Clinical Education Initiative
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DRUG USER HEALTH ECHO: XYLAZINE

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[video transcript]

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Dr. Sharon Stancliff is Associate Medical Director for Harm Reduction and Health Care at the AIDS Institute within the New York State Department of Health, and an attending physician at Project Renewal providing care for people with opioid use disorder. She has been working with people who use drugs since 1990, including development of overdose prevention programs, provision of primary care, drug treatment, HIV care and harm reduction services. Her current focus is on opioid overdose prevention through expanding access to Buprenorphine in primary care, and in less traditional settings such as syringe access programs, as well as for as expanding access to Naloxone. She also provides a standing order to pharmacists for dispensing naloxone in New York State. She maintains board certification in family medicine and in addiction medicine. We're also really excited to share that we are working on a podcast episode about Xylazine with Sharon that will be released in February as part of CEI podcast series Conversations with CEI. So when that's released, we'll be sure to share it all with this group. And now I'll pass it over to you, Sharon.

1:22
Okay, thank you. And thank you for joining us. I have no financial disclosures as noted. So today, we're going to talk about the evolving presence of Xylazine in heroin. Basically, fentanyl products now, discuss some of the complications of Xylazine . And talk a little bit about harm reduction and treatment. I do want to emphasize that this topic is evolving really rapidly. There is not a lot of medical literature. So I've gleaned a fair amount of this presentation from webinars from talking to harm reduction, colleagues from around the country. And I expect I will have a fair amount of new information by the time we do the podcast recording in a couple of weeks. A lot of my contacts disappeared for the holidays. And I think there's several topics that there's more information on. I also look forward to hearing what you're seeing in your various places. Just a little more introduction. I have not been aware of seen Xylazine in New York, although I will show you later that it does appear. It is definitely here. But years ago, when it was widespread in Puerto Rico, I visited there to do a Naloxone training. I have never seen skin complications, like what I saw there. And as a couple of you that know me know, I used to travel to a lot of, of low income countries, wherever they had heroin use to help them set up various services. I didn't see things like this in Sub Saharan Africa in Asia, it was it was really striking. Perhaps it's good that I lost all my pictures of it. So I'll be showing you some from journals, but I just hope that there's a way to prevent having a lot of it here.

3:19
There we go. So just some basics on it. Xylazine is related to instructionally to a lot of other drugs out there, but it's an alpha two adrenergic agonist. So I think the one that we're all most familiar with is clonidine does have some similar characteristics to it, although it's not exactly like clonidine. Obviously, it's an anesthetic and a sedative approved for use in veterinary medicine. It's not licensed for human use. So there's really not any information about how it affects humans aside from what we're seeing in the streets. And a few cases of poisoning that I'll mention. It's not a federally scheduled drug, New York has some kind of scheduling of it here. But it's basically you can go on the web and buy it especially those of you with MD MP's, you know all the initials after our names, it's pretty easy to buy it, I think I haven't tried. It's usually found in a liquid form and then dried and salted into powder. I've been trying to find out what that process is like that. Put some contaminants into it or not. I don't know. It's also apparently a pretty good solvent. So who knows what it picks up in the process of taking this powder, putting it into a powder, fentanyl, heroin supply and then putting in water. I don't know the answer to that either. So it causes sedation, muscle relaxation, hypotension most of the time while it's active, but vasoconstriction as well. And oops, typo, some respiratory depression but that's not a major feature of it. Oh, excellent.

