

Welcome to the opioid crisis, how we got here, where we are headed, and what we can do. My name is Jeannie Kuehler and I'm the moderator today along with my colleague Melanie Ordonez. I would like to turn it over now to our speaker, Nicole Browning. Welcome, Nicole.

Jeannie, I'm so happy to be here. Good afternoon, everyone. I'm happy you are able to join today. My name is Nicole Browning. I am a licensed professional counselor. I started here at Magellan in February of 2019 as an employee assistance program consultant and a utilization management care manager. Recently, I moved into the role of financial trainer. I spent the first 14 years of my career working with young people and addiction. That's really where my passion lies. And population I really love. I spent 2016 through 2019 working directly with the opioid crisis as it unfolded. I have been a public speaker, trainer, presenter on this topic and I'm really excited to be here to present with you all today. We are going to take a look at a review of opioids and how they affect your brain and what you can do about an overdose you are going to learn about today's opioid -- how we came to be in this crisis, current statistics, you will find out about the opioid addiction and the brain and what happens in the world that you can play in prevention and overdose response. Firstly, I just want to bring up this slide to kind of wrap our heads around what we are looking at. We are talking about here when. We are talking about opioids. For most of us when we hear the word heroin this is probably what we picture. We picture a needle and a spoon. However, that is not necessarily heroin of today. Heroin of today like this. One of these is actually glucosamine/chondroitin, for joint pain. What I would like to do is have a little audience participation here and I would like for you all to take a guess on which one is which. You can use the raised hand icon at the top and raise your hand if you think that the one on the left is heroin. That the greenlight capital. If you think the green and white one on the left is the heroin raise your hand, so we can get a guess. Who thinks one on the left is heroin?

Nicole, I am seeing tons and tons of raised hands.

Okay. All right. Okay. Let's pause responding and let's switch. Jeannie, if you can clear out those responses for me. Any guesses for the one on the right? One that is pretty much a white pill, solid white. If you can go ahead and raise your hand if you feel like the pill on the right is the heroin.

I am seeing number of responses for the one on the right as well. Lots of raised hands.

Okay. All right. Thanks for that. I appreciate that. Groups are pretty split on this. The real thing is who knows? Who is really sure? Even if you responded, were you really sure or just taking a wild guess? Who knows which is which? In this case, actually the one on the right was a heroin, one on the left is the glucosamine/chondroitin. That is the over-the-counter supplement and one on the right is heroin that we are seeing from local Police Department in town. The idea here is that heroin of today is just a pill. You don't necessarily need that needle and spoon, because it is stronger and easier to use and have access to. For those of you who don't know, that capsule or that pill of heroin is often called a button or a bead. The depending on where you live in the country it costs five dollars to \$10 a pill. The reason that is important is because for most of us in this country we are not scared of pills. We are a country who can tend to take pills for everything. In America we make up 5% of the worlds population. We have a 80% of the worlds painkillers and 99% of the worlds Vicodin. That is astounding. Do we have 99% of the worlds pain? Probably not. Right? That is enough prescription for every adult in America to have a bottle of painkillers. Is enough for every man, woman, and child to be on painkillers for 24 hours a day for one month. It is a lot of pills. The reason that is important is to kinda talk about how we got here. Just to clarify, when we talk about opioids, opioids include those prescription painkillers that with that that.

