



Basic ECG Level IB ECG Reading & Monitoring Study Guide

Includes basic ECG interpretation and bedside ECG monitoring skills. The student should be able to:

- **Identify monitoring protocols depending upon patient presentation and the differential diagnosis**
- **Demonstrate proper lead placement with five wire telemetry systems**
- **Demonstrate proper lead placement to record a 12-lead ECG**
- **Demonstrate the 10-step analysis skill when interpreting ECG rhythm strips and 12-lead ECGs**
- **Identify the following ECG diagnoses and state the best monitoring leads for each:**

Sinus rhythms

Sinus rhythm
Sinus bradycardia
Sinus tachycardia
Sinus arrhythmia
Sinus pause
Sinus arrest

Atrial rhythms

Atrial premature beats conducted normally, aberrantly, or non-conducted (APB's)
Atrial tachycardia
Atrial flutter
Atrial fibrillation

Junctional rhythms

Junctional premature beats (JPB's)
Junctional escape beat or rhythm with and without aberration
Junctional rhythm
Junctional tachycardia

Ventricular rhythms

Ventricular premature beats (VPB's from left and right ventricle)
Ventricular escape beats
Ventricular rhythm
Accelerated idioventricular rhythm (AIVR)
Ventricular tachycardia
Ventricular fibrillation
Torsades de Pointe

AV blocks

First degree AV block
Second degree AV block type I
Second degree AV block type II
High grade AV block
Complete or third degree AV block

Normal 12-lead ECG

Ischemia and injury seen in the 12-lead

Inferior wall ischemia and injury
Inferior-lateral wall ischemia and injury
Anterior wall ischemia and injury

Bundle branch blocks

Right bundle branch block (incomplete and complete)
Left bundle branch block (incomplete and complete)
Supraventricular tachycardia with right bundle branch block
Supraventricular tachycardia with left bundle branch block

Electrolyte disturbances (potassium and calcium)

Hypokalemia
Hyperkalemia
Hypocalcaemia
Hypercalcemia