Dangerous Injection Practices are Still Commonplace

Medication injections are a part of everyday clinical practice. There are basic principles that must be followed to ensure drug injections are safely administered and to prevent the spread of infection. These best practices include:

- Always utilize aseptic technique.
- Avoid reuse of single-dose or single-use vials.
- Use needles and syringes only once for only one patient, then discard vial after initial use.
- Never reenter a medication container with a used needle or syringe.
- If multiple-dose vials are used, limit to single-patient use whenever possible, and use a sterile needle and syringe to access the vial.

The Centers for Disease Control and Prevention (CDC) recently conducted a survey on injection practices in acute care, long-term care, and outpatient settings. Almost 700 physicians and registered nurses from a variety of clinical settings responded to the questionnaire. The survey results were alarming and identified several issues within clinician knowledge, attitudes and habits despite recent educational campaigns to raise awareness about unsafe injection practices. The following problems were discovered:

- **Syringe reuse for more than one patient** was reported by physicians to occur *usually* or *always* in the work area; this practice was most frequently reported by oncologists; while most believe this is an unacceptable practice, 12.4% of physicians and 3.4% of nurses reuse a syringe for more than one patient.
- **Reentering a vial with a used syringe/needle** is falsely believed to be an acceptable practice by 12.7% of physicians and 6.7% of nurses; over 40% of physicians and 24% of nurses reported this occurs in the workplace. This unsafe practice was reported by more than half of all responding radiologists, anesthesia-pain management physicians, and oncologists.
- **Using single-dose vials for multiple patients** is erroneously believed to be an acceptable practice by 34% of physicians and almost 17% of nurses. This unsafe practice was most frequently reported by oncologists and anesthesia-pain management physicians.
- **Using source bags or bottles as diluents for multiple patients** was reported by almost 29% of physicians and 13% of nurses. This unsafe practice was reported more often by nurses in long-term care and outpatient facilities than acute care hospitals, and by oncologists.

The survey results indicate there are many clinicians not following best practices related to safe medication injections and are putting patients at risk for infection. Healthcare institutions must monitor staff for proper technique and provide resources to ensure staff have the knowledge and skills related to infection control and injection safety. Every staff member should know that any form of syringe and/or needle reuse is dangerous and should be avoided, and that syringes cannot be reused even if the needle is changed. Education on safe injection practices should be required during orientation, and staff competencies should be assessed on a regular basis.

References

1. Institute for Safe Medication Practices. (2017). *Nurse Advise-ERR.* Retrieved from Institute for Safe Medication Practices: http://www.ismp.org/newsletters/nursing/issues/NurseAdviseERR201711.pdf