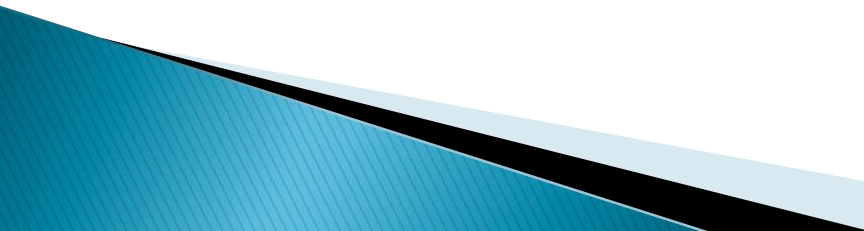
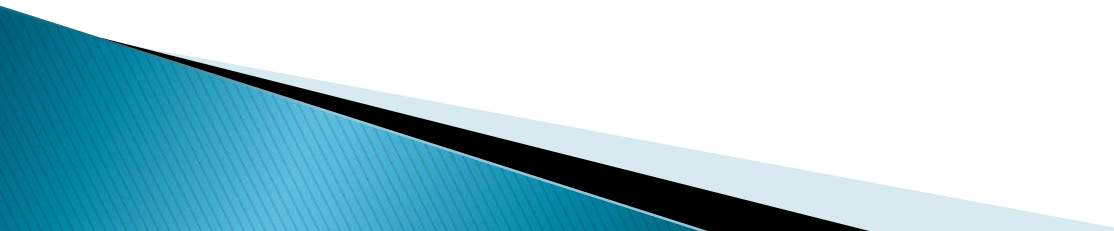
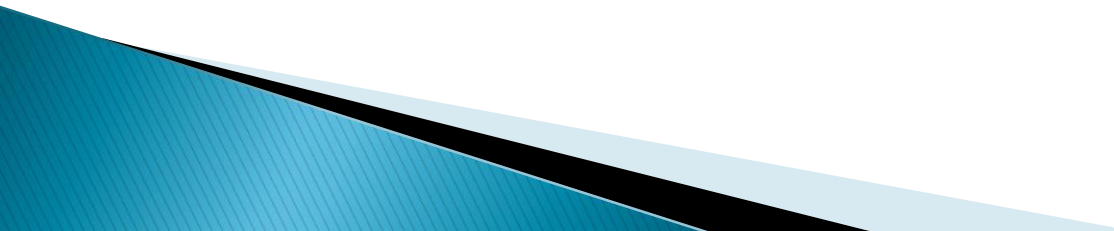


Phlebotomy



- ▶ **Phlebotomy** means collecting blood
 - ▶ **Venipuncture** is the act of puncturing a vein with a needle
 - ▶ **Thrombophlebitis** is the inflammation of a vein with blood clot formation
 - ▶ **Thrombus** a blood clot
 - ▶ **Hemolysis** is the breaking of blood cells
 - ▶ **Coagulate** “the act of blood clotting”
 - ▶ **Hematoma** a blood-filled bruise caused when a blood vessel is broken; collection of blood under the skin
- 

- ▶ **Lumen** is the hollow center of a structure (needle)
 - ▶ **Bevel** is the slant at the end of a needle
 - ▶ **Vacutainer** is a vacuum tube used to draw blood
 - ▶ **Butterfly** smaller needle with wings on each side used to draw blood; winged infusion needle
 - ▶ **Straight needle** is a straight needle used to draw blood
- 

- ▶ **Anticubital space** is the area in front of the elbow
 - ▶ **Ecchymosis** a bruise
 - ▶ **Thrombus** a blood clot formed in a blood vessel
 - ▶ **Coagulate** is the medical term describing blood clotting
- 

- ▶ **Centrifuge** is a device used in the lab to spin blood and separate the liquid and solid portions of the blood

Screen for Latex Allergy

- ▶ Always ask pt if he/she is allergic to latex before drawing blood!

Why?

