

APPROVED: SIGNATURE ON FILE IN EMS OFFICE  
 Executive Director  
SIGNATURE ON FILE IN EMS OFFICE  
 Medical Director

EFFECTIVE DATE 12/1/2006  
 SUPERSEDES:  
 REVISED:  
 REVIEW DATE: 12/2011  
 PAGE: 1 of 1

**ATRIAL FIBRILLATION – ATRIAL FLUTTER**

- I. AUTHORITY: Health and Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9
- II. PURPOSE: To serve as the treatment standard for EMT-Is and EMT-Ps in treating patients.
- III. PROTOCOL

Atrial Fibrillation: The rhythm is irregularly irregular. Atrial rate 350 to 600 but as a rule cannot be counted. Ventricular rate is between 160 and 180 but may be much slower if patient is taking digoxin (lanoxin). Fibrillatory waves may be coarse or fine. QRS complex is usually normal. Most Atrial Fibrillation is long-standing, and is NOT the cause of the patient’s chief complaint. In those cases, it should not be treated. In addition, any Atrial Fibrillation that has been present longer than 48 hours should not be treated, unless clearly unstable, to reduce the threat of thromboembolism after cardioversion.

Atrial Flutter: Atrial rhythm is regular. Ventricular rhythm may be regular or irregular if variable block is present. Ventricular rate is between 120 and 160 but may be slower if the patient is taking digoxin (lanoxin). QRS complex is usually normal and may follow every second, third, or fourth flutter wave. Atrial Flutter is rarely a long standing rhythm. It commonly causes symptoms.

<b>STANDING ORDERS</b>	
<b>ABCs</b>	
<b>SECURE AIRWAY</b>	As appropriate. Confirm tube placement, if intubated, with end-tidal CO <sub>2</sub> monitor and esophageal detector device. <b>Continuous waveform capnography shall be used in all intubated patients if available.</b>
<b>OXYGEN</b>	
<b>IV ACCESS</b>	TKO
<b>ASSESS</b>	For serious signs and symptoms: severe chest pain, shortness of breath, decreased level of consciousness or congestive heart failure.
<b>Unstable:</b>	Heart rate greater than 150 AND Systolic BP less than 90mmHg AND any of the above symptoms:
Midazolam	2.0 mg IV push. Do not delay cardioversion for IV access or sedation if the patient is unconscious.
Cardiovert	SYNCHRONIZED at 100J, 200 J, 300 J, 360 J (or clinically equivalent biphasic energy doses). Reduce power by half for patients on digitalis. If delays in synchronization occur and clinical conditions are critical, go to immediate unsynchronized shocks.
<b>REASSESS</b>	Treat as appropriate for rhythm.
<b>Borderline:</b>	Heart rate greater than 150 OR Systolic BP greater than or equal to 90 mmHg AND any of the above symptoms:
	Observe, reassess frequently.