Right? Things like Vicodin or OxyContin, oxycodone, hydrocodone, those kinds of things. Opioids also include illicit substances like heroin and for now. Let's look at some of those overdose rates. In this chart we see drug overdose deaths from 1999 through 2017. There is a couple of key points here I want us to look at. First, notice the green line. It is kind of in the middle of the timeline and it kind of piques a little bit and starts going up from there. That is labeled as natural and semi synthetic opioids. That includes morphine, codeine, oxycodone, these are things you have heard of if you have ever had surgery or pain you may have been given more feeling or codeine or hydrocodone. This is an overdose rate that has been steadily growing over time. The next one I want to look at is the redline. It really kicks up around 2010. That heroin. The third one to really look at is this blue line. It is kind of a lighter blue. It is labeled synthetic opioids. It really skyrockets in 2014, 2015. When we talk about synthetic opioids that is fentanyl. You have probably heard about fentanyl being mentioned more and more. That blue line is not the fentanyl patch that your grandma may have worn or some end-of-life prescription. It is not actually pharmaceutical fentanyl, but man-made powder. Usually made in China and sent over to us illegally. A few things about that, about how we got here. A few things happened in this timeline. In the 1990s we were introduced to the pain scale. Right? On a scale of 1 to 10 how much pain are you in? Anytime you want to the doctor or a hospital you saw this sad face all the way to a happy face. It is completely subjective. Your three is my seven and somehow for others it's a 10. Totally subjective. The other thing that was happening is that doctors are being reimbursed based on patient satisfaction surveys. If you are not happy they get paid less. They wanted happy patients. Most Americans don't like to be in pain, muscle doctors prescribed painkillers to make their patients not only happy, but not to be in pain. Around this time OxyContin was introduced and marketed as nonaddictive. Doctors didn't think they were doing anything wrong. They were making their patients happy with this pain reliever that they really believed was not addictive. They thought they had this perfect answer. The only problem was, OxyContin is actually highly addictive. We started to see an increase of addiction and, therefore overdoses. If we move up on the timeline in the mid to thousands when we start to see that redline take off think for a minute about what happened in this country, specifically in Colorado. Right? Legalization of marijuana. Colorado really started supplying the United States with the best weed we had ever had. Unfortunately, cartels didn't up in change careers, but what they did is rip up the marijuana fields and planted poppy fields instead. The drug trade that used to bring us marijuana then brought us heroin. It's now also brings us Mexican methamphetamines. Which is that little pink line that you see towards the end, kind of kicking up in 2014 and 2015. The continues to be on the rise because of supply and demand they are shipping it here and people are using it. Right? So, methamphetamines being that illicitly made substance. I know that can sometimes be a little confusing, because we hear amphetamines, which is the ADHD medicine. When we talk about methamphetamine overdoses it is not medication, but that illicitly made substance. It used to be made in the United States and people were making it and now it's being made in Mexico and shipped up. These kind of things are all working together and the other thing that happened around that same time, actually is the fentanyl started coming into our country to supply that demand that we already had the opioids. Right? Kind of this perfect storm really started to happen. In 2017 we had more than 72,000 Americans die from drug overdose. I know 2017 sounds a little bit old, so let me show you the last graph that we have, which was for 2018. And 2018 the CDC reported a decrease of 4.6% of opioid deaths. That is a slight reduction in deaths, which is great. Right? Some reduction is better than no reduction. It is mostly due to fewer deaths involving prescription opioids. Experts are really suggesting that the lower opioid prescribing rate expanded the treatment and increased locks on access to really help explain the decline that we saw in 2018. But there were still 60,367 drug overdose deaths. Of the opioids were 69.5% of them. Two out of three of those opioid deaths involved synthetic opioids. Right? So, like we talked about that is fentanyl. On this slide is that black line. That other synthetic opioid is for now. But now is what is by and large killing people in this country now. When people go to buy drugs they're actually buying fentanyl. Whether they know it or

want to or not is because fennel is cheaper and mass-produced and a little bit goes further, so drug dealers are just using more fennel and putting it in anything. It is a white powder, so we can go in heroin, math, ecstasy, all kinds of stuff. Fennel is really being put into lots of different drugs, which is why we are still struggling a lot with these overdose deaths. So, even though there was a downturn, unfortunately it actually gave way to a steep rise in overdose deaths. Like I was mentioning for, with the methamphetamines and the cocaine. Actually, since I turned this slide deck and there was some preliminary numbers that were released for last year for 2019, which actually show there has been an increase again of 5% which would make the overall total in 2019 over 72,000 people again. That total is higher, just put it into perspective, that total is higher than any year total for car accidents or guns or a. It is also contributing to the overall life expectancy of the U.S. citizens. Our life expectancy is going down partially because of this epidemic that still continues to happen. This is just to give you an idea of what it looks like in your state. 2018 geographic map of overdose death rates you can. Where you are on the map and see where you live and see where your state falls. The darker the red the higher did the death rate per capita white tends to be lower in death rates. Now that we have really talked about how we got here and we have seen the numbers and know the statistics why? Why is this happening? Let's talk a little bit about what opioids do in the brain. Unfortunately, it looks like the animation didn't come through on this. I'm so sorry. The dopamine specifically, what dopamine does in your brain is it is your feel-good chemical. Is part of your reward system. There are natural ways for dopamine to be released in our brain. Food, for example, causes a release of dopamine. That's why we like it. When I talk about going to Mexican or making s'mores in the fire pit my mouth waters. Right? I'm excited and I get happy about food. Because I release dopamine. Whatever your normal level of dopamine is, what ever your fully loaded is, feeling your best, 100% fully loaded and you have a food you release dopamine an increase from 100% to 150%. You get that natural boost of dopamine. Nicotine also causes us to release some dopamine. You may know a smoker, a former smoker, maybe you are one yourself. I would love another audience participation piece here. Totally confidential. I can't see anything or know who is raising hands or anything. No shame. I would really like that you would raise your hand if you have ever attempted to stop smoking or to stop using nicotine. If you have ever attempted at all give me a hand raised.