Many medical supplies still contain latex and could cause an allergic reaction



Choosing a Needle

- ▶ Size/diameter of lumen: smaller the gauge= larger the lumen.

Choice depends on amount of blood being drawn

- ▶ Length: user preference, may need longer needle for obese patients
- ▶ Use a 21 gauge or bigger to prevent hemolysis

Which needle is larger in diameter?

16 gauge or 20 gauge

Choosing a site

- ▶ Places to avoid:

- arm w/ IV solution infusing

- infected/swollen are

- area w/ rash

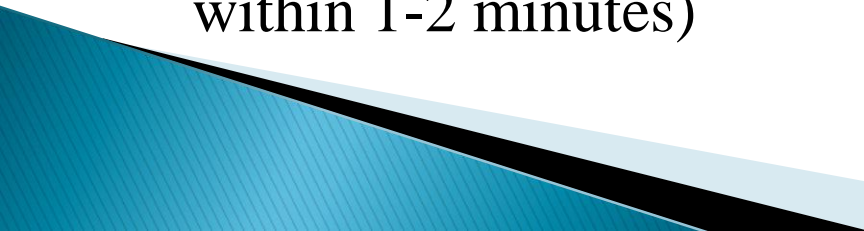
- arm w/ a dialysis graft or same side as a mastectomy

- site w/ injury, burn, scarring

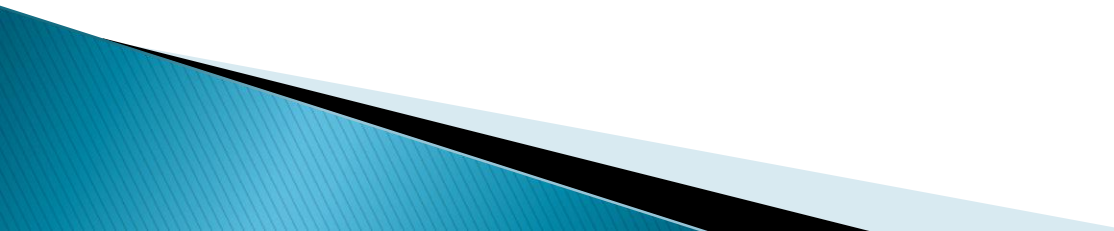
- lower extremities

- inner portion of wrist- why?

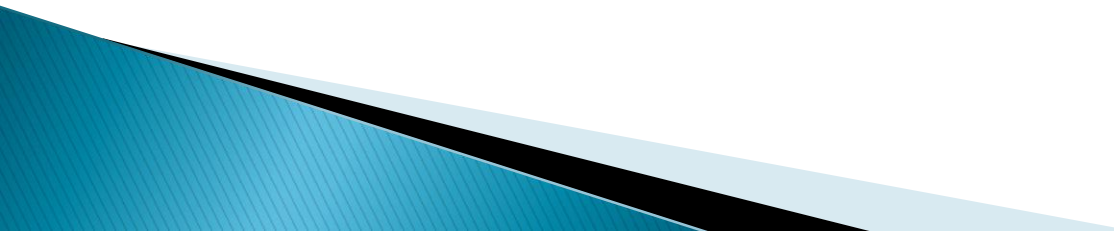
Choosing a Site

- ▶ Use a tourniquet to evaluate which vein to use
 - ▶ Apply tourniquet 2-3 inches above elbow. How? See pt 132; practice
 - ▶ Not too tight; tight enough to cause the veins to stand out but not so tight to occlude arterial flow- check pulse
 - ▶ Evaluate vein selection
 - ▶ Remove tourniquet until ready to perform full procedure (within 1-2 minutes)
- 

Choosing a Site

- ▶ Antecubital space are most commonly used
 - ▶ Apply tourniquet 2-3 inches above elbow or desired blood draw site
 - ▶ A good vein stands out when the tourniquet is applied
 - ▶ Use “touch” more than “sight”
 - ▶ Use vein that feels “springy”
- 

