Hello all, and welcome to the MedicAlert LIVE Healthy Hour. Today our subject is heart disease and COVID-19 – Q&A with Dr. Ira Nash. Glad that you chose to join us today. For those of you who have joined us in the past, welcome back. Those of you who it's your first visit with us, we welcome you. We put the Healthy Hour into place a couple of months back, and it's a great series of informational events for our members. I’m your host, Melody Howard. I'm the Director of Community Alliances at MedicAlert Foundation. And joining me as co-host today is Julie Hylton, our Vice President of Communications at MedicAlert Foundation. Welcome Julie.

Hello everyone!

Here’s today's agenda. We'll talk about MedicAlert and I'll share a little bit of the MedicAlert history. We will spend the bulk of our time on the heart disease and COVID-19 Q&A with Dr. Ira Nash. And finally, we'll also share some resources for you.

So a little bit about MedicAlert, for those of you who don't know about us. MedicAlert is actually the original creator of the medical ID in 1956. What's unique about our foundation, MedicAlert, is that we go beyond just an ID. Our IDs are backed by a 24/7 emergency response team who are standing by to relay your critical medical information to first responders. And MedicAlert is the only nonprofit organization in the medical ID space. All of our revenues fund our emergency services and help provide IDs and memberships to people in financial need. Our mission is to save and protect lives by sharing vital information in our members moments of need.

So here's a little bit about how our service works. You get an ID bracelet with your most vital medical information. For those of you with heart conditions, this is so important to include that information because in an emergency, paramedics and first responders need to know this information so that you're treated properly. Your medical ID prompts first responders to contact MedicAlert on our 24/7 emergency response line. And our emergency response team provides them with your full health record - which includes information such as your health data, medications you’re taking, and emergency contacts.
We’ve trained first responders to look for your medical alert ID, empowering them with vital information. Now more than ever given this current pandemic, it’s so important for first responders to know about existing conditions so that you get the best possible care. MedicAlert is your voice when you need us most.

Julie Hylton: 04:28 Melody, I would add to that something that we rolled out recently - a partnership with Rapid SOS and the 911 centers in the US. If someone calls into 911 from a number associated with their MedicAlert profile, we’re able to send their medical information to first responders before they even arrive on the scene via the partnership with Rapid SOS. So while MedicAlert has been around since 1956, we’re continually evolving to try to deliver more and better services for our members.

Melody Howard: 05:02 Great. Thank you for that point. Very valid, Julie. So today I want to talk to you a little about our guest speaker, Dr. Ira Nash. Welcome Dr. Nash. Dr. Nash is the Senior Vice President and Executive Director of Northwell Health Physician Partners, and a professor in the departments of cardiology, occupational medicine, epidemiology and prevention at the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell. After graduating from Harvard College, Dr. Nash received his MD degree from the Harvard MIT program in health sciences and technology at Harvard Medical School. He is board certified in internal medicine and cardiovascular diseases, and was a member of the cardiac unit at the Massachusetts General Hospital and on the faculty of Harvard Medical School. He moved to Mount Sinai New York in 1995 and held a number of senior positions. He was named the Chief Medical Officer of Mount Sinai in 2009, a position he held until moving to Northwell Health in 2012.

Dr. Nash is a fellow of the American College of Cardiology, the American Heart Association, and the American College of Physicians. He’s a former national spokesman for the American Heart Association. In 2015, he was awarded the first National Physician of the Year Award by Press Gainey for his leadership and improving the patient experience. He is passionate about the need for effective physician leadership and about engaging patients through transparency and data sharing. He keeps a blog, Auscultation, where he addresses contemporary issues of medical practice and health policy. Dr. Nash is also the on-air host of Well Said with Dr. Ira Nash, an award-winning health and wellness radio show and podcast produced in association
with WRHU, Radio Hofstra University. In addition to his professional responsibilities, Dr. Nash served his country as a commander in the medical corp of the United States Navy Reserve. He is married and has two daughters. Welcome Dr. Nash.

Dr. Ira Nash: 07:07 Thanks so much.

Julie Hylton: 07:09 We’re very grateful to have you with us today.

Melody Howard: 07:12 Very grateful. So now we'll get to the meat of our presentation here. Thank you so much for all the great questions. We had so many great questions, and so we'll try to cover as many as we possibly can. We're going to answer some questions in different categories of cardiovascular heart diseases, and how COVID impacts that. Some different conditions and how those impact the risk of COVID, such as congenital disease. We had a lot of questions around arrhythmias, different types of arrhythmias. So we'll spend some time covering that. Then questions around COVID outcomes for people with heart disease. And then the question we all have is about staying safe while things start to open back up. So we will kick those questions off. This question is in the cardiovascular and COVID category.

