




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
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

	<a href="#">Pediatric Lab tube colors and minimum amounts</a>
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
Ammonia	1 mL *on ICE*
Platelet Count	0.5 mL
Sed rate	1.5 mL
Reticulocyte Count	0.5 mL
Type and Cross	2 mL > 4 days
Neonatal Workup	1 mL < 4 days
PT/PTT/Fibrinogen	Fill Line
Acetone	1.5 mL
Immunoglobulins	2 mL
Quasolatic	1 mL
Thyroid Profile	2 mL
Amikacin	1 mL
CMV or EBV, IgM, IgG	3 mL
Lactate	0.5 mL *on ICE*
Blood Culture	1 mL
Urine Culture	1 mL

Rev. 7/2025

# Reasons for Recollection

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



THIS IS **OUR** HOSPITAL

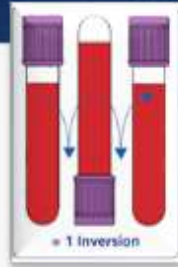
# Hemolysis

- 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



# 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

**SPOTfocus**  
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 test lanes (9.21 mm length).
- Gently 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 smudging blood to filter paper circle. This often causes the blood to cake or clot.
- Wipe Newborn Screening kit, and collect specimens away from sunlight.

*\*Guideline has changed per CLSI NB101-ED7:2011 Dried Blood Spot (Specimen Collection for Newborn Screening, 7th Edition)*

**TEXAS** Health and Human Services Texas Department of State Health Services VOL. 01 08/21 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 CLM40000004 FORM NBS 4 (Rev. 02/2018) Volume 4 (ISS: 06/11) Ed. 7033

USE BLACK INK. PRINT INFORMATION COMPLETELY, ACCURATELY, & LEGIBLY IN BLOCK CAPITAL LETTERS. See back of form for instructions.

Lab No. For Texas DSHS Use Only

**OTHER INFORMATION**

Parent's Last Name: [Redacted] Social Security #: [Redacted]

Parent's First Name: [Redacted]

Parent's Birth Date: [Redacted]

Parent's Address: [Redacted] City: [Redacted] Zip Code: [Redacted]

Parent Phone Number to Reach Multiple-Person Household: [Redacted]

**BABY'S PRIMARY CARE PHYSICIAN INFORMATION**

Physician Name (Last, First): [Redacted] Address: [Redacted] City: [Redacted] State: [Redacted] Zip Code: [Redacted]

Physician Phone: [Redacted] Fax No.: [Redacted]

TX 21-XXXXXX 5 P DSHS Copy

**SPECIMEN REJECTED IF NO** Date of Collection or NO Newborn's Last Name is provided.

**NEW FIELD - MECONIUM ILEUS IS BLOCKAGE OF THE SMALL INTESTINE. CHOOSE YES IF PRESENT OR NO IF NOT PRESENT.**

**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.**

**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.**

**For DSHS use only**

Check to verify parent information & decision form distributed

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

**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.

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

# 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?**

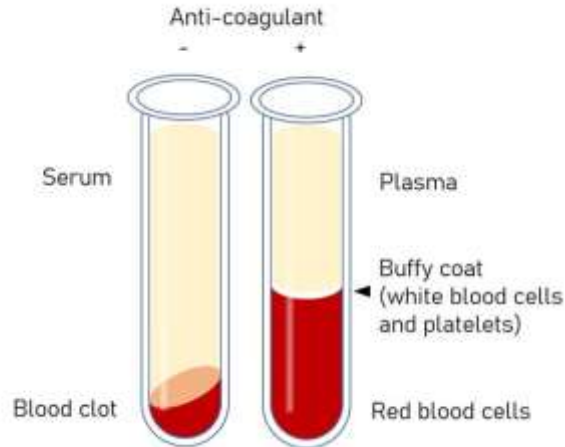
Plasma is obtained by centrifuging a tube of whole blood collected with an anticoagulant.

## **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.

THIS IS **OUR**  
HOSPITAL



**Q & A**



4845 Alameda Ave. • El Paso, TX 79905 • [ElPasoChildrens.org](http://ElPasoChildrens.org) • 915-298-5444