5:12
So, as I mentioned, it appeared in Puerto Rico in the early 2000s, and was extremely widely spread there. There used to be sort of a pipeline of people with opioid use disorder in Puerto Rico that essentially got boarded onto planes and shipped to New York City. And Beth Israel Medical Center saw a lot of them in their detox, you know that all those people either retired or moved on to leather pastures. So I've never been able to find out what their cocktail was to use when folks came from her to Rico for detox, but they did look at them very specially. So some street names here and it's easier to Kabyle krank T, krank dope. Dope when it's combined with opioids can definitely be injected, it can be inhaled by that I mean, sniffing, taken orally and perhaps smoked, or vaped. But that's not totally clear to me yet. And we'll come back to this but it is associated with really severe skin wounds, which are not clearly associated with injection sites. And there are some out there that say that, that we see these skin wounds even in people that are not injecting it. I'll come back to this but dependence and withdrawal are reported, not well characterized, especially in the medical literature, but irritability, anxiety, and dysphoria may complicate transitions to buprenorphine as well. Not that it needed to get any harder. It is appearing across the country in many parts of the country in overdose deaths, mostly in the northeast of the mainland, but it's really not tested for regularly testing for it in New York City, in the coroner's office for a period of time. But many jurisdictions don't test for it at all. It is truly widespread. And I'll come to some other more striking statistics in a minute. But in Philadelphia, in Maryland, increasingly these reports out from Rhode Island that just came out and soon they'll be one from Massachusetts. But in 2015 to 2020, the percentage of

all drug overdoses involving Xylazine in Philadelphia increased from minimal to 26%. And in 2021. It was involved in 19% of overdoses in Maryland and 10% in Connecticut. I think it's important for a number of reasons to note that in almost all 98% of the Xylazine involved overdose deaths. Fentanyl was there. There's a really strong association of Xylazine with fentanyl products. There are some reports of finding it mixed with cocaine, and methamphetamine. But at the moment those appear to be the exception and not the common thing. Usually, there's Xylazine there. There's fentanyl there. So I found a paper on just silencing poisoning. Now, there are some other code for drugs involved in these but this is 98 cases looking at the veterinary supply. People injected it, they sniffed it, sometimes intentionally for intoxication, or suicide, sometimes intention unintentionally, and the chief symptoms recorded where hypotension bradycardia lethargy, but apnea was is pretty rare. It appears to contribute to the respiratory depression of opioids in a similar way to benzodiazepines or alcohol. But in and of itself, it's not a major cause of respiratory failure. Fatalities alone are pretty rare. I think the one of the couple of fatalities in this group also mix it with a hefty dose of benzodiazepines, and was suicide. Testing for it is a work in progress. But it's really hard to test for it has a short half life. So testing for Xylazine in urine is really probably not helpful in our clinics at all. It disappears pretty quickly. We could be testing for metabolites, but I haven't found that those are widespread, actually enough. It's a doping product on product for horse races. So they may have some metabolite tests. I haven't really found anything that looks very useful. But I imagine our lab would be happy to test for Xylazine and I imagined that they would be unlikely to find it very often. There are some test strips available now. but they are undergoing validation. I don't know maybe some of you have received some, I my agency project renewal somehow got some. There are some that the emergency departments up in Erie County, Philadelphia, public health department and Johns Hopkins are currently doing validation of these strips to find out, but honestly, I don't know yet if these are made for testing urine, or they're made for testing product, but the thought is that perhaps they could be used for testing products. We also have an increasing number of harm reduction sites with PCMS testing available. Last I heard, which was about a month ago, the one in Harlem had not been seen Xylazine yet, but we do know it's in the supply in New York City. So yeah, the tests are really hard, most of our data is going to come from two things. Drug checking data, which hopefully we'll have a network around New York soon as many of the harm reduction agencies get on site point of care tests. Maybe we'll have more. But this is some data that I was able to find from Philadelphia and New Jersey, where the police, the police departments or DEA tested actual samples of drugs, minimal numbers of samples, it's not huge numbers like Philadelphia tested 136 91% of them in the first three quarters of 2022 contained Xylazine. And in New Jersey, which was across New York, New Jersey, not just one city, they had a larger number of samples. 35% of them contained Xylazine always with Bentendo. Bye, but the other kind of notable thing from that report is 63% of suspected heroin samples didn't have any heroin. And though we're just seeing this amazing replacement with fentanyl, there will be a report of some data coming out from New York State

