
BACTERIAL VAGINOSIS (see Smear Bacterial Vaginosis)

BARBITUATES SCREEN

Specimen Requirements: 2 mL urine
Reference Range: None Detected
Report Time: 24 Hours
Day(s) Set Up: Monday through Sunday
CPT Codes(s): 80101

BASIC METABOLIC PANEL

Includes: Sodium, Potassium, Chloride, CO₂, Glucose, BUN, Creatinine and Calcium. Also includes estimated GFR (Glomerular Filtration Rate)

Specimen Requirements: 1.0 mL plasma (green or PST). Fasting preferred.
Avoid hemolysis.

Reference Range:

Sodium	136 - 145	mmol/L		
Potassium	3.5 - 5.1	mmol/L		
Chloride	98 - 107	mmol/L		
CO ₂	22 - 31	mmol/L		
Glucose	70 - 99	mg/dL		
BUN	9 - 20	mg/dL (M)	7 - 17	mg/dL (F)
Creatinine	0.7 - 1.3	mg/dL (M)	0.5 - 1.0	mg/dL (F)
Calcium	8.6 - 10.2	mg/dL		
GFR	> 60 ml / min / 1.73 m ² ≥ 18years			

Refer to Addendum #5 for additional reference ranges.

Report Time: 24 Hours
Day(s) Set Up: Monday through Sunday
CPT Code(s): 80048

BENZODIAZEPINE SCREEN

Specimen Requirements: 2 mL urine
Reference Range: None Detected
Report Time: 24 hours
Days(s) Set Up: Monday through Sunday
CPT Code: 80101

BICARBONATE (HCO₃)

Specimen Requirements: 3 mL venous blood drawn in 3 ml plain Lithium green top vacutainer (must be at least half full). **Do NOT use PST.** Mix tube well. Place in ice water immediately. Stable 2 hours on ice.

Reference Range: 20 - 26 mmol/L

Report Time: 24 hours

Day(s) set up: Monday through Sunday

CPT Code(s) 82374

BILIRUBIN, NEONATAL TOTAL (Babies <15 days old)

Specimen Requirements: 0.5 mL blood drawn in PST microtainer.
Avoid exposure to light. Avoid hemolysis.

Reference Range: 1.0 - 10.5 mg/dL
≥ 18.0 mg/dL is newborn Panic

Report Time: 24 Hours

Day(s) Set Up: Monday through Sunday

CPT Code(s): 82247

BILIRUBIN, NEONATAL TOTAL AND DIRECT (Babies <15 days old)

Specimen Requirements: 0.5 mL blood drawn in PST microtainer.
Avoid exposure to light. Avoid hemolysis.

Reference Range: Neonatal, Total: 1.0 - 10.5 mg/dL
≥ 18.0 mg/dL is newborn Panic
Neonatal, Direct: 0.0 - 0.3 mg/dL

Report Time: 24 Hours

Day(s) Set Up: Monday through Sunday

CPT Code(s): 82247 (Total) 82248 (Direct)

BILIRUBIN TOTAL (Adults and Peds > 14 days old)

Specimen Requirements: 0.5 mL plasma (green or PST). **Avoid exposure to light. Avoid hemolysis.**

Reference Range: 0.2 - 1.3 mg/dL (Adults)
1.0 - 10.5 mg/dL (babies 0 - 28 days)
0.6 - 1.4 mg/dL (29 days - 19 years)

Report Time: 24 Hours

Day(s) Set Up: Monday through Sunday

CPT Code(s): 82247

BILIRUBIN TOTAL & DIRECT (Adults and Peds > 14 days old)

Specimen Requirements: 0.5 mL plasma (green or PST).
Avoid exposure to light. Avoid hemolysis.

Reference Range: Total: 0.2 - 1.3 mg/dL (Adults)
1.0 - 10.5 mg/dL (babies 0 - 28 days)
0.6 - 1.4 mg/dL (29 days - 19 years)
Direct: 0.0 - 0.3 mg/dL

Report Time: 24 Hours

Day(s) Set Up: Monday through Sunday

CPT Code(s): 82247 (Total) 82248 (Direct)

BLOOD GASES ARTERIAL

Includes: pH, pCO₂, HCO₃, PO₂, O₂ Saturation

Specimen Requirements: 1 mL heparinized arterial blood.
Place on ice. Deliver immediately.

Reference Range: pH 7.35 - 7.45
pCO₂
Male: 35 - 45 mm Hg
Female: 32 - 42 mm Hg
HCO₂ 20 - 26 mmol/L
PO₂ 103-(0.4 x age) mm Hg
O₂ Saturation 96 - 97%

Report Time: 24 Hours

Day(s) Set Up: Monday through Sunday

CPT Code(s): 82805

BLOOD PARASITES

Specimen Requirements: Fingersticks smears are sample of choice. Make 4 thin wedge blood smears and 4 thick smears (a drop of blood placed on slide and spread out to shape and size of a nickel. Allow to air dry) Send Unstained, dry slides.

EDTA peripheral blood may be used if slides can be made within 1 hour of collection.

Please specify organism suspected, eg. Malaria, babesia, ehrlichia, along with any recent travel history. If parasites are found and cannot be identified at SMH, the slides and blood will be sent to Wisconsin State Lab of Hygiene and/or the CDC for positive I.D.

Reference Range: No parasites seen.

Report Time: 24 Hours

Day(s) Set Up: Monday through Sunday

CPT Code(s): 87207

BLOOD TYPE ABO + RH

ABO may be ordered separately. Rh may be ordered separately. Specimen requirements are the same. Some D negative patients will have weak D testing performed.

