




Laboratory

Badge Buddy

Amylase	0.5mL
Acetaminophen	1 mL
AFP	1 mL
ALT(SGPT)/AST(SCOT)	0.5 mL
ANA	2 mL
BUN/Creatinine	0.5 mL
Calcium	0.5 mL
Chloride/CO2	0.5 mL
CK-MB or CK	1.5 mL
CRP or HCRP	0.5 mL
Bilirubin (Total & Direct)	0.5 mL
Direct LDL	1 mL
Ferritin	2 mL
Folate	1.5 mL
FSH/ LH	1.5 mL
FREE T3 / FREE T4	1 mL
Glucose	0.5 mL
Gentamicin	0.5 mL
HDL	1 mL
HIV / HCV / Hepatitis	2 mL
Iron / UIBC	0.5 mL
Insulin	1 mL
LDH	1 mL
Magnesium/Phosphorus	0.5 mL
NT BNP	1 mL
Potassium/Sodium	0.5 mL
Phenobarbital	0.5 mL
Phenytoin	0.5 mL
BHCG Quant	0.5mL
TSH	1 mL
TOTAL T3 / TOTAL T4	1 mL
URIC ACID	1 mL
Valproic Acid	0.5 mL
Vancomycin	0.5 mL
Vitamin D	1 mL

 Pediatric Lab tube colors and minimum amounts	
Ammonia	1 mL *on ICE*
BMP	1 mL
CMP	1 mL
Alkaline Phosphatase	0.5 mL
Troponin I	1.5 mL
CK-MB	1.5 mL
HCRP	0.5 mL
Procalcitonin	1 mL *lithium heparin*
CBC with differential	0.5 mL
Platelet Count	0.5 mL
Sed rate	1.5 mL
IPF	0.5mL
Reticulocyte Count	0.5 mL
Type and Cross	2 mL > 4 mos
Neonatal Workup	1 mL < 4 mos
PT/PTT/Fibrinogen	Fill Line
Acetone	1.5 mL
Immunoglobulins	2 mL
Osmolality	1 mL
Thyroid Profile	2 mL
Amikacin	1 mL
CMV or ESV, IgM, IgG	3 mL
Lactate	0.5 mL *on ICE*
Blood Culture	1 mL
Urine Culture	1 mL

Rev. 1/2023

Reasons for Recollection

- Hemolysis
- Clots
- Contamination
- Mislabels
- Quantity not sufficient
- Overfilled blue top



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Hemolysis

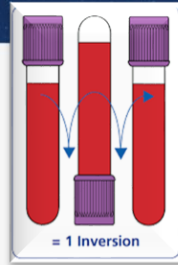
- Not letting alcohol dry before drawing blood
- Pulling blood too fast when drawing from a syringe
- The smaller the needle, the greater chance for hemolysis if drawing too fast



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Clots

- Not inverting specimen as soon as blood is drawn into the tube



× 6-8

- Letting blood sit in syringe for too long



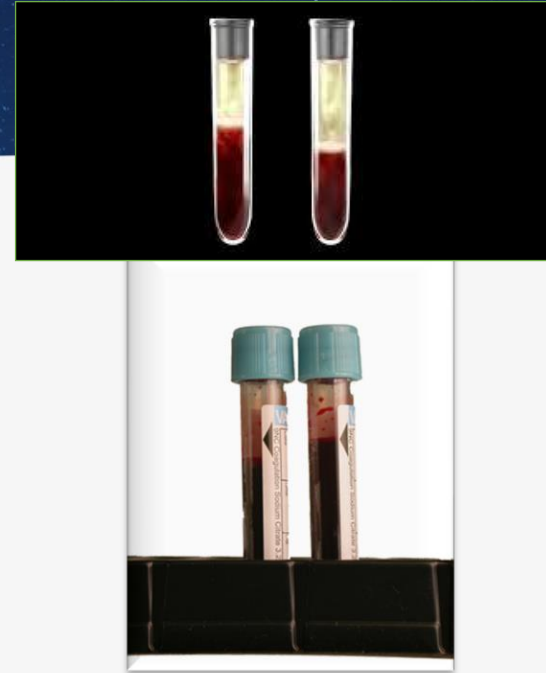
Contamination

- Not following appropriate order of draw
- Not following waste procedures when drawing from the IV
- Drawing above an IV line when not stopped



QNS/Overfilled

- When drawing microtainers keep in mind hematocrit. High hematocrit = less serum
- For blue tops, needs to be filled up to the line. Underfilling or overfilling will be an automatic recollect




Blood Culture Set

- One pediatric blood culture bottle can take the place of the set consisting of one aerobic and one anaerobic when collecting from pediatric patients (minimum 1 cc per pediatric bottle).
- Aseptic technique must be used to obtain these specimens in order to eliminate skin contaminants and thus provide clinician with diagnostically useful information (Make sure to clean the bottle with an Alcohol swab prior)
- Make sure to put the site of collection



NBS

NBS 1 less than 48 hours, NBS 2 after 7 days

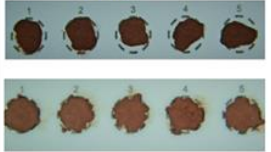


Newborn Screening Quality Improvement Hints

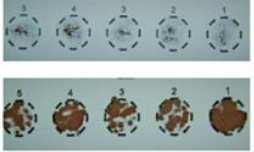
One reason for unsatisfactory newborn screening specimens is

INCOMPLETE SATURATION

Front



Back




*These examples show both sides of the same filter paper.