Q. Are people with heart disease more likely to get COVID than other people? And what does it mean when people say cardiovascular disease is a risk factor?

Dr. Ira Nash: 08:12 Well, first of all, thank you very much for having me this afternoon and I'm delighted to be here. And I hope to share a little bit of insight with you and our listeners about COVID-19 and heart disease. So I think this is actually a great question to start off the afternoon.

And before I even get to that, I want to make a couple of general statements that I think will stand us in good stead as we go through the rest of these questions. And the first is that there's still a lot we don't know about COVID-19. And despite the fact that over a million people in the United States have probably been infected and we've had a hundred thousand deaths, there's still much to be learned, and we're still coming to grips with all of the different aspects of this disease. But one thing I can say with assurance, is that most people who get COVID-19 are going to do just fine, and will recover completely. And many of those patients or individuals may not even know that they've been infected.
And so while I'm happy to share information about the more serious aspects of this, I want to make sure the broader context of this is understood - that again, most people who get COVID-19, they're going to do just fine.

But there is a certain percentage of people for whom this can be a very serious illness and obviously can be fatal. So it's important for all of us to do our bit, to help prevent the spread of this. So with the first question - are people with heart disease more likely to get COVID? The answer to that, as best we can tell, is no. So the risk, when we say that cardiovascular disease is a risk factor, what we're really saying is it doesn't make you more likely to get it. What it does do is make it more likely that you'll be in that group of individuals who may get into trouble with it once you get it. So it's not a question of susceptibility to infection. It's really a matter of how well you can cope with the illness itself – and that's what's meant by cardiovascular disease being a risk factor. It's a risk factor for a worse outcome once you get the disease. And I'm sure the questions that come up will allow us to talk in more detail about what kinds of cardiovascular disease and what kind of outcomes. But I think that's probably all I want to say about this question right now.

Thank you. Also this question I found pretty interesting and I wanted to share it because, I really liked the way that it was written. It talks about things in terms that we can all understand.

**Q. Heart disease is a broad category with many different issues - plumbing, electrical, etc. Is one type of heart disease worse than others when dealing with COVID?**

Yeah. So first of all, to Mark and Sandy, I really like that kind of metaphor for heart disease as well. And I often talk to my patients about taking the heart as a house and talking about the plumbing in the house and the wiring in the house and the walls of the house. So I think you're spot on in terms of thinking about heart disease in these broad categories. And I think your question is also a very good one because it's not all the same. It's really not appropriate in that sense to just lump all heart disease together and say that you're going to get into trouble with COVID-19 if you have preexisting heart disease. But I would say that the things that put people with heart disease at risk once they develop COVID-19 are the things that impair people's functional capacity or ability to deal with stress. So what do I mean by that?
So if you think about people who may already have a difficulty breathing, or may already have problems with their ability to do activities of daily living or to exert themselves in some way due to heart disease - all illnesses create an additional stress on the cardiovascular system. So COVID is no different in that regard than getting any other kind of illness, in the sense that it makes your heart go faster and it makes your cardiovascular system need to work harder to deal with the physiologic stress of having a systemic viral illness. So I would say although this is a great way to categorize different kinds of heart disease, I think we're better off thinking about people's functional status and their ability to withstand a stressor than we are understanding if it's an electrical problem or a plumbing problem. It's really not.

Melody Howard: 13:56 So our next question was submitted by a number of people

Q. Is there a special or different risk for people who have stents?

Dr. Ira Nash: 14:06 I'm sure that's on the mind of many people with heart disease. And just as a reminder for those who may not know what we're talking about here. Stents are small metal tubes. They look like a little rolled up chain link fence, and are inserted into people's coronary arteries to help treat coronary blockages. And they're very prevalent. Lots of people have had this procedure done either to relieve symptoms, or because they've had a heart attack. I would say here again, the issue is not so much - do you have a stent or do you not? The issue is that by definition, everybody with a stent has underlying coronary heart disease. They have some blockages in their coronary arteries. They are people who are more likely to have had a heart attack, which may have left them with some weakened heart muscle. So it's not the stent itself that provides a special or a different risk. It's the underlying coronary artery disease that may make it more difficult for somebody to deal with the additional stress of having a serious and systemic illness like COVID-19. There's another aspect of this that I'm sure we'll get into about blood thinners, because a lot of people who have stents are on blood thinners at least for the first few months, and I'm sure that'll come out in subsequent questions.

Melody Howard: 15:42 You're right about that, it's coming up a little bit later. So our next question was also submitted by a number of folks.

