

### **Special Specimen Collection Procedure for Coagulation Testing**

The accuracy of hemostasis testing depends upon the quality of the specimen submitted. To ensure the best possible results, follow the collection requirements as closely as possible.

#### **Collection of Blood Specimens from Indwelling Catheters**

When specimens are collected from indwelling catheters, in order to prevent possible heparin contamination or specimen dilution, the line should be flushed with 5 mL of saline. The first 5 mL of blood or 6-times the line volume (dead space volume) of the catheter must be discarded before the coagulation tube is filled.

#### **Collection of Citrated Plasma for Coagulation Testing**

1. Draw a plain red-top tube to remove tissue fluid contamination. Discard this tube. (Alternatively, this tube may be used for serum-type laboratory tests.)
2. Draw blood into a 3.2% buffered sodium citrate collection tube (light blue top) filled to the proper level.  
If the patient's hematocrit is >55%, the volume of anticoagulant in the tube should be adjusted. Use the following formula to determine the correct anticoagulant volume:  
Anticoagulant volume:  $(100-Hct)/(595-Hct) = \text{volume of anticoagulant to be used.}$
3. Invert gently 6 times to mix. Process immediately.
4. Centrifuge for 15 min at 2500 x g.
5. Repeat centrifugation at 2500 x g for 15 minutes to assure complete platelet removal.
6. Remove plasma using a plastic transfer pipette and dispense the plasma into 1 or more screw-capped plastic vials. Label tubes appropriately.
7. Freeze immediately at -20°C.
8. Specimen must remain frozen at all times. Ship within 24 hours on dry ice.