Protecting Patients from Unsafe Injections: What Every Provider Needs to Know

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

[Joyanna Wendt] Hello. I'm Dr. Joyanna Wendt, a Medical Officer at the Centers for Disease Control and Prevention, or CDC, and today we're talking about injection safety. I know some of you are thinking, "That's so basic. Of course I give injections safely." You might be surprised to hear that year after year, CDC investigates situations where providers *thought* they were doing everything right, but in fact, were making basic mistakes and putting their patients at risk for infection.

Joining me today to discuss this critical issue is Janice Izlar. Janice has been a certified registered nurse anesthetist for more than three decades and has recently started her tenure as the president of the American Association of Nurse Anesthetists. Welcome, Janice.

[Janice Izlar] Thank you for having me, Joyanna.

[Joyanna Wendt] To start, tell us a little bit about yourself, and you and your organization advocate for injection safety.

[Janice Izlar] The American Association of Nurse Anesthetists advocates on behalf of our profession, but more importantly, we advocate for the safety of patients. We have taken a very active role in helping educate our members about safe injection practices. I've always felt that injection safety needed to be clearly communicated since it's such an important issue. In fact, I felt so strongly that I did my doctorate on how the AANA can best communicate with our members on injection safety. I'm proud that the AANA is a part of the Safe Injection Practices Coalition, which worked with the CDC to create the One & Only Campaign. Together, we're spreading the message of one needle, one syringe, only one time.

[Joyanna Wendt] One needle, one syringe, only one time – that sounds like pretty basic stuff. Some of our listeners may be thinking, "Aren't all medical providers familiar with safe injection practices?"

[Janice Izlar] Safe injection practices have been part of standard precautions for years and *most* providers take steps to safely prepare and administer injections – whether sedatives, anesthetics, vaccines, or other injectable medications. But we know that some do not.

The issue isn't just related to nurses. I've given lectures about safe injection practices to nurses, doctors, technicians, and administrators from California to Maine and it shocks me how often I hear, *from trained professionals*, that they had not understood the dangers of certain injection practices. Just *one* mistake or missed protocol can put many patients at risk.

[Joyanna Wendt] How does this happen and how big a problem is it?

[Janice Izlar] To save time or stretch supplies, some providers take shortcuts, like re-using syringes or using single-dose vials for more than one patient. There's a myth that changing a needle makes a syringe safe for re-use. The reality is that once they are used, *both* the needle *and* the syringe are contaminated and *must* be discarded. During the past 10 years in the United States, syringe reuse and the misuse of medication vials have resulted in dozens of outbreaks. Since 2001, more than one hundred and thirty thousand patients have needed to get tested for bloodborne pathogens, such as Hepatitis B, Hepatitis C, and HIV because of potential exposure related to unsafe injection practices. These exposures are *completely* preventable.

[Joyanna Wendt] What are some other rules that every provider needs to know?

[Janice Izlar] Medications packaged in containers labeled as single-dose or single-use should *not* be used for multiple patients. Also, there's a common belief that syringes can be reused as long as an injection is administered through an intervening length of IV tubing. That is *not* correct. Everything from the medication bag to the patient's IV catheter is a single interconnected unit. Distance from the patient, gravity, or even infusion pressure do not ensure that small amounts of blood won't contaminate the syringe when it is connected to the IV tubing. Syringes should *never* be reused for more than one patient or to access medication vials.

[Joyanna Wendt] We've heard from health professionals that one reason they might break safety rules and use a single-dose vial for more than one patient is that a medication isn't available in a small enough vial. They don't want to waste medication that might be in short supply. How would you reply to those who argue that it's more cost-effective to use the vial for multiple patients?

[Janice Izlar] Saving money by using medication in single-dose vials for multiple patients is simply *not* worth the risk to patient safety. It's also not worth the liability risk to your hospital or clinic. You may be saving a couple of dollars, but you could cost the facility millions or even cause it to be closed. If you need to split or customize doses, it must be done with full adherence to United States Pharmacopeia, or USP, 797 standards, including use of a laminar flow hood and other precautions. Many clinicians work with high-quality compounding pharmacies or pharmaceutical compounding companies to assist with repackaging. If you do this, it's important to be sure that the pharmacy or outsourcing company follows USP 797 standards.

The bottom line is, a single-dose vial should *only* be used for one patient and one procedure. Any remaining contents should be discarded. Even medication that comes in multi-use vials should be dedicated to a single patient whenever possible. If multi-use vials *are* used for more than one patient, they should not be kept in the immediate patient treatment area. You *must* use a new syringe *and* needle for *each* withdrawal, with appropriate disinfecting technique for the vial prior to each entry, and discard the vial and any remaining contents within 28 days, unless the manufacturer specifies a different time period.

[Joyanna Wendt] IV bags are single-use items. Can they be used to supply multiple patients?

[Janice Izlar] No. IV bags should *not* be used for more than one patient. Outbreaks have occurred when providers flushed IV lines and catheters with saline solution taken from a

common-use saline bag.

[Joyanna Wendt] So to recap, there are three main things every provider should know:

1. Needles and syringes should not be used for more than one patient or re-used to draw up additional medication.
2. Don't administer medications from a single-dose vial or IV bag to more than one patient. And
3. Limit the use of multi-dose vials and dedicate them to a single patient, whenever possible.

[Janice Izlar] That's right.

[Joyanna Wendt] Any final words of advice for our listeners?

[Janice Izlar] Injections are an important part of the work we do and injection safety is *critical*. For most of us, it's second nature. You may be doing everything right, but your colleagues might not be, and that puts everyone at risk. So stay alert. If you see a colleague who isn't following safe injection practices, speak up. Talk to him or her or talk to their supervisor. It might be a little uncomfortable, but you could be saving someone's life, and that's much more important.

[Joyanna Wendt] Thank you so much, Janice, for joining us.

[Janice Izlar] Thank you for having me.

[Joyanna Wendt] For more information about safe injection practices, including a checklist, toolkits, and brochures that can be shared with staff and patients, go to the One & Only Campaign website at oneandonlycampaign.org.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO.