







EKG Interpretation Cheat Sheet

LEARN MORE AT [NURSESLABS.COM](https://nurseslabs.com)

Arrhythmias	Description	Causes	Treatment
Sinus Arrhythmia 	<ul style="list-style-type: none"> Irregular atrial and ventricular rhythms. Normal P wave preceding each QRS complex. 	<ul style="list-style-type: none"> Normal variation of normal sinus rhythm in athletes, children, and the elderly. Can be seen in digoxin toxicity and inferior wall MI. 	<ul style="list-style-type: none"> Atropine if rate decreases below 40bpm.
Sinus Tachycardia 	<ul style="list-style-type: none"> Atrial and ventricular rhythms are regular. Rate > 100 bpm. Normal P wave preceding each QRS complex. 	<ul style="list-style-type: none"> Normal physiologic response to fever, exercise, anxiety, dehydration, or pain. May accompany shock, left-sided heart failure, cardiac tamponade, hyperthyroidism, and anemia. Atropine, epinephrine, quinidine, caffeine, nicotine, and alcohol use. 	<ul style="list-style-type: none"> Correction of underlying cause. Beta-adrenergic blockers or calcium channel blockers for symptomatic patients.
Sinus Bradycardia 	<ul style="list-style-type: none"> Regular atrial and ventricular rhythms. Rate < 60 bpm. Normal P wave preceding each QRS complex. 	<ul style="list-style-type: none"> Normal in a well-conditioned heart (e.g., athletes). Increased intracranial pressure; increased vagal tone due to straining during defecation, vomiting, intubation, mechanical ventilation. 	<ul style="list-style-type: none"> Follow ACLS protocol for administration of atropine for symptoms of low cardiac output, dizziness, weakness, altered LOC, or low blood pressure. Pacemaker
Sinoatrial (SA) arrest or block 	<ul style="list-style-type: none"> Atrial and ventricular rhythms are normal except for missing complexes. Normal P wave preceding each QRS complex. Pause not equal to multiple of the previous rhythm. 	<ul style="list-style-type: none"> Infection Coronary artery disease, degenerative heart disease, acute inferior wall MI. Vagal stimulation, Valsalva's maneuver, carotid sinus massage. 	<ul style="list-style-type: none"> Treat symptoms with atropine I.V. Temporary pacemaker or permanent pacemaker if considered for repeated episodes.
Wandering atrial pacemaker 	<ul style="list-style-type: none"> Atrial and ventricular rhythms vary slightly. Irregular PR interval. P waves irregular with changing configurations indicating that they aren't all from SA node or single atrial focus; may appear after the QRS complex. QRS complexes are uniform in shape but irregular in rhythm. 	<ul style="list-style-type: none"> Rheumatic carditis due to inflammation involving the SA node. Digoxin toxicity Sick sinus syndrome 	<ul style="list-style-type: none"> No treatment if patient is asymptomatic Treatment of underlying cause if patient is symptomatic.
Premature atrial contraction (PAC) 	<ul style="list-style-type: none"> Premature, abnormal-looking P waves that differ in configuration from normal P waves. QRS complexes after P waves except in very early or blocked PACs. P wave often buried in the preceding T wave or identified in the preceding T wave. 	<ul style="list-style-type: none"> May prelude supraventricular tachycardia. Stimulants, hyperthyroidism, COPD, infection and other heart diseases. 	<ul style="list-style-type: none"> Usually no treatment is needed. Treatment of underlying causes if the patient is symptomatic. Carotid sinus massage.