Q. Does having a valve replacement put me at higher risk for complications from COVID-19?
Also a really good question. Let me just click through this. The best we can tell the answer is no, and I'm just going to qualify that a little bit, because there are some people who have some kinds of heart valves where they may be on blood thinners. And so we're going to get back into that blood thinner question, but in general, the answer to this is no. That a valve replacement in and of itself is not something that either makes it more likely that you would get COVID in the first place, or that you would do worse with it if you are somebody who gets the infection. What's more important: how good is your heart muscle function? So a lot of people who have valve replacements have them in the context of having some weakening of the heart muscle, and it's that weakening of the heart muscle that may limit their capacity to deal with the stress of illness. But the valve replacement itself is not the issue.

Our next question also comes under the same category conditions and risk and was submitted by Ben, Joseph, and a few others.

Q. What's the added risk for me, recently diagnosed with congestive heart failure. And does the stage of CHF matter?

So let's talk a little bit about the stages of heart failure. The American Heart Association and other organizations have helped cardiologists, patients and other physicians understand heart failure by categorizing it into different stages. Those stages are based on how symptomatic somebody is, and how impaired their heart muscle function is. Those are important because different treatments are appropriate at different levels of either heart muscle impairment or patient's symptoms. So categorizing heart failure in that way helps signal to patients and doctors what the appropriate treatments are at each stage along the way. The stage of heart failure does matter, but it matters more in terms of making sure that the patient with heart failure is on the right treatment. And there's nothing that is more important in terms of the prognosis of patients with heart failure, whether they have COVID or whether they don't, than to make sure that you're on the right combination of medications and other interventions for heart failure.

Now, does heart failure pose an added risk for somebody who gets COVID-19? I'm going to go back to what I said before. Yes, it does in that the stress of having a serious systemic illness is borne less well by people who already have a cardiovascular system that is challenged about dealing with stress. So people
with congestive heart failure may already be a little short of breath. They may already have some impairment of oxygen levels in their blood. And so if that takes a hit because of the way COVID-19 affects their lungs or other organ systems, then they could get into trouble more rapidly than other individuals. And again, it just makes the point that it’s really important for people with heart failure to be on the right medications. And those medications ought to be continued and closely monitored if a heart failure patient gets COVID-19.

Melody Howard: 19:58 I’m sure that if someone with heart failure is having shortness of breath, it might be hard to know if it’s because of their heart condition or if it’s COVID.

Dr. Ira Nash: 20:12 You’re absolutely right. It also poses a diagnostic challenge. And that’s true of lots of other things that cause people to be short of breath. This is something that cardiologists deal with on an everyday basis. Shortness of breath is a symptom for a million different diseases, heart failure being one of them. And so one of the things that your doctor or your cardiologist is skilled at doing is asking the right questions and doing the right tests and examinations to sort that out. But you’re absolutely right - it can cloud the diagnostic picture as well.

Melody Howard: 20:58 So this question:

**Q. I have a pacemaker, what does that mean for my risk in relation to COVID-19?**

Dr. Ira Nash: 21:04 Well, the good news is, probably nothing. Pacemakers are devices that are put into place to help regulate the rhythm of the heart. And generally speaking, that has very little to do with susceptibility to getting COVID-19. And probably has nothing to do with the risk of having a bad outcome, if you do get it.

Melody Howard: 21:40 So our next question is related to hypertension. A lot of people asked about this.

**Q. Is hypertension a risk factor? And what about pulmonary hypertension?**

Dr. Ira Nash: 21:46 Yeah, so first of all, let's distinguish hypertension or high blood pressure from pulmonary hypertension. Hypertension is the term that medical professionals use to refer to high blood pressure, and that's in your systemic or arterial circulation. That's what the doctor puts a cuff on the arm, and you can
check your blood pressure at home with home devices as well. Pulmonary hypertension refers to an abnormal elevation of the pressure in the circuit between the right side of the heart and the lungs. And there are a whole host of diseases that can lead to elevation of pressure in that right-sided circuit. They're quite separate and distinct from the more kind of common run of the mill high blood pressure that we call hypertension. So two very different things. And the hypertension question is really interesting, because many early reports coming out of China and subsequent reports coming out of early experience in the United States suggested that hypertension was a risk factor for worse outcome with COVID-19.

As this has been teased out a little bit more, it's not entirely clear that that is not just an artifact of the fact that as people get older, hypertension becomes more prevalent and age seems to be a factor in doing worse with COVID-19. There's nothing in the medical literature that explains why high blood pressure itself should lead to a worse outcome. And again, that's absent some other consequence of having high blood pressure. So we know that high blood pressure can lead to heart attacks and can lead to other things that may impair an individual's ability to deal with stress or to fully oxygenate the blood. So that's a separate thing, but high blood pressure itself, it's really not clear why that would be a factor.