Yeah. We are getting -- we have over 30+ raised hands.

Okay. Let's clear those out. Of around 30 raise your hand if you were successful. If you were actually able to stop using tobacco or nicotine. Give me a hand raised. I am seeing almost that 30 raising their hands. A little less. I don't know how statistically sound this is, but it looks pretty good.

In your guesstimate, it's the same as recounting in a room full of people. It's a good guess. One more question. For those of you who were successful and who have quit how many of you were able to do it the very first try?

First try we have around 10.

All right. 10 out of like 30, right? Because my guess is if you are one of those people that have tried you have tried three or five or 10 times. Laughed when I said can you do it the first try? We know it's hard. We know it's really hard. Most people have to stop several times before it works. Right? It takes several efforts. Part of that with the nicotine is the dopamine release when you go out for your, quote, fresh air you are actually getting a boost of dopamine. Your boost is up to 250% of normal. When you drop or break you out and you come back and feel better. You have some dopamine. You are feeling good. We know cocaine is addictive. It's 300% of normal. My shock moment when away, because you can see on

the slide. Look at heroin. 2200 times more normal . For those of you who have known someone who has tried to stop smoking and that's taken them many tries think about someone who gets this when they use heroin. Right? It is the most amazing euphoria someone has ever, ever felt when I get this 2200 times normal rush I want to do that again. So I do. Only I don't quite hit that. Maybe I hit 1800. That's still pretty amazing. I'm going to use again. And I hit 1500. And then the hit 1000. You are feeling good and I'm still going to do it again. Than I only hit 700 and 500. Right? You get the idea. You never quite hit that same hi again. When you hear the phrase tracing the Dragon this is the Dragon people are chasing. They are chasing that high of 2000. They are chasing that amazing euphoria. In that process the brain changes. You aren't able to handle all that dopamine, so your brain stops making it. You then need an outside source to replicate it or to feel like you have dopamine coming into your brain. Here is what that kind of looks like. This is a visual representation of what I was describing. When someone uses the first time they get really high and they feel euphoria. And then the come back down. They use again and they get high and the come back down. They use again and get high and come back down. There coming back down and right in the middle of the screen is where the brain stops making its own dopamine. Now when they come down it is below normal, in that read withdrawal section. They actually feel like they have to use again to feel normal. They will do whatever they have to to avoid that crash into withdrawal. Withdrawal is like the flu times 100. There cold, hard, shaking, sweating, you like their body is on fire. It's miserable. They do anything and everything in order to avoid that. That is part of the cycle that starts to happen. Another thing to remember here is that this cycle happens on all opioids. Not just heroin. If someone becomes addicted to their prescribed medication they could be using two or four or five Vicodin several times a day in order to avoid withdrawal. Two thirds of people who end up using heroin started with prescription drugs. They started on a drug that they may have been legitimately prescribed for real pain. Then they became addicted. So why would they go to heroin? Why not just keep taking the Vicodin? Because their prescription could run out or they could get used by their doctor. They can bite on the street. Prescription pain meds tend to run about a dollar a milligram. 20 milligrams \$20. 40 milligrams \$40. That one pill of heroin is only five dollars or \$10. That's not hard math to do. It does the exact same thing to the brain. People switch over, because it's cheaper and it's easier to find. Heroin versus prescription pain meds. That begs the question, how do you get better? By taking medication specifically made for opioid use disorder. Things like methadone, vivid trial, often his work in different ways, but they are really worked to bring that person out of the cycle, out of this up and down and up and down that we are seeing and into the normal zone. They all help reduce cravings. Ideally, they are using them in conjunction with behavioral treatment to help people stop misusing prescription painkillers or other things. As a counselor who has worked in addiction I cannot do therapy with someone who is on the left side of that screen. I'm worried about giving myself off the floor, out of pain, not throwing up I'm probably not going to be able to focus on what you're telling me about coping zones or about trying to get a job or hitting my kids back or going to a 12 step meeting meeting. If we can get someone into that normal zone than the counselor or treatment center can help them work on all of those other things they need to get their life back on track. Right? Ideally, this is a wraparound. This is medications and their pure treatment. About the brain. What things happen in the brain when you use opioids specifically? If we know that it changes the brain it changes the chemicals and it also changes the structure and how different parts of the brain work when you are in addiction. It also means that this is a disease. Addiction is a disease that can happen to anyone. It's not about those people anymore. It's all people. It could be your neighbor, your spouse, your nephew. We know that addiction plays no favorites but it cuts across all boundaries. It has a deep impact in our community and almost everyone knows someone who is or was struggling. You hear all the time things like I can't believe that happened to my kid or people don't believe this is happening in their neighborhood. That sort of thing. It's happening to everyone. However, there are some risk factors. There are some things that put folks at risk to develop an addiction. These factors on the slide are risk factors for addiction. We know this one more audience

