

LABORATORY COLLECTION MANUAL	ACCEPTABLE SPECIMENS FOR CHEMISTRY
Effective Date: 4/96	Page 1 of 1

Accurate chemical analysis of blood and urine is a valuable aid in helping recognize certain disease patterns. Blood and body fluid components must remain within narrow limits for the body to function properly, and any variations from normal levels can indicate numerous pathologic or physiologic conditions. The normal balance of electrolytes, enzymes, proteins, glucose, and other constituents may be easily disturbed during disease by many factors that influence their rate of formation and their utilization or removal. Any change in the structure or function of organs such as lungs, heart, liver, or kidneys, as well as the administration of many drugs, may alter the concentration of the chemical constituents of blood and urine.

I. PURPOSE:

Specimens that are to be processed in chemistry should be free from hemolysis and lipemia and should be drawn in the correct tubes for tests ordered. If specimens do not meet this criteria, the specimen should be redrawn. Although numerous chemistry components are not changed significantly after eating, it is recommended that, when possible, all blood specimens be collected following a period of fasting. Most routine chemistry tests as well as most therapeutic drug tests and endocrine studies require a red top tube or a lithium heparin (green top) tube, as a specimen. If there is to be a delay in transport, please spin specimen and separate serum or plasma into another tube. Store and transport at 2-8°C. Please see individual tests listing for specific requirements. All specimens must be labeled with at the very least the Patient's name and Date of Birth.

II. If a specimen is lipemic, the technologist should spin in ultracentrifuge. If this doesn't clear lipemia, use liposol per directions to clear the serum and then run tests accordingly. Documentation is entered into the computer stating that liposol was used and the extent of the lipemia of the serum.

III. If a specimen is hemolyzed, inpatients should be redrawn if possible. On outpatients, the physician should be notified to see if the specimen could be redrawn. A disclaimer about the validity of the results due to the hemolysis will be entered into the computer. The extent of hemolysis, whether the patient was redrawn or not, and when the physician was notified is also noted.

IV. Possible reasons for chemistry specimens to be unacceptable:

- Quantity not sufficient for tests.
- Specimen grossly hemolyzed.
- Serum or plasma was not separated from red cells soon enough.
- Specimen not stored or transported at proper temperature: (see separate storage requirement)

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REVISED BY: Kay Shaw, MT(ASCP)SBB DATE: 4-96, 6-2002, 6-2004, 3-2008, 4-2010

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**See original policy in the Laboratory for all documented annual reviews.**