And it's not honestly clear that it is a factor, and not just an artifact of the prevalence of hypertension in our community. The fact is that the prevalence of hypertension increases with age. Pulmonary hypertension is a separate thing altogether, because one of the things that is a hallmark of pulmonary hypertension is a stress on the right side of the heart. And in the more serious forms of pulmonary hypertension, an inability to fully oxygenate blood going through the lungs. And so any disease that has a profound effect on the lungs, like COVID-19, could be particularly dangerous for people with pulmonary hypertension.

Julie Hylton: 25:14 Well, going back to your first point around the prevalence of hypertension, I believe according to the American Heart Association, there's over a hundred million people in the US that have hypertension. And would it matter whether that hypertension was well controlled or uncontrolled?

Dr. Ira Nash: 25:31 Yeah, so that's a really good distinction to be made. And yes, it does. Hypertension that is well controlled is much less likely to
lead to those secondary consequences that would impair somebody's ability to successfully combat COVID-19. And so here again, the same theme that with all forms of heart disease, it's important that the condition be brought under control with the best medical treatment. And that treatment should be continued during whatever illness or exposure somebody might have to COVID-19. So I hope that answers what you were asking.

Julie Hylton: 26:20 Yeah, it does. I think it's just now is not the time for people to let their guard down on some of these chronic conditions.

Melody Howard: 26:29 So our next question, also in conditions and risks, from Ingrid.

Q. Does having cardiomyopathy or myocarditis put me at greater risk?

Dr. Ira Nash: 26:37 This is a great question, Ingrid, and I'm going to start by distinguishing between those two things. Cardiomyopathy is a broad term. It just means that the heart muscle itself is not functioning normally. So if we go back to the house that we were talking about before, now we're talking about the walls of the house, not the plumbing, and not the electrical system. Myocarditis is a particular condition where there's inflammation within the heart muscle itself. So let's take these one at a time. Certain kinds of cardiomyopathy can lead to weakness of the heart muscle, and that can impair somebody's ability to deal with physiologic stress. And so in that way, we could connect those two dots and say, if you have a significant cardiomyopathy that has left you with impaired heart muscle function, then yes, that would put you in a higher risk category for somebody who might not do as well with COVID-19.

27:55 Myocarditis, as I said, is a particular circumstance where there's inflammation within the heart muscle itself. And that's really interesting because there have been very well documented case reports where COVID-19 can cause myocarditis. And so, I'm not sure if that was the intent of this question, but myocarditis is kind of a rare entity. So I can't imagine there are too many people who have myocarditis and then have the severe misfortune of getting COVID-19 on top of that. But it is true that myocarditis is a potential complication of COVID-19. And it's not entirely clear whether that's a direct viral infection of the heart, which can happen, or whether it's a result of the intense, inflammatory reaction that occurs in response to a COVID-19 infection, but that is a grave complication of COVID-19.
Melody Howard: 29:10 So next question, we had a few submitters including Vivian, Jeanette, and Sam. I think you touched on this earlier, but it's a great question.

Q. What are the risks for people who have heart disease along with diabetes, kidney disease, auto immune disorder, or other chronic conditions?

Dr. Ira Nash: 29:28 It is a good question because it makes the point that a lot of folks have multiple chronic conditions. And you've lumped a few here that are frequent to co-travelers. It is often the case that people have heart disease with diabetes, because diabetes is such a profound risk factor for developing coronary artery disease and subsequent heart failure. We know that high blood pressure can cause kidney disease and heart disease, and so those two things go together. Aging makes all of these diseases more prevalent. So the bottom line is it's not uncommon for somebody to have a combination of diabetes, heart disease, kidney disease, and so on. And I would say that as, and this is going to sound like a broken record, but I think that the issue here is kind of a general tolerance in the physiologic sense of dealing with stress.

30:55 If you have limited amounts of what we call cardiovascular reserve, you don't have the ability to increase your heart rate without putting undue stress on your heart. You don't have the ability to pump more blood around without placing undue stress on your heart. Then that's going to put you at a higher risk of getting into trouble with COVID-19. The virus is a major physiologic stress - and the more of these other conditions that you pile on like kidney disease, diabetes, and so on - the worse that is. I said before that COVID-19 or the coronavirus can directly affect the heart. Well, it can directly affect the kidneys too. And that same intense, inflammatory reaction that it provokes in people who are infected, it can also impair kidney function. It can also make your diabetes go out of control, can also impair your heart muscle function. So it's the more ways in which your organ systems are vulnerable, the more likely anyone is to get into trouble, either directly from the virus or as a result of your body's intense, inflammatory reaction to the virus.

Julie Hylton: 32:18 I think when you're talking about comorbidities, we had a really great session a couple of weeks ago about diabetes and COVID-19. And one of the things that Dr. Perfetti mentioned is that the things that seem most highly correlated in terms of bad
outcomes consistently were age and obesity. And, you know, those tend to be things that are comorbid sometimes with diabetes and sometimes with heart disease.

