SAFE INJECTION PRACTICES

1. Purpose

The purpose of this policy is to define and describe practices necessary to safeguard Aurora Health Care patients and care-givers from the transmission of infection due to unsafe injection practices.

2. Scope

This policy applies to Aurora Health Care hospitals and clinics in any entity or facility owned, in whole or in part, or controlled by Aurora Health Care. It does not apply to the Aurora Visiting Nurse Association.

3. Definitions

3.1 Aseptic Technique: a set of specific practices and procedures performed under carefully controlled conditions with the goal of minimizing contamination by pathogens.

3.2 Multi-dose Vial (MDV)

A multi-dose vial is a vial of liquid medication intended for parenteral administration (injection or infusion) that contains more than one dose of medication. Multi-dose vials are labeled as such by the manufacturer and typically contain an antimicrobial preservative to help prevent the growth of bacteria. The preservative has no effect on viruses and does not protect against contamination when healthcare personnel fail to follow safe injection practices.

3.3 Single Dose Vial (SDV):

A single-dose or single-use vial is a vial of liquid medication intended for parenteral administration (injection or infusion) that is meant for use in a single patient for a single case/procedure/injection. Single-dose or single-use vials are labeled as such by the manufacturer and typically lack an antimicrobial preservative.

3.4 ISO Class 5 Clean room: the required environment for sterile preparation of most medications, per USP 797 (the chapter of the USP National Formulary that sets forth sterile compounding standards). Specifically, this space must have a measurable air quality of less than 100,000 particles (of less than or equal to 0.1 mm in size) per cubic meter. Laminar Airflow Workbenches, Biological Safety Cabinets, Compounding Aseptic Isolators and Compound Aseptic Containment Isolators are ISO Class 5 environments, and are almost always only available in pharmacy departments.

4. Policy

4.1 Aseptic Technique is used for in the handling, preparing, and storing of medications and injection equipment/supplies.
4.2 Needles and Syringes
a. The rubber septum on a medication vial and diluents is disinfected with 70% alcohol and allowed to dry prior to piercing.

b. Needles, cannulae and syringes are sterile, single-use items. They should never be reused for another patient nor to access a medication or solution that might be used for a subsequent patient. This includes manufacturer prefilled syringes and cartridge devices such as insulin pens.
   1. An insulin pen is multi-dose but must only used for a single patient.

c. Never administer medications from a single syringe to multiple patients, even if the needle or cannula on the syringe is changed.

d. Remove sterile needle/cannula and/or syringe from package just prior to use.

e. Needles and syringes are not to be stored unwrapped as sterility cannot be assured.

f. Syringes not pre-filled in an ISO Class 5 Clean Room are to be used within 1 hour of preparation. After 1 hour, they must be discarded.

g. Syringes pre-filled inside of the ISO Class 5 Clean Room will have an expiration date that must be followed.

h. Do not leave needles or other devices left inserted in any vial septum for multiple withdrawals.
   1. Exception for closed system transfer devices used in an oncology setting.

i. Do not prepare medication in one syringe to transfer to another syringe unless specifically called for in the reconstitution of a medication or part of a pharmacy workflow in an appropriate environment.

j. Do not draw solution out of another syringe through a rubber stopper

4.3 Vials, ampules and pre-filled syringes

a. Use single-dose vials for parenteral medications whenever possible.

b. Single dose (single use) medication vials/ampoules/prefilled syringes are used for only one patient.

c. Do not administer medications from single-dose vials, ampoules or prefilled syringes to multiple patient or combine leftover contents for later use.

d. Any medication left over in a single-dose container after patient use must be discarded. It cannot be stored for future use, even on the same patient.

e. Medications are not to be stored in caregiver or provider clothing or pockets.

f. Limit the use of multidose vials and dedicate them to a single patient, whenever possible.
   1. If multidose vials must be used, both the needle or cannula and syringe used to access the multidose vial must be sterile.
   2. Multi-dose vials to be used for more than one patient are kept in a centralized medication area and do not enter the immediate patient treatment area (e.g. operating room, patient room/cubicle/exam room).
   3. If a multi-dose vial enters the immediate patient treatment area, it should be dedicated to that patient only and discarded immediately after use.

g. Dispose of opened multidose vials 28 days after opening, unless specified otherwise by the manufacturer, or sooner if sterility is questioned or compromised. Vials must be labeled with the “do not use after” date when opened.
   1. Exception: Vaccines do not follow 28 date discard. Vaccines follow manufacturers’ expiration date.
   2. Exception: In the Ambulatory Clinic, if a patient brings in own multidose vial that is stored and administered in the Clinic, this may follow the manufacturer’s expiration date.

h. Follow manufacturer’s instructions for refrigeration.

i. Open vials brought in from patient’s home are prohibited. These may be used
only in emergency circumstances with Pharmacy’s approval.
1. Please see Item 4.3.g.2. for expiration date specifications in this instance.

4.5. IV Solutions
a. Bags or bottles of intravenous solution are not to be used as a common source of supply for multiple patients.
b. Use fluid infusion and administration sets (i.e., intravenous bags, tubing and connectors) for one patient only and dispose appropriately after use.
c. Once a syringe or needle/cannula has been used to enter or connect to a patient’s intravenous infusion bag or administration set it is considered contaminated.
d. IV bags or bottles are not pre-spiked for use at a later time.
e. For products compounded outside an ISO class 5 environment, administration must begin within one hour and be completed within 12 hours of preparation.

Cross References: Aurora Pharmacy Services policy and Procedure Manual Policy
No.S6.10, Expiration Dating of Medications
S6.01 Sterile Product Preparation Policy
AHC Clin 2012: Medication Brought Into the Hospital from an Outside Source
Owner: Aurora System Infection Prevention

References:


http://www.cap.org

http://www.oneandonelycampaign.org/


http://www.cdc.gov/injectionsafety/providers.html

http://www.mnreducinghais.org/documents/Infection_Control_Policy.doc