Specimen Requirements: 1 pink top tube.

Reference Range: Not Applicable

Report Time: 24 Hours

Day(s) Set Up: Monday through Sunday

CPT Code(s): ABO 86900
RH typing 86901

BONE MARROW PREPARATION AND EVALUATION

Includes: Preparation of Paraffin Block of Aspirate and Biopsy, Iron Stain, Slide Preparation, Pathologist's Diagnosis and Report.

Specimen Requirements:

Biopsy Specimen

1. The biopsy is collected by the physician in the bone marrow needle.
2. Make touch preps, if requested. Prepare by gently rolling the biopsy between two slides.
3. Place the biopsy in a 10% formalin vial immediately.
4. Label the vial with the patient's name, date, and time collected.
5. Deliver the biopsy in 10% formalin to St Mary's Laboratory on the day of collection.

Aspirate For Hematology Evaluation

1. The aspirate is collected by the physician in a syringe.
2. Place approximately 1 ml. or more of aspirate into a lavender (EDTA) vacutainer and mix gently.
3. Label the tube with the patient's name, date and time collected, and "Bone Marrow Aspirate".
4. Send the lavender tube to the lab for analysis. Maintain sample at room temperature in case flow cytometry analysis is needed.
5. **Slides should be packaged in a separate biohazard bag from the 10% formalin vial** to prevent contamination from leaking formalin.
6. **Peripheral Blood**
 - a. Collect a CBC within 24 hours of the Bone Marrow collection.
 - b. Send EDTA peripheral specimen, 2 unstained slides and CBC results to the lab along with the Bone Marrow.

Aspirate For Culture

1. If a single syringe is collected, aseptically inoculate the EDTA tube for hematology and cap the syringe.

2. If cultures are requested and the remaining syringe sample is to be further shared, the specimen should be handled first by Microbiology to prevent any contamination.
3. The physician needs to specify which particular cultures are requested, i.e. Bacterial, fungal, AFB, etc.
4. A minimum of 0.5 ml. Is recommended, with 3 to 5 more recommended for multiple culture requests.
5. Maintain at room temperature and promptly deliver to Microbiology

Aspirate For Cytogenetics

1. Approximately 0.5-2.0 ml of bone marrow aspirate is collected by the physician into a sterile syringe (supplied by the client). The sample is then inoculated into a sodium heparin vacutainer by client's lab personnel.
2. Testing is performed Monday-Friday only at the Wisconsin State Lab of Hygiene.

Flow Cytometry

1. All bone marrow aspirates and peripheral blood samples are retained at room temperature. Flow cytometry orders may be added by the physician or pathologist within 24 hours of collection.
2. If flow cytometry is ordered at the time of collection, an order for Leukemia/Lymphoma Evaluation should accompany the samples to St. Mary's Lab.
3. All supplies necessary for processing bone marrows are available from St. Mary's Lab. Please call Hematology at 258-6912 or send a written request with your courier.

Report Time: 24 Hours
Day(s) Set Up: Monday through Friday
CPT Code(s): Printed on report.

BRAIN NATRIURETIC PEPTIDE (BNP)

Specimen Requirements: 1.0 mL EDTA plasma (lavender). Separate from cells if analysis will be delayed longer than 24 hours. Label tube EDTA plasma. Whole blood stable at room temp or refrigerated up to 24 hours. Plasma stable at room temperature 24 hours. Freeze if analysis is delayed > 24 hours. Avoid gross hemolysis.

Reference Range: < 100 pg/mL
Report Time: 24 Hours
Day(s) Set Up: Monday through Sunday
CPT Codes(s): 83520

BRONCH LAVAGE PANEL

Includes: Cell Count with Differential, Special Stains for Iron, Pneumocystis, Legionella, Fungus, Acid Fast Bacillus and Bacteria, Cultures for Legionella, Fungus, Acid Fast Bacillus, CMV, Herpes and Bacteria, and Interpretative Comments by Pathologist.

Specimen Requirements: 40 mL preferred; 20 mL minimum
Refrigerate. Send to SLS same day.

Reference Range: Not applicable

Report Time: Significant result findings will be called.
Preliminary report issued within 3 days.
Final report issued in approximately 8 weeks.

Day(s) Set Up:

Monday through Friday for specimens received by 6:00 PM. Weekends and holiday specimens received by 3:00 PM. After hours specimens will be processed for cultures and cell count with differential. Special stains are not available on weekends and holidays but will be processed the next weekday. Currently not available on a STAT basis.

CPT Code(s):	Cell Count w Diff Fluid	89051
	Culture AFB	87116
	Culture Concentrate	87015
	Culture Fungus other	87102
	Culture Respiratory	87070
	Viral Culture	87252
	Viral Culture Shell Vial	87254
	Cytospin	88108
	Legionella by DFA	87278
	Smear Pneumocystis by DFA	87206
	Smear AFB	87206
	Smear Gram Stain	87205
	Smear Fungus GMS	88312
	SP Stain GRP II	88313
	If indicated:	
	Organism ID AFB	87143
	Organism ID Aerobic	87077
	Organism ID Mold	87107
	Organism ID Viral	87253
	Organism ID Yeast	87106
	Sensitivity	87186

BUN

Specimen Requirements: 1.0 mL plasma (green or PST)

Reference Range: Male 9-20 mg/dL
Female 7-17 mg/dL

Report Time: 24 Hours

Day(s) Set Up: Monday through Sunday

CPT Code(s): 84520