

Order of Draw for Multiple Specimens Collected with Evacuated Tubes during a Single Venipuncture ⁽¹⁾

ALWAYS CHECK TUBE EXPIRATION DATES
MIX ALL TUBES 6-8 TIMES BY GENTLE INVERSION IMMEDIATELY AFTER FILLING

Collect and fill in the following order to minimize contamination from tube additives:

CAP/COLLAR COLOR	DRAW VOLUME	CONTENTS / PURPOSE
Blue blood culture bottle ⁽²⁾	8-10 mL	a. Adult blood culture bottle (aerobic) • Note site-specific shape variations for bottles in picture below b. Adult blood culture bottle (anaerobic) • Note site-specific shape variations for bottles in picture below c. Pediatric blood culture bottle (aerobic) • Note site-specific color variations for pediatric bottles in picture below
Purple blood culture bottle	8-10 mL	
Pink blood culture bottle (Royal Oak, Troy, Grosse Pointe, Farmington Hills)	1-3 mL	
Yellow blood culture bottle (Dearborn, Taylor, Trenton, Wayne)	1-3 mL	
Yellow Isolator™ ⁽²⁾	7.0 mL	Blood culture for Fungus or AFB; draw one tube for each culture.
Clear ⁽³⁾	3.0 mL	NO additive. A discard tube drawn before light blue.
Light Blue	2.7 mL	Citrate – for Coagulation studies; <i>fill to STOP line ON THE TUBE.</i>
Royal Blue (red stripe)	6.0 mL	Clot activator only - for certain trace metals/elements. <i>(Check label wording and color stripe carefully.)</i>
Red	5.0 mL	Clot activator only - for drug testing
Gold	5.0 mL	Serum separator gel (SST) <u>and</u> clot activator - for most Chemistry & Immunology
Dark Green (green slash marks on label)	6.0 mL	Sodium Heparin - for HLA & chromosomes <i>(Check label wording carefully.)</i>
Dark Green (no green slash marks on label)	4.0 mL	Lithium Heparin - for pre-op & hyponatremia panels; plasma hemoglobin <i>(Check label wording carefully.)</i>
Light Green	4.5 mL	Plasma separator gel (PST) and Lithium Heparin - for Troponin <i>(Check label wording carefully.)</i>
Royal Blue (blue Plus flag)	6.0 mL	K-EDTA – for certain trace metals/elements including lead. <i>(Check label wording and color stripe carefully.)</i>
Lavender	4.0 mL	K-EDTA – for Hematology & Molecular
Pink	6.0 mL	K-EDTA – preferred tube for Blood Bank
Pearl	8.5 mL	Plasma Preparation Tube (PPT) with separator gel and K-EDTA – for HIV Quantitation
Grey	4.0 mL	Fluoride + Oxalate - for GTT
Yellow	8.5 mL	Glass, ACD - for cell cultures, B-27
Royal Blue (yellow label)	2.0 mL	Trypsin inhibitor/Bothrops Atto venom - for Fibrin Split Products (FSP)

If less than 3 mL, put all blood in pediatric bottle.

- (1) Order described above minimizes cross-contamination from tube additives. While collecting the blood, hold the tube horizontally or slightly downward to reduce carry-over effects.
- (2) Normally, routine and/or fungal/AFB blood cultures are drawn **first** to reduce bacterial / fungal contamination. **EXCEPTION: Venous pH and arterial blood for ionized calcium are to be drawn before any tubes, including routine or fungal/AFB blood cultures.**
NOTE: Collect routine and fungal/AFB blood cultures via butterfly collection device connected to tube holder or syringe.
- (3) Draw a clear top discard tube **before** drawing any light blue citrate tube in the following situations:
 - (a) **Special coagulation tests** (e.g., platelet function studies, clotting factors, D-dimer) are ordered.
 - (b) When a butterfly collection set is used and a light blue coagulation tube is the only tube to be collected.
 - (c) When a **fungal culture, venous pH or ionized calcium** is ordered along with coagulation studies.
 - (d) NOTE: A discard tube is not necessary if the routine coagulation tests (PT, PTT, fibrinogen, thrombin time) are the first tubes to be drawn.



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