself the rest and the care that you need as well is really important.

[00:32:01] Dr. Nicholas Van Sickles
I think it's important for your overall mental well-being, but it also helps keep you healthy so you don't get sick. If you're sleeping right, and you're doing stuff to promote your own self-care. I've noticed what I do with my kids now, I'm trying to take some time with them because they're still crazy at home too, is a lot of kids in different neighborhoods in New Orleans are doing a lot of sidewalk chalk, little rainbows, and things like that. You can go find it. It's really fun. And then just to echo, some of the stuff you talked about on our website. Our legal division, they were on the podcast rings on the podcast the other day, and then our case managers and our behavioral staff have put together a list of resources that go through the Cares Act, which is the most recent piece of legislation. What are some social services resources in our area? They always change or update it. All that's posted on website. So if you're interested or have questions about it, please go there and take a look. We've highlighted all those different pieces of information that Dr. Jose just mentioned, and it's really helpful to have that. Last couple questions I have, and we're getting toward the end of time. Some public health questions. What is public health modeling?

[00:33:13] Dr. Jo-Ann Jose
Oh, yeah, I like talking about public health, because it gets covered in the news quite a lot. And it's a little hard to know like where they're pulling these numbers from. So public health modeling is kind of the development and study of systems that are described by mathematical relationships, that account for observed behavior of real life or real world processes in health and medicine. That's a lot of words, but it basically means that we plug in some assumptions about what's happening and then we use really complicated math to figure out what things look like in the progression of an epidemic, the progression of a chronic disease. A lot of different health and medicine questions like that. So we're putting in a set of assumptions. We're doing super complicated math, using a bunch of computers, and we're coming out with a possible forecast of what things look like.

[00:33:59] Dr. Nicholas Van Sickles
So kind of all you talked about the last 30 minutes, kind of how to do that in a way that will predict. Forecasts for the weather.

[00:34:03] Dr. Jo-Ann Jose
They do this for all kinds of things. They do it for like what climate change will look like or how a disease will progress through a population or how a disease changes in someone's life over time. So population health depends on a lot more than simple biology or individual level behavior. Models basically use really complicated math to predict the potential parameters of an epidemic. What's really important to understand is that in order to make it work, we put assumptions in there and the assumptions we put in there change the result that we get at the end. So when you see wildly different numbers for how many people are going to get infected or die, it's because the assumptions were different. So by nature, this is an imprecise science. So it yields kind of ranges of outcomes based on the parameters that are used. And it's not an exact forecast. They're helpful to help us see the potential impacts of interventions and the potential costs of waiting to act. So that's what models are for. It's a potential forecast that we can use to kind of try and make some decisions.

[00:35:05] Dr. Nicholas Van Sickles
Ok. I think that's really good to explain. I really appreciate you explaining to me through me personally. I have some public health training, but not to the extent that you do by any means. And just even seeing these numbers, these models on the TV and they change, this pandemic has changed so rapidly. I think it's good to emphasize how this works. You can see it and you'll be like, "Whoa. They said this last week, though."

[00:35:28] Dr. Jo-Ann Jose
Yeah, it's not like voodoo. I think they get accused of being, partisan or inaccurate quite a lot. And I think that's
misunderstanding what they're intended to do. Like depending on what they are intended to do, but also what parameters they use, the numbers that they get are really different. So a good example of that is this week the White House announced some really scary numbers. I was like a little taken aback by those numbers. Lots of people were, too. My phone blew up with text about you about the thing. So they basically said that they predicted 100,000 to 240,000 deaths by the time this is over. Now, the question is, how did they get those numbers? And it's not entirely clear. So the White House says that they used 12 different models and then somehow integrated the data across those models. And without knowing exactly what assumptions they used, it's really hard to know how they got those numbers or speak to the accuracy of those numbers. But I will say, I picked out two models and I'll kind of tell you about those.

[00:36:24] Dr. Nicholas Van Sickles

Ok.

[00:36:24] Dr. Jo-Ann Jose

There is a model from the Imperial College, which is an institution in London, in the U.K., and they looked at worst case scenarios. So the purpose of this model was to show what would happen with different levels of government action. So they basically showed what would happen if the government did nothing in both countries and in other places as well. And then what would happen with limited intervention, and then maybe more intensive intervention. So those numbers, the numbers for if we do nothing, those numbers were really scary. It was like millions of people would die. The other model, the IHME model, used a novel approach to help predict what hospitals would need. So the purpose of the IHME model is not to say whether or not the government should do something. It's to say, what can we do to help hospitals decide what equipment they're going to need and when they're going to need it? Those numbers are a lot more conservative, more like the numbers that the White House kind of published the other day. So depending on the model, what the purpose is and what parameters you're putting in it, you'll get different numbers out of it. And that's why the forecasts, I guess-- I don't really like to use that term, but the the press uses that term quite a lot-- that's why it changes all the time, because the assumptions are changing. But also the purpose of each model is slightly different.

