

# TACHYCARDIA (With a Pulse)

## UPDATED 4/2025

### ALL PROVIDERS

- ☐ Focused history and physical exam
  - Assess blood glucose level
- ☐ Continuous ECG, ETCO<sub>2</sub>, blood pressure, and pulse oximetry monitoring
- ☐ Acquire and transmit a 12 lead EKG if possible.
  - Ensure to capture/print 4- or 12-lead EKG prior to, during, and after any maneuver or medication administration to evaluate its effectiveness.
- ☐ **Key Considerations**
  - Pregnancy >20 weeks gestation - Place wedge-shaped cushion or multiple pillows under patient's right hip.
  - Pediatric lowest acceptable systolic blood pressures are:
    - birth to 1 month = 60mmHg
    - 1 month to 1 year = 70mmHg
    - 1 year to 10 years = 70mmHg + (age x 2)
    - 10 years and older = 90mmHg.

### ADULT

**PEDIATRIC**  
Pediatric weight based dosing should not exceed  
Adult dosing.

#### AEMT

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| <ul style="list-style-type: none"> <li><input type="checkbox"/> Vascular access and fluid therapy</li> <li><b>Supraventricular Tachycardia (SVT)</b></li> <li><input type="checkbox"/> Obtain a 12 Lead EKG, if possible</li> <li><input type="checkbox"/> Maneuvers to increase vagal tone: Valsalva, ice pack to face, Trendelenburg, urination, etc.)</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Vascular access and fluid therapy</li> <li><b>Supraventricular Tachycardia (SVT)</b></li> <li><input type="checkbox"/> Infants: rate usually greater than 220 bpm with no variation</li> <li><input type="checkbox"/> Children: rate usually greater than 180 bpm with no variation</li> <li><input type="checkbox"/> Obtain a 12 Lead EKG is possible, if possible</li> <li><input type="checkbox"/> Maneuvers to increase vagal tone: Valsalva, ice pack to face, Trendelenburg, urination, etc.)</li> </ul> |
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### PARAMEDIC

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| <p><b><u>Supraventricular Tachycardia (SVT)</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Adenosine</b> <ul style="list-style-type: none"> <li>• <b>Initial dose: 6 mg IV</b> followed immediately by a 20cc NS or LR rapid push</li> <li>• <b>May repeat once: 12mg IV</b> followed immediately by a 20cc NS/LR rapid push</li> </ul> </li> </ul> | <p><b><u>Supraventricular Tachycardia (SVT)</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Adenosine</b> <ul style="list-style-type: none"> <li>• <b>Initial dose: 0.1mg/kg IV (to max 6mg)</b> followed immediately by a 10cc NS or LR rapid push</li> <li>• <b>May repeat once: 0.2mg/kg IV (to max 12mg)</b> followed immediately by a 10cc NS/LR rapid push</li> </ul> </li> </ul> |
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### **Stable Wide Complex (QRS > 120 msec)**

#### **Tachycardia**

- ❑ Transport to ED with IV in place and careful monitoring

### **Unstable Tachycardia – Synchronized Cardioversion**

#### ***Signs/Symptoms of Unstable Tachycardia***

- Acute cardiac chest pain
- Acute congestive heart failure / pulmonary edema
- Altered mental status
- SBP <90 mm Hg
- Cool, Clammy or Pale skin
- Weak or Thready pulse

#### **Synchronized Cardioversion**

- Initial dose: 100J
- Repeat doses: 200J
- Consider pretreating with a benzodiazepine and analgesic **ONCE via IV/IO:**
  - Fentanyl - 50-100mcg
  - Midazolam - 2.5mgOR
  - Fentanyl - 50-100mcg
  - Lorazepam – 1mg
- **DO NOT DELAY SYNCHRONIZED CARDIOVERSION FOR COMFORT CARE**

### **Stable Wide Complex (QRS > 120 msec)**

#### **Tachycardia**

- ❑ Transport to ED with IV in place and careful monitoring

### **Unstable Tachycardia – Synchronized Cardioversion**

#### ***Signs/Symptoms of Unstable Tachycardia***

- Acute cardiac chest pain
- Acute congestive heart failure / pulmonary edema
- Altered mental status
- Low BP for age
- Cool, Clammy, or Pale skin
- Weak or Thready pulse

#### **Synchronized Cardioversion**

- Initial energy dose is 0.5-1 J/kg
  - If no response, double energy dose to 2 J/kg
- Consider pretreating with a benzodiazepine and analgesic **ONCE via IV/IO:**
  - Fentanyl - 1mcg/kg
  - Midazolam - 0.1mg/kgOR
  - Fentanyl - 1mcg/kg
  - Lorazepam - 0.05mg/kg
- **DO NOT DELAY SYNCHRONIZED CARDIOVERSION FOR COMFORT CARE**