Dr. Ira Nash: 32:44 I'm glad you brought up the obesity, and we talked about age. There's probably some deep connection that still needs to be sorted out between the inflammatory reaction to this disease and the damage that it causes. And the fact that inflammation is a profound part of a lot of these other chronic conditions. And so there's a connection there that we're just now starting to understand or tease apart.

Julie Hylton: 33:29 Learning more everyday.

Dr. Ira Nash: 33:30 Exactly.

Melody Howard: 33:32 For sure. So now this next question has to do with congenital heart disease.

Q. My child has congenital heart disease. Does this make her high risk for COVID-19 complications?

Dr. Ira Nash: 33:43 Well, first, sorry to hear that your child has congenital heart disease. But again, that's a very broad category. So it includes people who have a minor small connection between the two upper chambers of the heart that they can live with without difficulty their entire lives. It also includes people who have major kind of abnormalities of how the heart chambers are arranged, and the arteries are connected and so on and so forth. I think this is yet again a question of functional status. I would say that somebody who's had a repair of a congenital anomaly, and has normal heart muscle function and has a normal exercise capacity - then I wouldn't imagine that that child has any more to fear from getting COVID than anybody else. People who have complex congenital heart disease, particularly individuals who have cyanotic heart disease - meaning they don't fully oxygenate – that's a bit different. They don't have fully oxygenated blood circulating in their systemic circulation. Those people would be at higher risk because they have just a much narrower margin of safety, and especially if it involves the pulmonary circulation as we talked about before.

Julie Hylton: 35:32 So again, it's a continuum based on function from the starting point.
Melody Howard: 35:42

So now we're onto the questions about arrhythmias; we had many of those today.

Q. What impact does AFib have on my risk for complications with COVID? And - I have AFib, if I contracted COVID-19 how will it affect my heart rate?

Dr. Ira Nash: 35:58

So I'm going to make a comment before I try to answer the question. There's probably a distinction to be drawn here between people who have atrial fibrillation, chronically, meaning they're in it all the time, and people who have what we call paroxysmal atrial fibrillation, people who go in and out of atrial fibrillation. For people who have paroxysmal atrial fibrillation, any kind of stress or just a fever can bring on an episode of atrial fibrillation. So for folks that have a history of paroxysmal AFib, it wouldn't surprise me at all to hear that they're more likely to have an episode if they get sick with COVID-19. Just as they might if they got sick with bacterial pneumonia or a kidney stone, you know, it's not a specific reaction.

The AFib itself though, is not a risk factor for worse outcomes. And again, if you're on the right medications and your heart rate is being appropriately controlled and you're on appropriate prophylaxis for blood clots that are often associated with atrial fibrillation, then the AFib itself is probably a non contributor to your risk. For the second question, if I contract COVID, how will it affect my heart rate? I would say just as your heart rate will normally respond to stress. This is a stress like running up a flight of stairs, except you're doing it continuously - just the way that having a fever in general can cause an increase in heart rate.

Melody Howard: 37:55

Certainly makes sense why when you're sick, your heart rate increases and you're exhausted.

Dr. Ira Nash: 38:02

Actually, I'm glad you brought that up because it goes back to the myocarditis question a little bit. It's often the case when people get even a mild viral illness that they feel kind of draggy and short of breath and weak and tired. And for a certain percentage of those people, it's probably because their heart function has deteriorated transiently as a result of the viral infection. And we don't routinely do echocardiograms or assess people's heart muscle function when they have a viral illness. But when this has been looked at systematically, there's pretty significant incidents of depressed left ventricular function. That
is a decline in the ability of the heart to pump blood just from the run of the mill kind of viral infections that might lay low with a winter cold. This virus is just a much more profound version of that, but it's not unusual in the greater scheme of things for viral illnesses to do this.

Melody Howard: 39:17 So the next question also on arrhythmias.

Q. Do SVT (supraventricular tachycardia) and PVC (premature ventricular contraction) problems increase my risk? I have had four heart ablations.

Dr. Ira Nash: 39:29 I would say no with a little asterisk. Again, if you're the kind of person who has stress triggers for your arrhythmia - so increased catecholamine's, the things that produce the increase in heart rate and increase in blood pressure - that comes with dealing with stress. Then that can at least theoretically trigger an arrhythmia. But the arrhythmia itself is not a risk factor for having a worse outcome with COVID-19, unless you have the heart rhythm problem along with some other problem with your heart, like heart failure, or impaired left ventricular function that can lead in some cases to PVCs or ventricular arrhythmias. So just to clarify, the arrhythmias themselves are not the problem. The stress may trigger a paroxysmal arrhythmia, but it's really the underlying heart condition that's driving the bus here.