soon based on medical examiner data, but it will be 2021 data. But we do know from that, that there's a fair amount of New York City, some in other parts of the state. And this is all medical examiner though. So not all the medical examiner's look for it. Um, but we certainly are seeing in formal reports from York City, Syracuse, Rochester, other parts of the state last night after though Erie County wasn't seeing it. So it's really spotty. And that's what my friend Tracy green is finding in Massachusetts and Rhode Island that it shows up a lot in some places and not in others. This appears to be something that is put on really local put into the supply really locally, not coming across the border not coming in large batches, we think. And so why do people want to use it? And why do they and so we've got two things from a wonderful article. I love those articles that have quotes from people using. So the chief reason that it seems to be put in is because it gives the dentinal legs although fentanyl wasn't a thing, apparently Puerto Rico a lot back then. But fentanyl lasts a shorter time. And it gives apparently a longer high. But if you just get all Xylazine you're not very happy, calm down for a while and you wake up and you're probably still in withdrawal. And then another one of their informants found that they're just seeing holes, abscesses, like the bodies rotting and that's what it really looked like and Frederico was awful. I saw that people lost limbs. One of the people I was most concerned about in my brief visit died shortly thereafter. I think I've got one picture record from CEI. Let me show it. But it's pretty striking. So I do want to note that opioid overdose in Xylazine, it's not an opioid, so of course it doesn't respond directly to Naloxone. But again, it's rarely found without fentanyl, that Xylitol Naloxone should reverse the respiratory depression from the opioids but that may not be apparent. I love with my ER doc Michael Daly said it's about respiration, not about conversation. We want to get people breathing again, when we treat them. There is no current antidote available for safe human use. The care of a person with an overdose, whether in the field or medically is purely supportive. sedation and relaxation of muscles probably promotes airway relaxation and closure. So airway support just opening it up becomes as important or more. And of course, opioid withdrawal is associated with Valentin and Xylazine ism Look, at least in some animals caps notably got it got a lot of esoteric and trying to find out about it on so

15:08
we may be seen associated with a variety of things more respiratory conference complications from high dose naloxone. I can't guarantee that but there's reports coming out from emergency medicine Doc's and toxicologist suspecting that so potential overdose as always attention to airway, call EMS tried to teach the people we're training to check for breathing as best as possible. I know it's really hard to do. That's why the American Heart Association just as you know, the don't think they're down, start doing chest compressions. And now they at least include rescue breathing for overdoses. A lot of us have pulse oximeter, not including me and I closets from the midst of the COVID 19 pandemic. So getting people that are in places where a lot of people are using drugs to bring them out of the closet and keep them around might be a

good idea. Rescue position when breathing is perhaps a little more important because vomiting may be more likely people can be sedated for a really long time. So harm reduction thought is to put them in better position so that they don't actually develop pressure damage to skin and nerves. That's the thing that's ubiquitous throughout any depressants, I've seen people that that damage their actual array nerve, so had had paralysis for a long period of time of their hand. That was from heroin mixed with alcohol. So it's something to keep in mind. That's kind of new to my thoughts on harm reduction. As I said, high dose Naloxone may be a concern. severe withdrawal is of course preferable to death. But high dose Naloxone concerns about our being raised by multiple medical and harm reduction disciplines. Aspiration may be more likely it's probably not really about much about pulmonary edema that remains less common, although it might be more common when you can't oxygenate first possible reluctance to going to the ER with high dose Naloxone on so you know if anybody wants it, I can send you a few papers by Marcus and Hill and all these folks that are raising these concerns. But I think it's something that we should be thinking about, not just because of Xylazine. But because we now have it's really easy to get to four milligram intranasal is really quickly. And now there is an eight milligram product and so it's easy to give 16 milligrams really quickly. That is not currently in our standing orders, nor is it purchased and distributed by either the New York City or State Department of Health, but that's out there and occupies a fair amount of my time thinking about it. Nox, I'm gonna Xylazine withdrawal is definitely a thing. But down below you can see there's one case report on it that's published in the medical literature. And Philadelphia Department of Health actually put out a very good, informative health alert about it. But people can be really anxious, really restless, unhappy, and it may lead to early discharge, or contribute to difficulties initiating buprenorphine. Again, don't really know what we're seeing in New York, but it is here in various parts of the state. Treatment is with benzodiazepines, alpha two adrenergic agonists, which not only include clonidine, but several I never used, but I am using more clonidine, probably because of the fentanyl when I tried to get people from using heroin fentanyl over to buprenorphine, and perhaps that will become more useful as well. Aren't to know for sure. I've mentioned the skin wounds. Oh, I actually, how do I uncover that picture?