participation ask. Jeannie is going to put a question box on the screen and I would like for you to type in what you think of the number one predictor is. From this list I'm going to run through it what you think is the best predictor that someone is going to develop in addiction? Victims of abuse, easily available in the, poor self-concept, difficulties coping with stress, weak family relationships, early experimentation, behavior problems, genetics. And these are all risk factors. What are your guesses for the number one? What do you think the number one risk factor is? All right. I'm seeing a lot of easily available. If it's not there I can't use it. This makes perfect sense. Right? We know that is a problem. Difficulties coping with stress. This makes sense, because if I don't know how to deal with stress I can easily use some sort of substance to had a my problem right? Genetics. I always hear a lot of genetics as answers. Because, yeah, right? We know this is real. If I have a family member who is addicted, particularly a parent, I am a four times more likely to become addicted myself. It really raises the stakes. Victims of abuse. Absolutely. Because, again, this can be my out. I don't know what else to do.. I get out of my head and I escape. I see almost everything on here has been answered. All of these I see on there as an answer. Yeah. They are all risk factors. Perfect. Thanks for that. The actual, I saw this as an answer so some of you are right, the number one predictor is early experimentation. Because how old are you when your brain stops developing? About 25. Mid 20s. If I start using earlier my brain is still developing and it's more vulnerable to the negative effects of drugs. Damage to your brain can actually happen quicker and become more severe than in an adult brain. If it happens faster is more severe in that young developing brain. Just a couple of factors to try to go with that. The majority of those who have a substance use disorder started using before the age of 18. They have developed their disorder by the age of 20. With my background I always worked with young people and I will tell you, this is about as valid -- I would say when I asked every single one of my clients Howard -- of old were you when you started using my guess is that probably 90% of them said 13 years old. Which may sound really shocking for some of you we are talking early experimentation. We are not talking heroin or math, we are talking I am stealing my brothers weed, drinking my moms bike, different stuff like that. That is early experimental Asian. Most kids I worked with said they started using around age 13, sometimes 14. That's when experiment Tatian is really starting. That is so important to talk to kids about drugs. For those teens that did start using before the age of 14 there the greatest risk for developing a substance dependence and they actually have a 34% prevalence he rate of lifetime substitutes -- substance abuse disorder compared to the rest of the population which has less than 10%. For each year that you wait to initiate substance use there is a 4 to 5% decrease what I'm saying here is the younger the brain the more likely you are to have long-term problems. The longer you can put off using the better. If people can wait until they are 18 or 21 and their brain is more formed they stand a better chance.. The other side of that is that someone could have all of these risk factors and never develop a substance use disorder. Because of protective factors. I like to call it the bubblewrap. These are the things that really protect you from the bad stuff.. If you are the victim of abuse but your parents got you to therapy that is a protective factor. You had parents who care and you got into therapy and got some help. Maybe your family was awful and you had a really speak weak family relationship and drugs were easily available. But your best friend's parents treated you like their own. They were your protective factor. They were your bubblewrap. Maybe you did some early experiment Tatian and had a genetic predisposition. Not the best for self-concept, but then you got involved in school. Extracurricular activities. Or winter sports are a great protective factor. These are things that could help to balance things out. Right? It's not the end-all, be-all, especially if there are some other protective factors happening to help balance it out. On the flipside, some of have none of these factors and still develop a substance use disorder because of that disease model. Right? If you think about a kid with a soccer injury or if you have ever had a child who had their wisdom teeth pulled my total very recently kids were getting like a 30 day supply of Vicodin. Which to some of us is crazy, because when I got my first set of wisdom teeth pulled I got a pat on the back. Take some Tylenol and feel better. I got my second set pulled and I got some Tylenol with codeine. Like three pills. And that we

