### BLOOD COLLECTION TUBES & THE ORDER OF DRAW

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Clear	New Red/ Light Gray	None (plastic)	0	For use as a discard tube or secondary specimen tube.
Light Blue	Elight Blue	Buffered sodium citrate     0.105 M (=3.2%) glass     0.109 M (3.2%) plastic     Citrate, theophylline, adenosine, dipyridamole (CTAD)	3-4 3-4	For coagulation determinations. CTAD for selected platelet function assays and routine coagulation determination. Tube inversions ensure mixing of anticoagulant (citrate) to prevent clotting.
Clear				
Red	Red Red	Silicone coated (glass)     Clot activator, Silicone coated (plastic)	0 5	For serum determinations in chemistry. May be used for routine blood donor screening and diagnostic testing of serum for infectious disease. "Tube inversions ensure mixing of cbt activator with blood. Blood clotting time: 60 minutes.
Gold	Red/ Gray	Clot activator and gel for serum separation	5	For serum determinations in chemistry. May be used for routine blood donor screening and diagnostic testing of serum for infectious disease. "Tube inversions ensure mixing of clot activator with blood. Blood clotting time: 30 minutes.
Green	Green	Sodium heparin     Lithium heparin	8 8	For plasma determinations in chemistry. Tube inversions ensure mixing of anticoagulant (heparin) with blood to prevent clotting.
Light Green	Green/ Gray	Lithium heparin and gel for plasma separation	8	For plasma determinations in chemistry. Tube inversions ensure mixing of anticoagulant (heparin) with blood to prevent clotting.
Pink	Pink	Spray-coated K <sub>2</sub> EDTA (plastic)	8	For whole blood hematology determinations. May be used for routine immunohematology testing and blood donor screening." Designed with special cross-match label for patient information required by the AABB. Tube inversions prevent clotting.
Lavender	Lavender	Liquid K <sub>S</sub> EDTA (glass)     Spray-coated K <sub>2</sub> EDTA     (plastic)	8	K <sub>2</sub> EDTA and K <sub>3</sub> EDTA for whole blood hematology determinations. K <sub>2</sub> EDTA may be used for routine immunohematology testing, and blood donor screening." Tube inversions ensure mixing of anticoagulant (FDTA) with blood to prevent chitting
Gray	Gray	Potassium oxalate/ sodium fluoride Sodium fluoride/Na <sub>2</sub> EDTA Sodium fluoride (serum tube)	8 8 8	For glucose determinations. Oxalate and EDTA anticoagulants will give plasma samples. Sodium fluoride is the antiglycolytic agent. Tube inversions ensure proper mixing of additive with blood.
Royal Blue		Clot activator (plastic serum)  K <sub>2</sub> EDTA (plastic)	8	For trace-element, toxicology, and nutritional-chemistry determinations. Special stopper formulation provides low levels of trace elements (see package insert). Tube inversions ensure mixing of either clot activator or anticoagulant (EDTA) with blood.
	Yellow	Sodium polyanethol sulfonate (SPS)     Acid citrate destriose additives (ACD):     Solution A -     22.0 g/L trisodium citrate,     8.0 g/L citric acid, 24.5 g/L destriose	8	SPS for blood culture specimen collections in microbiology.  ACD for use in blood bank studies, HLA phenotyping, and DNA and paternity testing.  Tube inversions ensure mixing of anticoagulant
		Solution B - 13.2 g/L trisodium citrate, 4.8 g/L citric acid, 14.7 g/L dextrose	8	with blood to prevent clotting.

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SOLUTION

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BD Vacutainer® Venous Blood Collection
Tube Guide 07/2010

# SPECIMEN LABELING REQUIREMENTS

All specimens submitted to the laboratory must be individually labeled.

Specimen labels may be ordered from Laboratory Services – please call Client Services.

### **Each Container MUST be labeled with the following information:**



Patient's full legal name (as it appears on the requisition)
Second identifier unique to the patient (date of birth, SSN, billing #, etc.)



Date and time of collection Initials, ID# or signature of person collecting the specimen



Collection source/site as required for microbiology, molecular pathology, pathology, cytology and electron microscopy



Multiple specimens submitted for one patient MUST be labeled with an alpha/numeric description which is an exact match to the requisition

#### **Example:**

Name: Doe, John Michael

Second Identifier: (SS, DOB, MRN, FIN/Billing Number, etc.)

Date: 09/04/01 Time: 9:00 am Initials: HR

Source/Site: Right Upper Chest, (A or 1, B or 2)

#### Use indelible ink:

- Print clearly
- Label containers DO NOT put labels on caps or lids
- Container labeling MUST match information on requisition
- Label frosted end of slides with a No. 2 pencil
- Slides must be labeled with patient's name and date of birth. If possible, indicate if the slide is fixed or air-dried.



## TRANSPORTING SPECIMENS

### **Basic methods for transporting specimens:**

- Transport specimens in labeled, appropriate containers (sterile, leak-proof, without needles, swabs in culturettes, strep screens acceptable in paper sleeves).
- Place the labeled specimen container in the sealable pouch of the biohazard transport bag.
   Seal the pouch securely.
- Place the completed requisition in the unsealed outer pouch of the biohazard transport bag containing the specimen.
- Place the sealed bag containing the specimen and the requisition inside a second bag. Seal it securely.
- Determine the correct temperature for transport as listed under test requirements. Mark the bag appropriately.

**Specimens should not be shipped in syringes as s**yringes with needles attached are dangerous to anyone handling them. **Some Microbiology specimens are acceptable in <u>capped</u> syringes.** Transfer the contents of the syringe into an appropriate container. If a syringe is shipped with the needle attached, the ordering clinician or office will be contacted.

Failure to provide the appropriate conditions can render a specimen unsuitable for testing. If the specimen integrity will be compromised by the weather, either too hot or too cold, call a courier to transport the specimens immediately to the laboratory. For assistance, contact your providing laboratory.

### Frozen: -10°C or colder (<14°F)

When ordering multiple tests on a patient, prepare a separate aliquot for each test requiring a frozen specimen. Pour off serum or plasma into a properly labeled plastic tube before freezing. Do not freeze glass tubes. Do not freeze whole blood unless specifically indicated by the specimen requirements. Do not package frozen specimens with non-frozen specimens. Specimens must remain frozen during shipment.

### Refrigerated: 2-8°C (35.6-46.4°F)

Specimens should be packaged in an appropriate shipping container with a frozen coolant pack. Insulate the specimen by placing a barrier (i.e., paper towels) to ensure that it does not come in direct contact with the coolant pack. One pack cools for 8-10 hours; 2 packs cool for 24 hours if the shipping container remains unopened.

### Room temperature (Ambient): 18-25°C (64.4-77°F)

Room temperature specimens need not be packaged with coolants; however, extreme weather or other conditions such as exposure to sunlight could affect specimen quality. Take weather and other conditions into consideration when leaving specimens in locked boxes for couriers.

Note: If submitting more than one specimen per patient, and if specimens need to be stored and transported at different temperatures, use separate bags and include the patient information and specific tests on a separate requisitions.

