**Pediatric Tachycardia**

**History**
- Past medical history
- Medications or toxic ingestion (e.g. Aminophylline, Adderall, diet pills, thyroid supplements, decongestants and Digoxin)
- Drugs (e.g. nicotine and illegal drugs)
- Congenital heart disease
- Respiratory distress
- Syncope / near syncope

**Signs and Symptoms**
- Heart rate: Child > 180
  - Infant > 220
- Pale or cyanosis
- Diaphoresis
- Tachypnea
- Vomiting
- Hypotension
- Altered mental status
- Pulmonary congestion
- Syncope

**Differential**
- Heart disease (congenital)
- Hypo / Hyperthermia
- Hypovolemia or anemia
- Electrolyte imbalance
- Anxiety / Pain / Emotional stress
- Fever / Infection / Sepsis
- Hypoxia
- Hypoglycemia
- Medication / Toxin / Drugs
- Pulmonary embolus
- Trauma
- Tension Pneumothorax

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**Assess symptom severity**

**Unstable**
- Cardiac monitor
- Establish IV/IO
- 12-Lead ECG
- EtCO₂ monitoring
- Attempt Valsalva maneuver

**Probable SVT**
(QRS ≤ 0.09 sec)
- Adenosine IV/IO Rapid push
  - Use Pediatape and refer to dosing guide

**Probable V-Tach**
(QRS ≥ 0.09 sec)
- Cardioversion Procedure
  - Consider sedation pre-cardioversion
    - Midazolam IV/IO
    - Use Pediatape and refer to dosing guide
      - Max 5mg
  - Synchronized cardioversion
    - Use Pediatape and refer to dosing guide
      - May repeat if necessary – refer to dosing guide for repeat energy doses

**Stable**
- Monitor and reassess
- Cardiac monitor
- 12-Lead ECG
- EtCO₂ monitoring
- Consider, IV/IO

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**Base Hospital orders are required for all of the following treatments**

**Notify receiving facility.**
Contact Base Hospital for medical direction, as needed.
Pearls

- Most important goal is to differentiate the type of tachycardia and if STABLE or UNSTABLE.
- Unstable is defined by poor perfusion with AMS, abnormal pulses, delayed capillary refill, or difficult or unable to palpate a blood pressure.
- If at any point the patient becomes unstable, move to the unstable arm of the algorithm.
- Early transport is always appropriate in unstable patients.
- For ASYMPTOMATIC patients (or those with only minimal symptoms, such as palpitations) and any tachycardia with a rate of < 150 with a normal blood pressure, consider CLOSE OBSERVATION or fluid bolus rather than immediate treatment with an anti-arrhythmic medication.
- Use Pediatape for pediatric weight measurement. ALWAYS use the weight-based dosing guide.
- Separating the child from the caregiver may worsen the child’s clinical condition.
- Pediatric pads should be used in children < 10kg or Pediatape measurement of Purple.
- Monitor for respiratory depression and associated hypotension associated if Midazolam is used.