

Boston Reed College®
Pharmacy Technician Training Program
Week #18 Homework Assignment

Visit the <http://usp797.org/> or other helpful websites regarding USP 797 and then answer the following questions. Take your work to class in Week 18.

1. What is USP 797?

2. What is the history behind the creation of USP 797 (why is it being implemented)?

3. What are the differences between sterile compounding processes prior to implementation of USP 797 as compared to after USP 797 implementation?

Links to other helpful websites:

- www.ashp.org
- www.pharmacyisolators.com/usp-chapter-797.php
- www.valiteq.com/usp_facility.htm
- www.publicrelationsnewsroom.com/wsn/page4.html

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STERILE COMPOUNDING

Topics to discuss as a group:

- Creating a sterile environment
- How to read a syringe
- Proper needle technique
- Aseptic technique
- How to open an ampule

Imagine you are in a sterile I.V. room and working under a laminar air flow hood. Prepare the following I.V. products. See instructions on next page.

Cefazolin 2 g in 100mL -D5W

½ cc of ampule volume in 100mL -D5W

Topics to discuss as a group:

- Clean up
- Proper disposal of waste and sharps

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The technician who mixes injectable admixtures must be organized, orderly, and motivated. Quality assurance is of utmost importance in the I.V. room. By performing intelligently and professionally the technician will find working in the I.V. room a rewarding experience.

Preparation of Parenteral Products

- ❖ Aseptic Technique:
 - ❖ Prepare and handle sterile products in such a way as to prevent contamination by microorganisms- keep a sterile product sterile
 - ❖ Must be present in all stages of handling parenteral products

- ❖ Laminar Air Flow Hoods
 - ❖ Some pharmacies run their hoods continuously - if hood has not been running for 24 hours, turn on and run 30 minutes before compounding.
 - ❖ Remove all jewelry from hands and arms
 - ❖ Thoroughly wash hands for 3 minutes with antimicrobial cleanser
 - ❖ Clean hood with 70% Isopropyl alcohol -- sides, back, glass front, roof, bottom counter.
 - ❖ Clean hood using long, continuous motions
 - ❖ Clean several times per day (including at the beginning and end of shift).

- ❖ Hands should be washed again if leaving and returning
- ❖ Gather all materials needed before starting
- ❖ Materials being used should be inspected for particulate matter
- ❖ Outside of containers should be clean
- ❖ Wash hands and gown-up. If doing chemo, use hat, goggles, mask, gown, shoes, two pair gloves. If normal IV, use only one pair gloves.
- ❖ Place materials inside hood
- ❖ Work in center of hood- at least six inches into the hood
- ❖ Vertical hoods- lower window to keep airflow inside
- ❖ Clean vials and IV ports with alcohol
- ❖ Mix all powders with diluents – shake to dissolve.
- ❖ Make IV's starting with first additive, placing syringes on right side of vial with plunger extended to mark amount entered into IV for pharmacist to check each syringe for correct amount used. Watch finger position as not to interrupt airflow.
- ❖ When using ampules, use filtered needle to withdraw from ampule saving filter needle inside wrapper for pharmacist to inspect. Change to regular needle to insert additive into IV bag.
- ❖ Check for particulate matter, call pharmacist to check. Dispose of refuse -- sharps in sharps container, biohazardous in Bio container.