

# UNSTABLE PEDIATRIC TACHYCARDIA

## INADEQUATE PERFUSION

Signs & Symptoms			Possible Causes	
<p><b><u>Sinus Tachycardia</u></b></p> <ul style="list-style-type: none"> <li>•P wave normal</li> <li>•HR varies with activity</li> <li>Infant &lt;220 beats/min</li> <li>Child &lt;180 beats/min</li> </ul>	<p><b><u>Supraventricular Tachycardia</u></b></p> <ul style="list-style-type: none"> <li>•P wave absent</li> <li>•HR not variable</li> <li>•Abrupt rate change</li> <li>Infants ≥220 beats/min</li> <li>Child ≥180 beats/min</li> </ul>	<p><b><u>Ventricular Tachycardia</u></b></p> <ul style="list-style-type: none"> <li>•P wave absent</li> <li>•HR not variable</li> <li>•Wide QRS complex</li> </ul>	<ul style="list-style-type: none"> <li>• Hypovolemia</li> <li>• Hypoxia</li> <li>• Acidosis</li> <li>• Hyper/o-kalemia</li> <li>• Hypoglycemia</li> <li>• Hypothermia</li> </ul>	<ul style="list-style-type: none"> <li>• Toxins/OD</li> <li>• Cardiac tamponade</li> <li>• Trauma</li> <li>• PE</li> <li>• Tension pneumo</li> </ul>

	EMR	EMT	PM
1. Provide <a href="#">Pediatric Routine Medical Care</a> - treat life threatening problems with airway, breathing circulation and disability.	•	•	•
2. Obtain ECG, monitor Capnography.		•	•

**UNSTABLE:** Altered Mental Status, MAP < 65 or Capillary refill >2 sec.

### SUPRAVENTRICULAR TACHYCARDIA

3. Instruct patient to perform vagal maneuver	•	•
4. <b>ADENOSINE:</b> 0.1 mg/kg, max. dose 6 mg, rapid IVP, followed by rapid flush <b>NORMAL SALINE:</b> 5 mL		•
5. If no response in 2 min. - <b>ADENOSINE:</b> 0.2 mg/kg, max. dose 12 mg, rapid IVP, followed by rapid flush <b>NORMAL SALINE:</b> 5 mL		•
6. If no response in 2 min., consider sedation for conscious patients <b>MIDAZOLAM:</b> 0.2 mg/kg IVP/IO, max single dose 2mg, may repeat 2 min., max. 10 mg		•
7. <a href="#">Synchronized cardioversion</a> 1 J/kg		•
8. If no immediate response, synchronized cardioversion 2 J/kg		•
9. For <a href="#">Pain Management</a> : <b>FENTANYL:</b> 1 mcg/kg IVP/IN/IO/IM, max. single dose 100 mcg, repeat every 10 min., max. total dose 200 mcg		•

### VENTRICULAR TACHYCARDIA

3. Consider sedation for conscious patients <b>MIDAZOLAM:</b> 0.2 mg/kg IVP/IO, max single dose 2mg, may repeat 2 min., max. 10 mg		•
4. Synchronized cardioversion 1 J/kg		•
5. If no immediate response, synchronized cardioversion 2 J/kg		•
6. Contact <b>OLMC</b> to consider <b>AMIODARONE</b>		•
7. For Pain Management: <b>FENTANYL:</b> 1 mcg/kg IVP/IN/IO/IM, max. single dose 100 mcg, repeat every 10 min., max. total dose 200mcg		•

**NOTE:**

1. If receiving sedation or pain medication, monitor patient with continuous Capnography
2. Do not delay cardioversion for sedation

**Use Calculator for dosing**