Lab Dept:

Transfusion Services

Test Name: NEWBORN TYPE AND SCREEN

General Information

Lab Order Codes:	BN
Synonyms:	Exchange Transfusion, Neonatal Transfusion; Newborn Transfusion; Type and Crossmatch for Exchange Transfusion of Newborn; Newborn Crossmatch and Transfusion
CPT Codes:	86900 – ABO 86850 – Antibody Screen 86880 – Direct Coombs 86901 – Rh Type
Test Includes:	ABO, Rh, Antiglobulin Test – Indirect, Antiglobulin test – Direct. If indicated, or indirect Coombs test with A and/or B cells.
Logistics	
Test Indications:	For pretransfusion testing for infants <7 days old or for the diagnosis of hemolytic disease of the newborn. Refer to Type and Screen procedure for infants 8 days to 4 months of age. Infants under 4 months of age require only one workup per hospital admission.
Lab Testing Sections:	Transfusion Service
Phone Numbers:	MIN Lab: 612-813-6824
	STP Lab: 651-220-6558
Test Availability:	Daily, 24 hours
Turnaround Time:	1 hour DAT: 4 – 24 hours
Special Instructions:	Enter infant's birthweight with order.
Specimen	
Specimen Type:	Whole blood
Container:	Lavender top (EDTA) tube
	Alternate: Red top tubes will be accepted, but will delay specimen processing to allow for clotting. (SST tubes are Not acceptable.)

Draw Volume:	1 – 2 mL blood
Collection:	All specimens submitted to the Transfusion Service must be appropriately labeled at the bedside with the time and date of collection, and the signature of the individual collecting the specimen. A completed order, either through the HIS or general requisition must accompany each specimen. It is not always necessary to collect a new sample prior to the provision of blood for patients. Consult with the Transfusion Service prior to collecting additional samples if the patient status is unknown.
Special Processing:	Lab Staff: Refrigerate specimen
Patient Preparation:	Refer to <u>Collection of Patient Specimens</u> for full details. The patient must be positively identified when the specimen is collected.
	The label on the blood specimen must correspond with the identification on the patient's Medical Record wrist or ankle band (or ED ID) and on the physician's/practitioner's orders. The specimen must be timed, dated and signed by the phlebotomist at the bedside.
Sample Rejection:	Gross hemolysis, sample placed in a serum separator tube, specimen tube not properly labeled
Interpretive	
Reference Range:	N/A – see report
Reference Range: Limitations:	N/A – see report Exchange Transfusion: A classic indication for exchange transfusion in full-term infants is an indirect bilirubin level >20 mg/dL. At this level, brain damage may occur. In premature babies or those with other complications, brain damage may occur at lower levels of bilirubin. An exchange transfusion may then be appropriate at levels <20 mg/dL. Severe bilirubinemia may also occur with hepatic failure, disseminated intravascular coagulopathy, and in respiratory distress syndrome. In the latter disorder, exchange transfusion aims to shift the oxygen dissociation curve to the right by replacing hemoglobin F with hemoglobin A.
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References:	Klemperer M, Petz (1989) Perinatal and Neonatal Transfusion. Clinical Practice of Transfusion Medicine, Petz LD and Swisher SN, eds, New York, NY: Churchill Livingstone, pp 615-34
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Updates:	2/1/2019: Updated TAT for DAT.