Melody Howard: 40:44 So our next questions relate to COVID outcomes.

Q. Does the virus attack the heart or is the heart at risk from the effects of the virus on other organs? And what specific effects have been observed in heart patients with COVID?

Dr. Ira Nash: 40:58 Yeah. So great question. We've talked about this a little bit already. So I would say that the virus can attack the heart. It doesn't necessarily routinely attack the heart, and the heart is also susceptible in important ways to the effect of the virus more systemically. For instance if your lungs fill with fluid because your lungs are being attacked by COVID-19, then that may make it much harder for the heart to pump blood through the lungs. You can develop a syndrome of heart failure on the right side of the heart because the lungs are in such bad shape. And the inflammatory response that is the body's reaction to this infection can adversely affect the heart directly, meaning intense inflammation can impair heart muscle function.
And then the third way that sort of indirectly connects COVID-19 and the heart is that we’ve come to learn that COVID-19 can dramatically increase the risk of blood clotting. And that can happen either in very tiny little blood vessels that get clogged up and impair the ability of the heart to function. Because remember, the heart is a muscle like any other - well, not like any other muscle - but it is a muscle. And so it needs its own blood supply. If that blood supply is interrupted, then the heart can’t do its job. There are also reports of blood clots in larger arteries and blood clots in veins. And the indirect effects of those, maybe we’ll have a specific question on that coming up, can certainly have profound effects on people’s cardiac function as well.

Julie Hylton: 43:25 And that does tie directly to our next question, actually.

Melody Howard: 43:29 Perfect. Let’s roll right into that.

Q. Do anticoagulation medicines decrease your chance of complications from COVID-19?

Dr. Ira Nash: 43:36 Yeah, so I want to be careful in how I answer this. I don’t want anybody to go out there and start taking anticoagulants if they don’t need them, right, because they’re drugs with serious side effects of their own. And so nobody should be trying to stock up on blood thinners as a way to improve their chances of getting through a COVID infection. On the other hand, it is true that people who are, pretty sick with COVID - particularly people who are hospitalized - have a very high frequency of blood clots, both in arteries and in veins. Part of the in-hospital treatment for patients with serious COVID-19 is anticoagulation, and that’s to prevent blood clots and prevent the complications of blood clots. Many of those patients should probably be continued on anticoagulation for a period of time after they go home. We know from other illnesses that if you are hospitalized with a wide range of different medical illnesses, that also increases your risk of blood clots and it’s been standard medical practice for a long time to give blood thinners to hospitalized patients across a very large number of different diagnoses. What we’re finding in COVID is that it’s even more important to do that, and that protection needs to be extended outside the hospital once people recover and go home.

Melody Howard: 45:31 So our next question has to do with other medications lots of people with heart disease take.
Q. Do beta blockers or ACE inhibitors reduce the risk of death from COVID-19?

Dr. Ira Nash: 45:41 Not directly - but if you need these medications for the underlying reason for which they've been prescribed, then it's important to continue to take them. And in that sense, withdrawing medications that you would otherwise need is a bad idea. It's a bad idea in general, and it's a worse idea if you're sick with another illness. And so you know, if you're on a beta blocker for a good reason, or you're on an ACE inhibitor for high blood pressure, by and large those medications should be continued during your treatment for COVID-19.

Julie Hylton: 46:20 I think we've already answered the next question then Melody, we can probably move to the one following.

Melody Howard: 46:26 So this one is also on COVID outcomes. This question submitted by Candice.

Q. How does the use of hydroxychloroquine to treat COVID affect heart patients?

Dr. Ira Nash: 46:39 Well, first we should say that there's no good reason to use hydroxy chloroquine to treat COVID-19. There's no high quality evidence that suggests that this is effective in any way, either as a prophylactic agent or as a treatment. So let's start with that. And there are some data to suggest that it actually leads to worse outcomes, and that's because it does have a potential effect on the heart, and that is that it can provoke certain heart arrhythmias in susceptible individuals. So - no good reason to take it, and a potential life-threatening complication if you do. Not a good idea.

Julie Hylton: 47:36 Thank you for making that so clear. There's been so much noise around this.

Dr. Ira Nash: 47:40 Yes. Sadly noise is the right word to describe some of what we've been hearing about this.

Melody Howard: 47:50 So our next question was submitted by a number of folks

Q. I recently recovered from COVID and have a family history of heart disease. Should I see a cardiologist to assess any impact to my heart health? Also, can COVID-19 cause heart damage or disease in an otherwise healthy patient?
So the answer to the second one, we've already talked about it a little bit, is yes, in rare instances, people who have a perfectly normal heart can have profound impact on their heart from a severe case of COVID-19. That said, if you have had COVID-19 and recovered, and you're feeling well, I don't think there's any particular reason to suspect that you've had a significant impact on your heart. And so I would actually say seeing a cardiologist would be low on my list of important things to do following recovery.

