

Position Statement Number 2.13 Safe Practices for Needle and Syringe Use



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Standard IX of the American Association of Nurse Anesthetists (AANA) *Standards for Nurse Anesthesia Practice* states that Certified Registered Nurse Anesthetists (CRNAs) shall take precautions “to minimize the risk of infection to the patient, the CRNA, and other healthcare providers.”¹ Further, the AANA *Code of Ethics* states that every member of the AANA “has a personal responsibility to uphold and adhere”² to the ethical standards contained within the Code of Ethics document. Specifically, item number 3.2 of the AANA *Code of Ethics* states that the “CRNA practices in accordance with the professional practice standards established by the profession.”² The AANA historically has taken a strong stance concerning infection control behaviors, and the AANA’s *Infection Control Guide*³ has served as a valuable resource to CRNAs on this issue for many years.

Despite attempts to educate healthcare providers regarding the public hazards of syringe and needle reuse and other unsafe injection practices, transmission of bloodborne pathogens continues to occur in the United States.^{4,5} According to one recent report, there have been 33 different outbreaks involving transmission of the Hepatitis B or C viruses which placed over 60,000 patients at risk for contracting bloodborne infections within the past 10 years.⁵

Preventing the transmission of infectious agents involves many considerations and best practices on the part of the anesthesia professional in order to be successful. This position statement is intended to address aspects of anesthesia care which involve the use of needles and syringes when administering intravenous medications.

The following statements reflect current safe practices for needle and syringe use by CRNAs:

- **Never administer medications from the same syringe to multiple patients, even if the needle is changed.**⁶
- **Never reuse a needle, even on the same patient.** Once a needle has been used, it is considered contaminated and must be discarded in an appropriately identified sharps container. Needles are single-use devices.⁶ For example, when injecting a dose of medication from a syringe through an intravenous port, the needle may enter the port only one time and then must be discarded. If additional medication dosages are to be administered from this syringe, a new sterile needle must be utilized for each injection.
- **Never refill a syringe once it has been used, even for the same patient.** Syringes are single-use devices.³ Once the plunger of a syringe has been completely depressed in order to expel the syringe contents (i.e., intravenous medication), the internal barrel of the syringe is considered contaminated and must be discarded in an appropriate fashion. A syringe must only be used **once** to draw up medication, and must

not be used again even to draw up the same medication, from the same vial, for the same patient.⁷⁻⁹ CRNAs should weigh the risks of possible syringe contamination (e.g., from anesthesia workspace contamination¹⁰⁻¹²) which may occur when repeatedly connecting and disconnecting a medication-filled syringe from an intravenous infusion set.

- **Never use infusion or intravenous administration sets on more than one patient.**⁶ Infusion and intravenous sets are single-patient use items and must be used according to applicable policies and guidelines. These devices are to be used on one patient only, and must never be used between patients.
- **Never reuse a syringe or needle to withdraw medication from a multidose medication vial.** A new sterile syringe and needle are required each time a multidose vial is accessed.^{6,13} Practitioners should avoid using multidose vials if at all possible. If a multidose vial must be used, the practitioner should consider using that multidose vial on only one patient. Although multidose medication vials contain a preservative, they still may become contaminated with infectious agents due to unsafe practices. Using a new sterile needle and syringe each time a multidose vial is accessed reduces the possibility of contamination.
- **Never reenter a single-use medication vial, ampoule or solution.**¹⁴ It is not appropriate to prepare multiple flush syringes for multiple patients from the same single-use intravenous solution bag or bottle (e.g., normal saline). It is not appropriate to prepare multiple fentanyl, midazolam, or propofol syringes for the same or multiple patients from the same single-use medication vial, ampoule or solution.

Every patient deserves to receive anesthesia care that is free from risk of infection. CRNAs have an obligation to ensure that the care they render reduces the risks posed to their patients and themselves from infectious agents. Therefore, using a **new** sterile needle, a **new** sterile syringe, and a **new** single-use medication vial is required to minimize the inherent risks of injection practices. **Syringes and needles must only be used once.**

References:

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