



ZUCKERBERG
SAN FRANCISCO GENERAL
Hospital and Trauma Center

Venipuncture Procedures and Specimen Handling



San Francisco
Health Network

SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH



San Francisco Department
of Public Health

Patient and Practice Considerations



- Venipuncture may be the most common invasive procedure performed



- Properly collected blood specimen ensures accurate laboratory data → assist in diagnosis and monitoring of treatment
- **Poorly collected blood specimen results to:**
 - Need for recollection
 - Diagnostic and therapeutic delays
 - ↑ costs of consumables and personnel time
 - patient inconvenience

This Can Happen to You



- Collect from the incorrect patient



- Label with incorrect labels



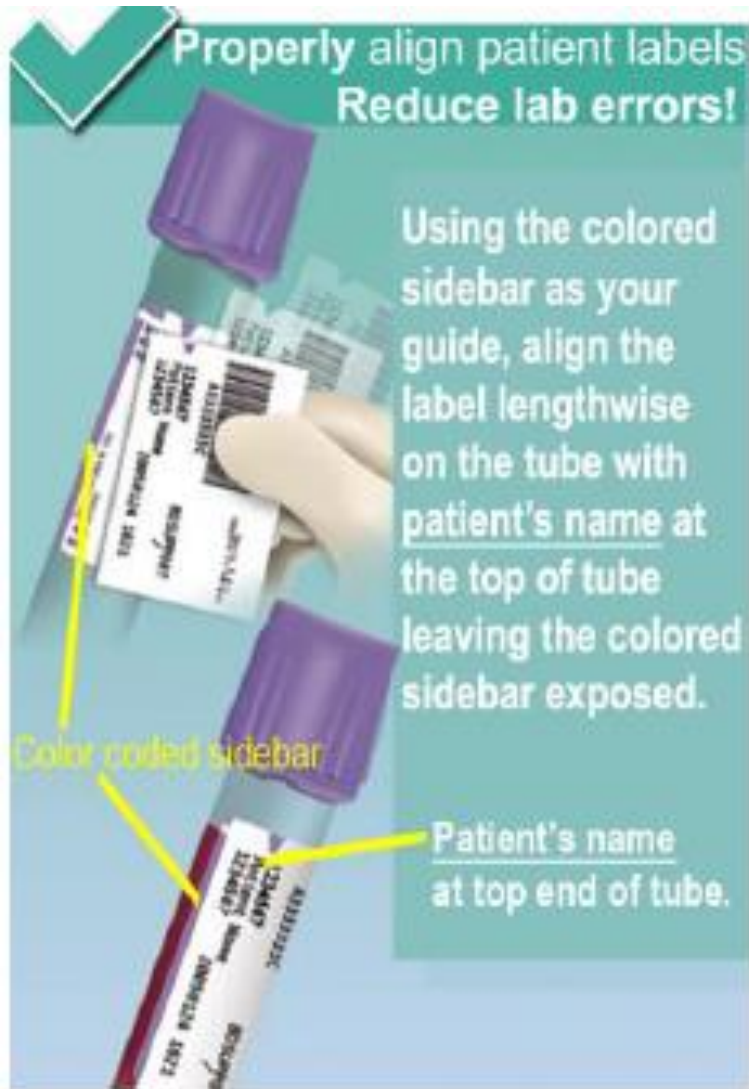
- Forget to label the specimen



Order of Draw

- Blood Cultures
- Light Blue
- Gold
- Red
- Royal Blue
- Green
- Lavender
- White
- Pink
- Tan
- Gray

Order of Draw:	
1	Blood Cultures
2	Light Blue
3	Gold
4	Red
5	Royal Blue
6	Green
7	Lavender
8	White
9	Pink
10	Tan
11	Gray
Thoroughly mix all specimens by inversion 8-10 times.	



- Thoroughly mix by gentle, **end to end inversion**, 8 to 10 times
- Place labels lengthwise.
- No flags.
- Can visualize how much blood is in the tube

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LABORATORY FASHION WEEK!!

Wrinkly Willy



WORST DRESSED

Turtleneck Tommy



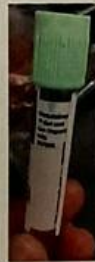
Belted Bernie



The Group Hug



Mysterious Marvin



Is it full? Is it hemolyzed?
WHO KNOWS?!?!?



Upside Down Ursula

BEST DRESSED TUBE

Label directly
under cap



Barcode Straight



Open window to
see blood

Scarfy Sally



Twisted Taylor

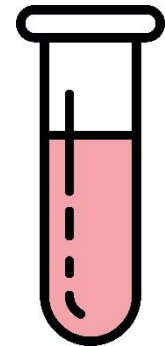


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Coagulation Testing



- When using a winged blood collection set for venipuncture and a blue tube is the first drawn, you must draw a blue discard tube to prime the tubing.
- The discard tube does not need to be completely filled.
- Blue tubes must be filled to the fill line.
- The ratio of blood to liquid anticoagulant is critical.
- It is not acceptable to pour two half-filled blue tubes together.