TIPS TO ENSURE A COMPLETELY SATURATED SPECIMEN

- Use the proper sized heel lancing (<2.0 mm length).*
- Lightly touch the filter paper with a large drop of blood while watching it **soak through completely** from the opposite side.
- Ensure that each circle is completely filled, one at a time.
- Avoid reapplying blood to filter paper circle. This often causes the blood to cake or clot.
- Store Newborn Screening kits and collected specimens away from sunlight.

*Guideline has changed per CLSI NBS01-ED7:2021 Dried Blood Spot Specimen Collection for Newborn Screening, 7th Edition



TEXAS
Health and Human
Services

TEXAS Department of State
Health Services

VOL. 8 | 2021
TEXAS NEWBORN SCREENING LABORATORY

Longer expiration date, the new kits are valid for 5 years from the date of manufacturing.

Newborn Screening

TEXAS DEPARTMENT OF STATE HEALTH SERVICES Laboratory Services Section CLIA#020805044
FORM NBS-4 (Rev. 05/2019) Telephone # (505) 960-7111 ext. 2333

PARENT INFORMATION

Parent's Last Name: _____ Mother's First Name: _____
 Mother's Last Name: _____ Social Security #: _____
 Mother's Birth Date: _____
 Street Address: _____ City: _____ Zip Code: _____
 Best Phone Number to Reach Mother/Father/Guardian: _____

BABY'S PRIMARY CARE PHYSICIAN INFORMATION

Physician Name (Last, First): _____
 Street Address: _____ City: _____ Zip Code: _____
 Phone No.: _____ Fax No.: _____

NEWBORN INFORMATION

Newborn's Last Name: _____ Newborn's First Name: _____
 Birth Date: _____ Birth Time: _____
 Sex: _____ Race: _____ Ethnicity: _____
 1. Male 2. Female 1. White 2. All Other
 1. Non-Hispanic 2. Hispanic 1. Asian 2. Other
 1. Born in US 2. Born in US 3. Born in US 4. Born in US
 1. Born in US 2. Born in US 3. Born in US 4. Born in US

FEED OPTION

1. NPO 2. TPN 3. NPO 4. TPN
 1. NPO 2. TPN 3. NPO 4. TPN
 1. NPO 2. TPN 3. NPO 4. TPN

SUBMITTER INFORMATION

NBS Submitter ID Number: _____
 Name: _____
 Address: _____ City: _____ TX Zip Code: _____

Check to verify parent information & decision form distributed

☐ Yes ☐ No

TX 21-XXXXXXX 5 P

This is used for DSHS internal process, please do not write in this space.

New Field - Meconium Ileus is blockage of the small intestine. Choose yes if present or no if not present.

New Field - Gestational Age, enter the number of completed gestational weeks and days at the time of birth. If the number of days is not available, use completed gestational weeks.

New Feed Option - NPO (nil per os), choose NPO when no food or liquid is given by mouth. If patient is on total parenteral nutrition (TPN) and NPO, choose TPN.

CSF (Cerebrospinal fluid)



- Can they be sent in the tube system?



- Walk down ASAP (30 MIN FROM COLLETION)
- Always put the source of collection

Whole Blood

What is Whole Blood?

Whole blood is collected in an anticoagulant tube (e.g., lavender or light blue) to **prevent clotting** for tests such as CBC, ESR, and certain coagulation studies.

Serum vs Plasma

What is Plasma?

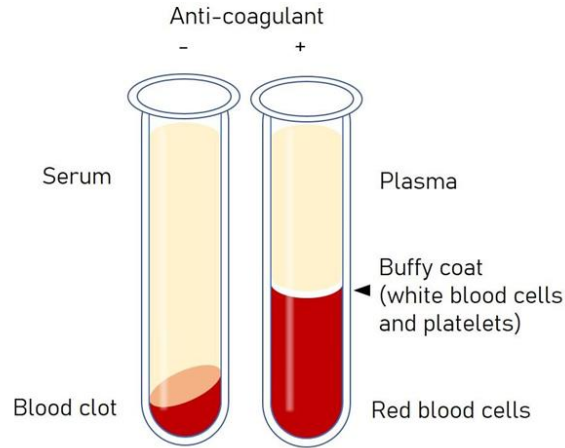
Plasma is obtained by centrifuging a tube of whole blood collected with an anticoagulant.

What is Serum?

Serum is obtained by centrifuging clotted whole blood collected in a coagulation tube or a tube with no additive (e.g., red or gold/SST). It is commonly used for tests such as CMP, BMP, magnesium, and phosphorus.

Serum vs Plasma

From Clotted
Whole Blood



From Whole
Blood

Please Note

Although we may receive approximately 3 mL of Whole Blood, once the sample is centrifuged we may only obtain about 1.5 mL of usable serum or plasma. This reduction in volume is expected because a portion of the original sample consists of cellular components that separate out during centrifugation.

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Q & A



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