have kids were getting a month supply. If I may teenager and I take my medication as prescribed I could develop a substance use disorder or a addiction because I took my medication. It changes the way my brain works and functions. Okay. I'm going to shift gears a little bit to talk specifically about the overdose piece. We know what happens in the brain and how people become addicted. Let's talk specifically about overdose. These are some risk factors for overdose. Chronic risk factors include a history of a previous overdose, history of substance use or misuse, a previous suicide attempt, access to prescription drugs, when the state family member overdose, or a high prescription opioid does and or sustained action opioid. A sustained action opioid is something like OxyContin that releases throughout the day or high dosages. I really want you to focus on that last one here. The first ones kind of makes sense. We get it. They have access if they have a drug use history. Right? That access -- that last one just think outside of the box for a moment and think about people who are not necessarily drug users or illicit substance users, but perhaps your mom. Your grandfather. Your spouse. Your neighbor. People who are on prescribed medication. They can be at risk, because of what they are legitimately prescribed. Especially, as we look at the next frame. When we look at the acute factors for an overdose these are the short-term things that put someone at risk. The very first one says a period of abstinence equals decreased tolerance. In your head I want you to think about how long you think it takes someone to lose their tolerance to opioids opioids being by getting, heroin, Fentanyl. If I started off in my path to addiction was I used Vicodin as prescribed, but I started using 33 times a day and then 10 and then I started using heroin I built up a tolerance over time where I need more and more and more. Right? If I stop cold turkey how long does it take me to lose my tolerance to opioids? I will tell you, in discussions I have heard answers of never. Once you have it it's always there. I here it depends on how long it took you to get there. If it took you six months to get there it takes you six months to lose her tolerance. If it took you two years to get there it takes you two years to get back down. I often hear 30 days. People thing 30 days. I think that means 30 days of rehab, the 20 day program. 30 days is also a common answer. The right answer is no matter how long it took you to get there, no matter what substances you used when it comes to opioids, whether Vicodin or heroin if you stop using you lose your tolerance in 3 to 5 days. 3 to 5 days. That's less than a week. I'm really hammering that home, because people don't know it and it's a huge risk factor. If I am a drug user and I get arrested and I spend the weekend in jail and I get out on Tuesday and use what I used last Tuesday I'm going overdose. Maybe I want to get sober and I go to treatment. Detox is 3 to 5 days. If I have a window between detox and wherever I'm going to treatment and I decide to use one last time I'm going overdose. If I go to treatment, if I go to the 28 day program and I get home and I have been sober and I'm struggling and it has been six weeks since I last used and I have a relapse am probably going overdose. This is a big risk factor. The second risk factor is a change in amount or purity a.k.a. fennel that we were talking about. Unfortunately, the folks who are dealing are not chemists are pharmacists. They might be weighing things, the mayor not may not be cleaning the scales between them. If you by 10 buttons of heroin one of them might be all fennel and one maybe baby aspirin. You don't really know what you are getting. It's not necessarily the best. Actually one other thing I just read this week is that with Covid it is actually getting worse. We are having a spike since March of overdose deaths, because people don't have access to their normal dealers, so they are buying from whoever they can get their drugs from and have no idea what they are getting. If you generally buy from the same person may know what you're getting and it may be pretty consistent. If you have to buy from a brand-new person you have no idea what you're getting. That is causing an issue with overdoses right now. Obviously, if you object that is a risk because it is straight into the bloodstream. Mixed with other substances, especially to present -- if I'm taking Xanax with my Vicodin and drinking alcohol it puts me at risk. Even thinking out of the heroin box using alone, because no one can call 911 or help me. Think about CMPD, emphysema, or asthma., Since in the past 90 days also hazard with lung capacity and overall wellness. If we think about the chronic person who is not an illicit substance user, but is using prescribed medication and that multiple ones prescribed to them, including an opioid and something