I would think for most people, as you said earlier, their symptoms are going to be fairly mild. They're going to get through this without a lot of impacts. It might be different if someone was hospitalized or on a ventilator.

Yeah. And Julie, thank you for reinforcing that. You know, we've been talking about generally all of the things that I've been saying have been really relatively rare events, right. We know from population studies that a significant percentage of individuals who get COVID don't even know that they've had it. And the vast majority of people who have it and know they have, it are not sick enough to go into the hospital. So you know, the people who are sick enough to go into the hospital are the ones who are really are the ones who get into trouble and have some of these complications and situations that we've been spending most of our time this afternoon talking about.

Right. And luckily for most of us, those are the outliers.

So our next question related to staying safe.

Q. With States reopening because of lower infection rates, how should people with heart disease remain vigilant? When, and how is it safe to come out of quarantine?

Well, I'm going to answer this more from a public health perspective than from an individual perspective, because we're all dependent on each other's behavior to prevent the spread of this illness. I would like to reframe this question a little bit, and think about it in terms of what the general population needs to do so that people with heart disease and other people at high risk are not put in a situation where their lives are in danger. And that's really what we're talking about here. So it shouldn't be the burden borne only by the elderly or people at risk. We all have a part to play in preventing the spread of this illness.
The things that we should all be doing are wearing a mask when you're out in public. And just to make the point, the mask is not to protect you. The mask is to protect the people around you. All right. So, it affords a little bit of protection from the person wearing the mask, but the bigger effect is that it prevents the spread from somebody who might be infectious and doesn't know it. And we should be keeping our distance now with the prevalence going down in some communities. I'm talking to you from New York, which was the hardest hit state, and in a place where we saw the greatest concentration of COVID-19. But even here we're starting to relax some of the restrictions because the prevalence of the disease is going down, because many fewer patients are being hospitalized, and because we seem to be over the major hump in our community.

That's not true everywhere. And so this is a very local kind of phenomenon. So I would say this is the job of local public health officials. It's the job of mayors and governors and county executives to figure out what's going on in your city, state, county, region. And it concerns me quite a bit that I see the data for Texas or Florida, or Georgia, California. These are folks that are not following the curve that New York is on. New York, I'm happy to say, is declining sharply. It's going up in Florida, it's going up in Texas, it's going up in Georgia. And I think it's quite worrisome that at the same time that rates are increasing, that there seems to be this magical thinking that it's okay to go outside, and take your mask off, and gather in large groups. I think we're going to get into trouble from that.

Related to this is, you hear a lot of talk about a second wave. What does that look like?

Well so your guess is as good as mine. And, and the truth is nobody really knows, but I think there are a couple of different patterns that people have forecast as possible for, let's say through the end of the year. Because beyond that, God only knows what's going to come our way, but I think it could be what you described as a second wave. Meaning we relax the lockdown that many of us have been living under, the virus takes advantage of that, and rates take off again and we get a huge spike. It's also possible that it'll reach some sort of steady state plateau where there's a lot of this in our communities, but it's not overwhelming the medical system. But remember that means a lot of people are getting sick. A lot of people dying. You know, that's not necessarily a pretty sight. And then there are some people who think that it's going to just kind of bounce
along and it'll get a little bit better. It'll get a little bit worse in a cycle.

55:15 I think the truth is, and believe me, I'm no expert here, but from what I've read and seen, we can effectively contain this and get back to some semblance of normalcy in our lives, if we wear masks in public, attend to good hand hygiene, keep our distance in situations where you may not be able to wear a mask or you’re going to be with somebody for an extended period of time. And for God's sakes, get a flu shot when they become available. Because the last thing we want is a flu pandemic on top of the COVID pandemic. And so I'm reasonably optimistic that those things can work. Where I get nervous is when I see people completely ignoring all of those recommendations, and that can have serious consequences for all of us.

Melody Howard: 56:32 So our next question:

Q. is it safe to exercise with a mask if you have reduced heart function?

Dr. Ira Nash: 56:40 You know, that's a really good question. I'm going to revert to the kind of advice I give to all my patients about exercise, which is that nobody should be exercising to the point where they feel uncomfortable. So I think exercise is great. Exercise is important. It's good for your heart. It's good for your general overall health, but that doesn't mean exercising to exhaustion. It doesn't mean exercising to uncomfortable symptoms. You have to appeal to people's sense of community and decency - it's the same as what I was saying about the mask. The mask is not for you, the mask is for the people around you. I think it's about appealing to people's sense of responsibility to their loved ones and a sense of responsibility to their communities. Unfortunately, that's not terribly persuasive for a lot of people, but I can't think of a more compelling argument or reasoning than that.

