

Copley Hospital, Inc. Laboratory Services Directory

INSTRUCTIONS FOR HANDLING BLOOD SAMPLES

Refer to specific specimen needed for correct handling instructions

- 1. Sample type = SERUM (SER) TIGER, RED or GOLD top tube.
 - a. Following collection gently invert tubes <u>5</u> times (not necessary for RED TOP). This mixes clot activator with the blood.
 - b. Allow to clot <u>30</u> minutes. This minimizes hemolysis and yields more serum. However, if time goes beyond 1 hour glycolysis occurs (decreasing glucose) and there can be a shift of substances from cells to the serum (increasing potassium and interfering with most enzyme assays).
 - c. Centrifuge <u>10</u> minutes at <u>3000</u> rpm. The centrifuge causes the red cells and serum to separate into distinct layers.
 - d. IMPORTANT: If any red cells remain in the serum, re-spin and transfer to another plastic tube. Store as indicated and submit to laboratory.

BLOOD BANK DOES NOT ACCEPT TIGER TOP TUBES - PLEASE DO NOT SPIN BLOOD BANK SAMPLES.

2. Sample type = WHOLE BLOOD (BLD) - Color of tube top indicated:

LAVENDER TOP used for Hematology

PINK TOP used for Blood Bank

RED TOP when used for Blood Bank

a. Gently invert specimen <u>5</u> times immediately following collection (not necessary for RED TOP). This mixes anticoagulant with blood to prevent clotting.

INSTRUCTIONS FOR HANDLING BLOOD SAMPLES -continued

- b. DO NOT SPIN. Store as indicated until submitted to laboratory.
- 3. Sample type = PLASMA (PL) Miscellaneous specialty tubes. Refer to appropriate

specimen requirements section.

<u>LIGHT GREEN GEL</u> – used for General Chemistry

- a. Gently invert specimen <u>5</u> times immediately following collection. This mixes anticoagulant with the blood to prevent clotting.
- b. Centrifuge <u>10</u> minutes at <u>3000</u> rpm. The centrifuging causes the red cells and plasma to separate into distinct layers.
- c. Immediately transfer the plasma to the plastic tube provided. Label the tube "plasma". DO NOT store plasma on cells. Hemolysis can result which can interfere with testing. Separation is not required for routine chemistry testing and same day delivery.
- d. IMPORTANT: If any red cells remain in the plasma, re-spin and transfer to another plastic tube. Store as indicated and submit to laboratory.