19:13
If you just advance click the screen once more, it will animate out.

19:18
Okay. So I'll start with this part. So again, clearly not all the skin damage is not always found at the injection site may be seen in people that don't inject. It's usually seen on extensor surfaces on the arms and legs. Some people right oh can be seen anywhere in the body. But really it's primarily on the limbs. Etiology is completely unclear. People talk about when people start just keep injecting into that site where some damage has been done. Possibly, there's a whole lot of talk about various kinds of vascular oddities that might be causing that, but we really don't

know and I don't know that any dermatologists have done biopsies to look and see but This gives you a sense of what it looks like. And I, this is not an, you know, this is an advanced case, but I saw stuff like this in Puerto Rico, and worse. So hopefully we don't start seeing a lot of this hopefully we can as potentially ward it off a little bit. So this is a mostly from my frontline wound care nurse who is now very much immersed in the field of harm reduction in Philadelphia, and Philadelphia emergency medicine doctor on a webinar, hygiene was openwater probably keep the alcohol out of just basic soap and water cover wounds with a non adherent dressing, zero form or you know Vaseline and something else to keep it from adhering. And as they tend to be pretty weepy covered by an absorbent dressing. So is it weeps, they're a little bit safe to breathe, may be needed for some, but hopefully not if it's treated earlier, but we can get to the point of not only pharmacological, surgical debridement antibiotics may be needed. But observations from both of these environments find that they're not always infected, especially if you can take care of them. And antibiotics, of course, carry their own risks, they can be really painful. That's a challenge to manage. And people that are using opioids. We don't help they're going to manage it themselves with other opioids that may contain Xylazine. So there are severe adverse events besides losing limbs. hypertensive crisis, remember what happens if you take clonidine regularly for your hypertension and you stop it. Rebound hypertension, that is sometimes being seen in detox stabilization units, something to be aware of possibly some cardiac arrhythmias, rhabdomyolysis and nerve injury from prolonged immobility. And, you know, after that, also, when people are suddenly moved in the correct amount of analysis that not only is damaging to kidneys, but the release of potassium can lead to cardiac arrhythmias as well. So something to be aware of. And of course, infection to the wounds can happen and can lead to septicemia and amputation. So again, just think a little bit more about harm reduction for Xylazine. We need to get out information about the sedation, the positions, we need to continue to put out our information on Naloxone, but maybe readjust some of our messaging to have a little more patience between doses. It's a hard balance. And I don't know if you've ever reversed an overdose out in the field where you don't have any support. It's scary. I have done so and I didn't administer the second dose and actually got somebody else to hold off for a minute. But it's hard. Continue to reinforce our sterile syringes. hygenic injection practices continued to suggest not using alone, if possible that people are always going to use alone. That's just part of being a regular opioid user. Don't inject into the wounds use soap and water cover and try to seek medical care of worsening. I mean, one of the things that they're seeing in a couple of the other states is drug treatment, residential drug treatment programs don't want to accept people with the wounds because they don't know how to take care of them. So hope. Yeah, we just need to be vigilant about that. Um, I hope there's questions or people adding to what I have to say. But here's a list of the folks in addition to the medical references that helped me out with this and will continue to help us all out with this. I wish that that the doctor D'Orazio webinar was out there. He had

some really good pictures and really good pieces to it, but they didn't take them. So questions, comments?

[End Transcript]