



Jackson Hole Fire/EMS Operations Manual

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Title: **Procedure Guidelines:
Synchronized
Cardioversion**

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SYNCHRONIZED CARIOVERSION (Procedure Guidelines)

SCOPE OF PRACTICE

All EMT-Intermediates and Paramedics shall operate within their authorized Scope of Practice as limited to those skills and medication approved for use by the Physician Medical Director and Physician Task Force on Pre-Hospital Care as approve and authorized by the Wyoming Board of Medicine

Scope of Practice: Paramedic

PURPOSE:

To restore an effective heart rhythm in the **hemodynamically unstable** patient with tachycardia. The unstable condition **MUST** be related to tachycardia. Signs and symptoms of instability may include:

- Chest pain
- Shortness of breath
- Decreased level of consciousness
- Hypotension
- Shock
- Pulmonary congestion; CHF
- Acute MI

INDICATIONS:

- Ventricular tachycardia with a pulse
- Supraventricular tachycardia

PRECAUTIONS:

- Delay of cardioversion because of problems with synchronization resulting in worsening patient condition
- Risk of thromboembolic complications (i.e. stroke) in patients with history of atrial fibrillation duration > 24-48 hours

PROCEDURE:

- Consider analgesia/sedation for the alert patient
- Turn on defibrillator
- Attach monitor (limb) leads to the patient
- Place defibrillation pads on the patient as directed by the manufacturer.

- Engage the synchronization mode by pressing the “sync” control button
- Look for triangle marker on the “R” waves indicating sync mode
- If necessary, adjust monitor gain/EKG size, or change lead until sync markers occur with each R wave
- Select the proper energy level
- Announce to team members: “Charging defibrillator...stand clear”
- Press “Charge” button
- When the defibrillator is charged, announce the shock
- Press and hold the “Shock” button, there may be a delay until the shock is delivered as the monitor is attempting to correctly synchronizes
- Check the monitor. If tachycardia persist, increase the energy level according to protocol
- Remember to reset the sync mode after EACH synchronized cardioversion; most defibrillators default back to the unsynchronized mode. This default allows an immediate shock if the cardioversion produces ventricular fibrillation