like Xanax and perhaps this is a grown adult who takes their medication as prescribed and once you have a few beers before they go to bed, that is three central nervous system depressants working to slow down their breathing and heart rate. That person is at risk for an overdose. Whatever caution is if you know someone, someone coming from here you might want to go home and say you are at risk for an overdose, but you might want to say, hey, did you know when you take all of those together and drink on top of it can make you stop breathing? Let's talk about what overdose looks like next. Just to think about the language in what you're saying, because when we say the word overdose people think junkies. They're not thinking but someone who is just taking their prescribed medication. Let's look specifically at what an overdose looks like. It can have multiple, multiple signs. It's can be someone who is unresponsive and not moving. Shallow or absent breathing. They could be turning blue or purple, depending on skin tone around the lips and nails. They could have a snoring or gurgling sound. They could have cold, clammy skin. And that teeny, tiny pinpoint pupils. Really, it boils down to these three on the screen. If they are unresponsive, that is what depressed mental status or, means, you shake them and they don't wake up ineffective or absent breathing. I'm not a nurse or a doctor and I do not know how often admit I'm supposed to breathe, but if I think you're not getting enough oxygen or breathing deep enough, it's shallow or irregular or you are not breathing that is a sign. The third one are these teeny, tiny pinpoint pupils that you see. The smallest you are ever going to see them. You know if you take a stimulant your pupils get big and if you take a to present they get small. This is a smallest you have ever seen. To open up the persons eyes and they're going to be these teeny, tiny pinpoints. Those three together equal and overdose. If you find someone unresponsive, cold and clammy, turning a little bit blue, not breathing very well is that an opioid overdose? Maybe. Right? It could be alcohol poisoning or diabetic,. Let's talk about how to respond to that. I'm going to move a little bit quickly through these next few slides, just for the sake of time. If we need to get questions we can. So, what do you do if someone overdoses? You're going to give them Naloxone. Will talk about what that is. You will call 911 administer rescue breaths or put them in this recovery position like you see on the screen. In this case, their elbow and their knee are kind of like a kickstand so they're not going to roll over. Stay with the person. After two or three minutes if they don't start to wake up you can give them a second dose of Naloxone. What is Knox Hill? You may never have heard that term. Naloxone has one purpose and one purpose only and it is to reverse an opioid overdose. That's it. It has no other properties. One of the Naloxone name brands is Narcan. That is probably what you have heard of. It's only purpose is to remove the opioid receptors from the brain. This diagram is showing your receptors. With heroin, morphine, opioids whatever is sitting on those receptors. When those drugs occupy the new receptors they send signals throughout the body like leisure, to block the pain, and slow down breathing. Of those receptors have a higher affinity to Naloxone, meaning they like the Narcan better. When Narcan is given it kicks out the opioid that's on board. Whether it's heroin, morphine, whatever. The Narcan will kick the opioid off and it will take its place on the receptor. It sends no signals at all. That's why it's really safe. Because the brain is like a computer and it really quickly recognize there is no signals coming to tell it to slow down the breathing and breathing restarts very quickly. What Narcan does is comes in a kicks off in the opioid and takes its place and just sits there. So, if that person I mentioned on the left side was unresponsive, blue, not breathing well and you gave them Narcan what if you are wrong? Nothing would happen. Right? If you are wrong and you gave someone Narcan who was not experiencing an opioid overdose the Narcan goes to the receptor and just sits there. Is that when help the person, but it's also not going to hurt the person. Which is why you would want to go ahead and call 911, because it is not an opioid overdose and it's alcohol poisoning or a diabetic coma you want EMS to be on the way to start the proper procedures. Just a quick look specifically at Narcan. This is the name brand for the locks on. It is most popular for this particular nasal spray. There is an older nasal spray that you had to assemble the atomizer and stop. This is preassembled and is really easy to use that's why people like it. It does take two or three minutes for it to work, which is why you have to wait those two or three