Preventing Hemolysis

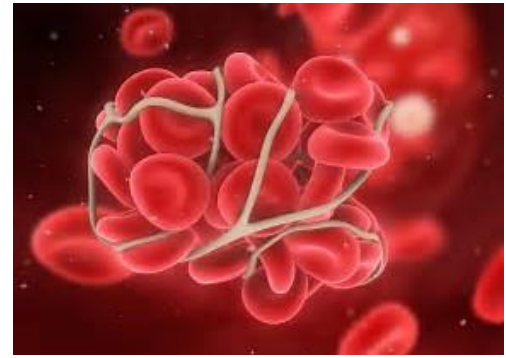


Hemolysis occurs when the red cells are broken or damaged. To prevent hemolysis:

- After cleansing, allow site to air dry.
- Never draw blood through a hematoma.
- Gently invert the tubes. DO NOT SHAKE.
- Use the largest needle size possible
- If using a syringe, make sure the needle fits securely on the syringe to avoid frothing.

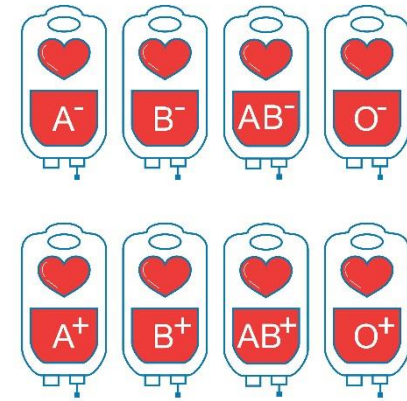


Clotted Specimens



- Blood flow will be slow if the needle is not well placed in a vein.
- Clots may form because of slow fill time.
- Remember to gently invert the tubes to mix specimens. DO NOT SHAKE.
- Clotted specimens can yield erroneous incorrect results.

Blood Bank Specimens



- Specimens must be labeled with the first and last names, medical record number, and date and time of collection.
- Phlebotomist must always sign the requisition.
- One full 10ml pink top tube is required.

Blood bank is located in Bldg. 25

Collecting Blood Cultures



- Chloraprep wipe to disinfect the venipuncture site.



- Use a back and forth motion to scrub for 30 seconds.
Air dry.
- Do not touch after disinfecting the site.
- Remove flip top cap on the blood culture bottles and wipe the rubber top with 70% isopropyl pad.

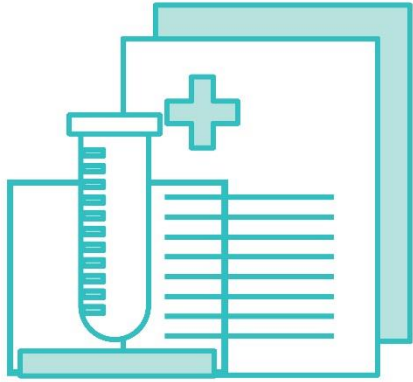


Collecting Blood Cultures cont.

- **Aerobic** bottle **first**, then anaerobic bottle next.



- Complete 1 requisition per set of culture bottles.
- Leave bottles at room temperature.



Laboratory Requisitions

All specimens sent to the Clinical Laboratory (Bldg. 5 2M) must have a paper or electronic requisition with the following information:

- Patient's complete first and last names
- Medical record number
- Patient account number
- Patient's date of birth
- Patient's gender

Transportation of Lab Specimens

- By in house messengers
- By pneumatic tube system
- By nursing staff
- By outside messengers

**Specimens must be separated by priority –
STAT or Routine.**

Pneumatic Tube System

Most can be sent to the laboratory through the pneumatic tube system.

- **Blood bank** specimens must be sent to the Blood Bank station 100 with the signed requisition.
- **General clinical laboratory** specimens are sent to the Laboratory station 21.
- **Microbiology** (e.g. blood cultures, swabs and sputum) are sent to the Microbiology station 23.

Must place specimens

- in **double** ziplock biohazard bags with the requisition in the outside pocket
- into the plastic carrier and send to the correct station.



Pneumatic Tube System Cont.

Specimens that **CANNOT** be sent through the pneumatic tube include and must be hand carried to Bldg. 5 2M:

- Urine specimens in Urine CUPS
- Any specimen ON ICE
- Any specimen in an endotracheal tube (E1)
- Any specimen transported in a syringe
- Any specimen requiring special handling; e.g., kept at 37C.
- Any samples in pediatric bullets, i.e. infant heel sticks
- Blood gases/Co-ox tests
- AFB/Fungal blood cultures (collected in yellow glass SPS tubes)
- Stool specimens
- Body fluids (CSF, synovial, pleural, peritoneal, pericardial, gastric and ascetic fluids, aspirates, broncho alveolar lavage, washes, drainage, etc.)
- Blood specimens from a difficult stick.



Main Take-away Points

- Collect specimens from correct patient.
- Please label specimens with correct labels.
- Always double check when labeling specimens.