

Blood Tubes used in Lab Testing

Chemistry Tubes:



Lithium Heparin Separator Tubes

Yield Plasma for Chemistry tests like:

- Electrolytes
- CMP Comprehensive Metabolic Panel
- BMP Basic Metabolic Panel
- Troponin

Advantage is for STAT testing, since these tubes do not need to clot before being centrifuged. Cannot be used for Lithium determinations



Serum Separator Tubes (with clot activator)

Yield Serum for Chemistry tests like:

- Panel tests listed above
- Hepatitis Panels
- Therapeutic Drug levels
- Many send out tests

While more versatile, these tubes do require the blood to clot for at least 15 minutes before centrifuging, so are slower for STAT needs.

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Hematology Tube:



Contains EDTA - ethylene diamine tetraacetic acid – keeps blood from clotting by binding calcium.

Used for Lab tests like:

CBC – complete blood count

Retic – reticulocyte count

ESR – erythrocyte sedimentation rate

Malarial smears

Whole blood can be used for Glycohemoglobin determinations, a test used to monitor a diabetic patients' glucose control.

Blood Bank Tubes:



EDTA Blood Bank Tube

Full draw on normal patient will yield ~ 5 mL of EDTA plasma.

Must be collected carefully, any hemolysis is cause for rejection (can interfere with interpretation of BB tests).

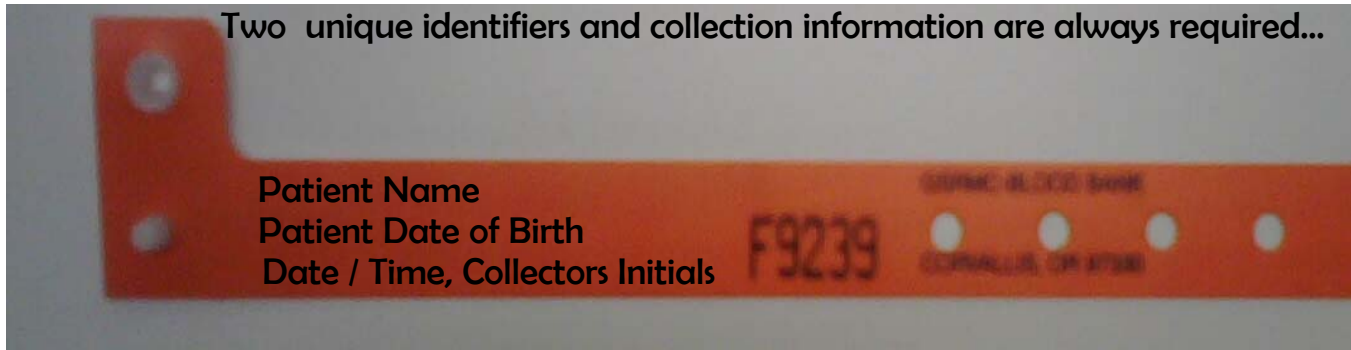
Used for Type & Screen, Crossmatch, ABO/Rh testing

9 mL

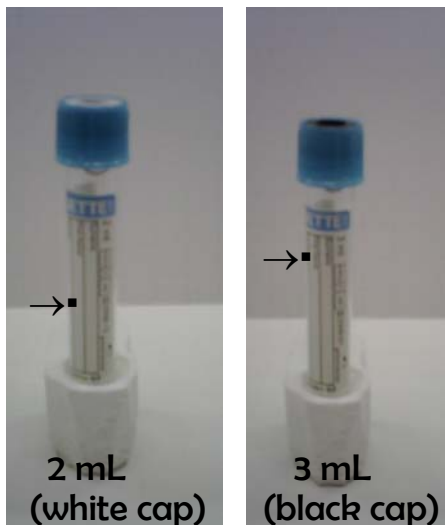
Often these are used in conjunction with Blood Bank Armbands.

Blood Tubes used in Lab Testing

Blood Bank Continued



Coagulation Tubes:



Sodium Citrate Tube

Prevents clotting by binding Calcium

Specimens are centrifuged; plasma is used for tests like:

Prothrombin Time and INR

Activated partial Thromboplastin Time

Fibrinogen

D-Dimer

It is critical these tubes are properly filled; there is a guide mark on the tube to help with this

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Specialty Tubes:



ACD Tubes – stands for ACD Solution A of trisodium citrate, 22.0g/L; citric acid, 8.0 g/L; and dextrose 24.5 g/L

Sometimes used in Blood banking, used in Histocompatibility testing (like when screening persons as possible bone marrow donors)



Sodium Heparin

Prevents clotting by neutralizing thrombin

Venous whole blood can be used for test like:

Venous Blood Gas

Lactate (Lactic Acid)

Blood Tubes used in Lab Testing



Non Additive Trace element

* Can be one of two types that the tubes look the same:

- EDTA trace element
- Serum trace element

So it is important to verify correct tube is used.

Trace element = testing for heavy metals