[00:37:35] Dr. Nicholas Van Sickles

It's good to know. I think it's really helpful to understand because I, like you, was very alarmed when I saw those numbers. And I think it's good to know that they do serve, take it as what the purposes is, you should listen. You should do social distancing. This is why. But if it changes, don't feel like all of your work was for waste. It wasn't. Perhaps the assumption wasn't right going in. But you still did the right thing.

[00:37:59] Dr. Jo-Ann Jose

Yeah. And I think the first time that we did this, I mentioned that if we do this correctly, which, you know, may or may not actually happen depending on how things go. But if we do it correctly, the idea is that people should find our response to have been overblown, because if we do it correctly, the impact of the epidemic will be much less than it would have been without all of those measures. So the hallmark of a successful public health intervention in outbreak containment is that the outbreak is small, which means that a good number of people will think that the outbreak wasn't that big of a deal to begin with.

[00:38:30] Dr. Nicholas Van Sickles

That's tough. That's really tough. Well let's think on a happy note, because I want to say that you, even though we've had a lot of conversation about people dying and things that are sad and economic stress, you I've noticed this whole time have talked about a lot of happy moments like collaboration and things like that. Should I and should people who listen to this remain optimistic?

[00:38:55] Dr. Jo-Ann Jose

So this is not a scientific question. It's a metaphysical question. And I do have an answer to it. So I think optimism is a choice and it's the choice that I'm making. And here's why. I think there is enormous evidence that we are doing things that are unprecedented and incredible in a time of really difficult circumstances and really impossible amounts of stress on individual people, on health systems, on governments. So I think that social distancing is an act of global solidarity and is really inspiring to me. So many of us have done the right thing, even though it hurts and it wasn't comfortable and it like sucked all around because it was the right thing to do, not just for us, but for our communities and for the world that we live in. So I think that's really incredible. I think scientists working together and cooperating is really inspiring, as well. So I'm an HIV doctor, which means that I already was like a major fan of Dr. Anthony Fauci. But he is 79 years old and he works like 16 to 19 hour days. He runs 3.5 miles a day. He, like, sleeps four hours. If he can do that, we can all do our part. So I find him so impressive, and I think his leadership is so important. And then I think I see acts of of people doing heroic things all around me, every health care worker who goes to work accepting the personal risks to them and the risks to their families. That's incredibly heroic to me. I think all of the people in the community who are supporting people on the front lines who are encouraging their friends and family to do the right thing, who are maintaining people's spirits, that's really cool. There's this article that I sent you about this woman in Maine who has a dog sled team and uses it to deliver groceries to her elderly neighbor. What an amazing thing to do. And I really like to spend my reading time on COVID finding at least a couple of things like that because they give me a lot of hope. I think there are whistleblowers in medicine. I think there's a Navy captain who was recently reassigned because he brought to
everyone's attention some unsafe conditions. And I think the fact that people are willing to risk their jobs and their livelihoods in this incredibly scary time to make sure that everyone is safe is incredibly inspiring. I think all of these essential workers, right? People who work in Amazon delivery services and other delivery services, people who stock our grocery stores. I would love if those people had choices about whether or not they had to show up, which the reality is that for a lot of them, that isn't a choice because they are financially in a very difficult position. But I still so appreciate their work. I never go to a grocery store or interface with someone who is an essential worker, who is not a health care worker, without saying thank you, because I think it's so incredible and keeps our world running in a really inspiring and incredible way. And then I've had patients who have been so lovely and kind. I'll call them for a telephone visit but then their first question is about how I'm doing and whether I'm OK. People will send me like little notes through the EMR to say, "I'm just thinking about you. I don't want to bother you, but I want to I want you to know that I'm thinking about you and hoping that you're safe". So I think if you will look for it, there's a lot of things to be optimistic about. I think we do the best we can and we persist. I'm a huge Lord of the Rings fan. I have this little quote from it that's printed out and on my desktop. And it's from Gandalf and Frodo. Frodo says, "I wish it need not have happened in my time." "So do I," said Gandalf, "And so do all who live to see such times. But that is not for them to decide. All we have to decide is what to do with the time that is given us." And I really think that's so important right now.

[00:42:29] Dr. Nicholas Van Sickles
That is really important. I love that. Well, we will wrap up there, but thank you for ending on an optimistic note. A metaphysically optimistic note.

[00:42:39] Dr. Jo-Ann Jose
Thank you so much for having me.

[00:42:41] Dr. Nicholas Van Sickles
I love it. Talk to y'all later.