Julie Hylton: 58:15 Right. And essentially you have to appeal to the greater good.

Dr. Ira Nash: 58:19 Yeah, well, that's exactly right.

Julie Hylton: 58:20 And then the, another question:

Q. How do I deal with a family member who's over 65 has heart disease, and isn't taking COVID seriously?
Dr. Ira Nash: 58:31 I’ve heard this from family and friends as well. And I don’t have a good answer to that. Unfortunately we live in a society where even what should be objective information somehow can become polarizing. So I think the best you can do is lay out the facts for people that people who are over 65, who do have chronic medical conditions and are at higher risk for complications if they get this disease. And, you know, maybe you could appeal to their sense of their obligation to their family, to their children or to their grandchildren or to their neighbors.

Julie Hylton: 59:42 That’s the exact conversation I’ve been having with my mother.

Melody Howard: 59:47 Well, we are actually like right at the very end of our time here. I do appreciate your answering all these questions Dr. Nash. Now we want to share some helpful resources for people living with heart disease.

Dr. Ira Nash: 60:06 So thank you for giving me a chance to shamelessly plug that. I’ve been fortunate to be the host of a health and wellbeing Radio Show done in collaboration with the Hofstra Northwell School of Medicine. The show is Well Said with Dr. Ira Nash. We have a podcast that is basically the radio show recordings. You can subscribe to that on Stitcher, iTunes, wherever you get your podcasts. We’ve done a whole host of extra shows about COVID-19. I think I’ve lost track of how many we did, but they’re all on our website. And we’ve dealt with every aspect of this disease that you can imagine from its effect on pregnant women, children, the elderly, and healthcare delivery in general. So check it out, subscribe, and thanks for listening this afternoon.

Julie Hylton: 61:15 And we’ve just sent that link out in the chat and we’ll also include it in a follow-up email to everyone that’s registered and have a link to the show there. I would encourage you if you enjoyed Dr. Nash’s insights today to really tune in, his show is really wonderful and very accessible. And I can see why you got that award for that level of humanity to the profession.

Melody Howard: 61:43 Also want to say a big thank you for your services as a vet. It means a lot.
We have a couple of other resources that are available. We'll provide links to all of these as well. They include some general COVID resources for people to learn more about heart health, as well as some of the latest on what the research is telling us and the findings so far.

**Northwell Health:** Coronavirus Digital Resource Center

**Hofstra University Radio:** Well Said with Dr. Ira Nash, Every Monday from 4 p.m. - 5 p.m. ET on 88.7FM WRHU

**American Heart Association:** Coronavirus (COVID-19)

**American College of Cardiology:** Coronavirus and Your Heart (Explainer Video)

**University of Chicago Medicine:** What heart disease patients should know about coronavirus (COVID-19)

**Science Daily:** Heart attacks, heart failure, stroke: COVID-19’s dangerous cardiovascular complications

**Johns Hopkins University:** Can Coronavirus Cause Heart Damage?

And as Dr. Nash explained, this is an evolving science where we’re learning more every day. So I encourage you to check out some of these resources.

Also on MedicAlert’s web site, we have a Coronavirus Resource Center where we have pulled out resources specifically for people that are living with many different chronic conditions, and helping you really understand what that means in light of COVID-19. So we've tapped into some very trusted sources here, and we hope you'll take advantage of that. If you enjoyed today’s session, you can check out replays from our recent Healthy Hours. We had an excellent session a couple of weeks ago about diabetes, and we've covered asthma and allergies, Alzheimer’s disease, autism, and more general COVID information. So I encourage you to check those out.

And in two weeks, our next Healthy Hour is: Managing Stress and Anxiety during COVID-19. We have a special guest, psychiatrist Dr. Paul Pouri. You know, 2020, this is the year to talk about mental health! We have all sorts of things going on in
the world, so we’re talking with Dr. Puri about mental health and coping skills. We encourage you to join us.

Melody Howard: 63:32 So please hang on for a quick survey. We'd really like to hear about your experience today. And please, don't forget to update your MedicAlert record. It's really important that we have the most up to date, current information in an emergency, because that's the information that we provide to first responders on your behalf. So if you don't mind answering our survey questions, that would be great.

Julie Hylton: 63:58 I'm seeing a lot of comments in the chat Dr. Nash, just letting you know that that your insights and help here is much appreciated. And your ability to cut through the noise and provide very clear answers is really, really helpful to a lot of people. So thank you so much for participating with us today.

Dr. Ira Nash: 64:19 My pleasure. Thanks for the opportunity.

Melody Howard: 64:23 We appreciate you very much.

Julie Hylton: 64:25 All right. Thanks everyone. Stay safe.