minutes to see if it's working. Sometimes one does is not enough. In fact, it's usually not enough. As you can see, the box comes with two per box. You get two of those devices. After the first dose of the person is not waking up you can give them the second dose. There is also an intramuscular Naloxone available that you would administer in the arm, shoulder, left thigh. It's really fast acting, but a lot of people don't like to use the needle. That's why they really prefer this nasal spray. The nasal spray is this easy to use. You literally just peel, place, and press you peeled back off. We like to joke that it's not Tylenol cold and flu. It's sticker easy. You don't even a scissors or poking or prodding. You peeled back off and it comes right off. The device is ready to use. In the center you put your fingers on each side of the nozzle and you place your fingers, the back of your fingers, to their nostril. So, the tip of that device goes into the nostril and you press the plunger. It's a firm, brisk push. That creates a really nice mist that goes into the mucosal membranes. That's how it gets into the bloodstream. They don't have to be breathing. They don't have to sniff in order to get it. You push it in there and it's going to get right into the bloodstream. I think you have probably all experienced a blood he knows at some point in time, so it does get into the bloodstream. They do have to have a heartbeat. The heart has to be to pump it through the body, but they don't have to be breathing for Narcan to work. So then, he would want to call 911 I would probably be multitasking. I would have my speaker phone calling 911 while I'm opening up the Narcan. If someone is with you we can go back to that great video of, hey, you, call 911 while you are opening for Narcan. However you do it, call 911 or emergency services in your area. Ask for help. Let them know it's an opioid overdose. I know you guys get a copy of this, so you can take a deeper look, but there are good Samaritan laws in 40 of the 50 states. Basically, what that allows you to do is call 911 with some protection, including protection or the person overdosing. It usually blocks things like arrest or charges for things like possession. They are not going to get in trouble for having anything on them. And then just a quick reminder on the head lift. Rescue breathing is key, because if they stop breathing they stop getting oxygen and the heart stops and that's when they die. If you are able to do this do it. Your safety is important if the person that we mentioned is a complete stranger where they vomited and are plenty safety first. Put them in the recovery position and call 911. If it summer you love and care about you rescue breathing. Make sure you take care of that. One last quick piece on what can you do now? You can carry Narcan with you. It is available over the counter without a prescription. You pay cash. It's \$100-\$150 per box. 42 states have orders where you can go to the pharmacy and purchase Narcan using your personal insurance without a prescription, but you just pay your co-pay as deemed by your insurance company. Walk into your Walgreens or CVS and handle your insurance card and they give you Narcan and you pay your co-pay. The other thing you can do is educate, educate, educate. Yourself and others. Even if you don't know anyone with opioid use disorder are struggling with addiction think about those other people I mentioned like elderly neighbors, parents, spouse, anyone who takes prescribed medication. There has been a lot of education going on with pharmacists and physicians and sometimes they are requiring co-prescriptions. If you're getting that high-dose painkiller and something like Xanax they are also sending you home with Narcan. That is helpful. That could be part of our numbers going down but you can talk to your family members and loved ones, have Narcan. These websites are really the places to go for information. Samson is really great and drug abuse.gov has 18 specific site also. I know we are running low on time. That does conclude my slide portion of the presentation. I will turn it back over to Jeannie and then we will see if we have any time left at the end.

Thank you, Nicole. Thank you for just a very informative presentation today. We are going to have time for questions. Before we get to questions I want to remind everyone your EAP program is here for you. We are a community of experts that support you, your family, coworkers, employees, so please don't hesitate to reach out to your EAP for support and resources you can access our portal 24 hours a day seven days a week with the company specific 800 number or web address. If you don't know your 800-number or web address reach out to your Human Resources for help. I also wanted to mention our

website has and one of good resources around Covid-19 support and it is continuously being updated. Please check that out. All right, Nicole, it looks like we have a little bit of time for questions. I'm going to turn it back over to you now.