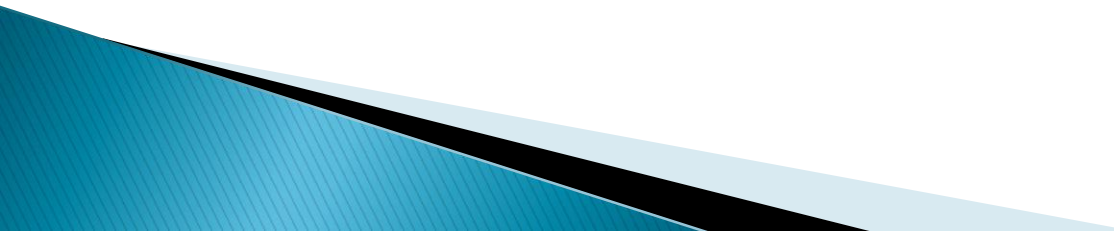
Supplies

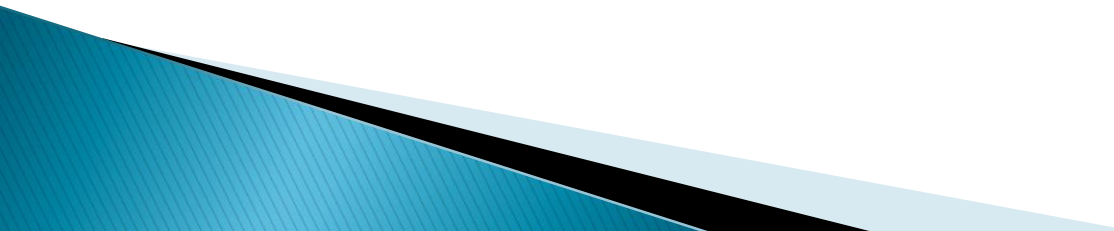
- ▶ Alcohol
 - ▶ Betadine
 - ▶ Chlorhexidine
 - ▶ Tourniquet
 - ▶ Needle(smaller number=bigger needle)
 - ▶ Vacutainer
 - ▶ Adapter
 - ▶ Gauze
 - ▶ bandaid
- 

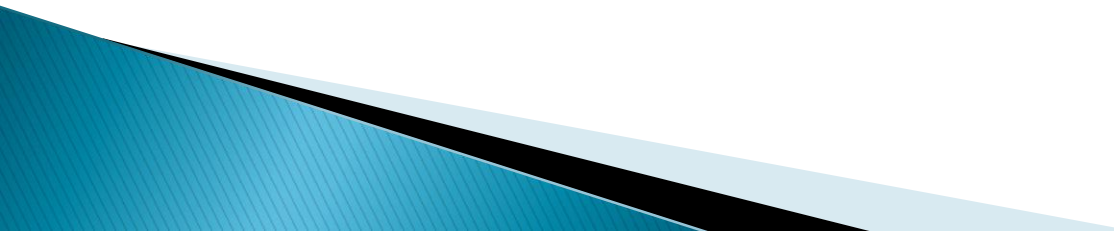
Supplies



Steps to Phlebotomy

1. Gather supplies
 2. Explain procedure/screen for latex allergy
 3. Standard precautions
 4. Examine arm
 5. Place tourniquet; find vein (1-2 min max)
 6. Release tourniquet
 7. ready supplies and clean site
 8. Replace tourniquet without contaminating
 9. Stabilize the vein
- 

10. Enter vein at 15 degree angle
 11. When you see “flash”, push vacutainer into adapter
 12. Allow tube to fill(if multiple tubes drawn; follow correct order)
 13. Release tourniquet as last tube is filling
 14. Place gauze over site as needle is removed
 15. Hold pressure x 2-3 minutes
 16. Place bandaid if bleeding has stopped
- 

- ▶ Invert blood tubes 5-10 times. See 137
 - ▶ Label tubes according to facility requirements
 - ▶ Send to lab in biohazard bag x 2
- 

Thank you for listening