Okay. Let me start off with the one about the shelf life of Narcan. That's always one thing I forget to mention every presentation I do. It does have a shelf life of about two years from the date of manufacture. There is an expiration date on the bottom of the box what I will also say is, yes, it has an expiration date. The Department of Defense did studies on Narcan and they stopped testing it at five years post expiration and it was still 100% active. Take that and do with it what you would like. To me that means it's good. I'm going to use it. Nothing bad is going to happen. It may not be 100% if it has decompensated, it might be 90% or 80% active. So, that is something to bear in mind. And the other thing is it should be fairly temperature controlled. It does not have to go in the refrigerator, but it should be kept around room temperature. It can do excursions for up to 2 hours up to 107 degrees. Don't leave it in your glove box, depending on where you live. If you are from St. Louis it will boil one day and freeze the next. For some of you that's also true, maybe you are in Colorado right now. If you're going to a park where you are going to wait on a bus and it's 100 degrees outside the Narcan is totally fine. There are some places that will take them back and exchange them. That is possible. Personally, I actually found my the other day when I was changing bags. It expired two years ago. I still carry it to me because I'm still going to use it if I find someone who needs it. Right? And then when buying over-the-counter do you have to tell the pharmacist that you need Narcan how did they know they will take our insurance?

Great question. This has been a real struggle and it probably does depend on where you are located in the country. We fought really hard here to get from assists educated and onboard. I will say that Walgreens, because it's national, they have really worked to educate their folks. They have some internal parts and procedures along with Walmart and target and CVS but if you go to one of those main places they should, theoretically, know about the law. You can just Google standing order for your state for Naloxone and find out if you have a state law that covers that. Where that, basically what the standing order does is create a statewide prescription, so that you don't need one from your doctor. You walk into Walgreens and you say I want to buy Narcan they have a copy of that standing order in order to run it through your insurance. That is going to be how that process works. The co-pay does depend on your insurance. Some insurance has a cap on it and some don't. Some you can buy like one every six months. I know for Medicaid, which doesn't relate to us, necessarily, but if you know people on Medicaid it's generally like a three dollar co-pay and there's no limit on how many people can buy. It really just depends on the insurance company. And then the pharmacy themselves. I would always suggest calling a pharmacy first and say, hey, do you carry Narcan? Do you stock it? Is it on yourself? If I come in with my insurance you know how to run my insurance? That would be my suggestion. Okay. The question is, if is not 100% potent, if it's past expiration date is it worth the risk? My answer would be 100% yes. Because if it doesn't work it's not going to hurt them. Now, if you, as soon as your Narcan expires want to buy a new box, great. Yes. Do that. Do you know what I mean? I think my co-pay is \$60 or something like that. For me it \$60 is a lot I'm going to use it. I'm going to call 911 and to rescue breathing, so I'm going to do all of those other efforts to help sustain life until EMS arrives. If you live in a rural place and you must takes 45 minutes or an hour to get to you you kind of take those kind of things into consideration also. A lot of these other questions I just don't have time to answer. I really want to talk about them, but I just don't have time. Is there anything else I have time for? The only other one I will say is, yes, -- you are asking does the methadone sort of medication for opioid use disorder work like an nicotine addiction substance? Yes is my short answer. The nicotine replacement therapy is to give you small amounts of nicotine. Some of those opioid use disorder medications also give you

small amounts of opioids, it just depends on which one is being prescribed. I wish we could do more, but I'm cutting myself off, Jeannie.

Thanks, Nicole. You are the most well behaved presenter we have had by cutting yourself off even. Thank you. Thank you so much for sharing your wealth of knowledge and expertise on such an important topic. We really appreciated having you here today. I have pulled up our exit poll question if you don't mind filling that out. It reads, please rate your overall satisfaction with today's webinar. Very satisfied, satisfied, dissatisfied, very dissatisfied, just click that radio button next to your response one time and your response will be sent. Thank you again. The certificate of completion is available for download if you'd like to download that. And we are out of time. I want to thank you, Nicole. Thank you everyone else for joining today. And this concludes our webinar.

[Event concluded]