SUPRAVENTRICULAR TACHYCARDIA

ADULT		PEDiatric (≤ 34Kg)

BLS
- Universal Protocol #601
- Pulse Oximetry
  - O₂ administration per Airway Management Protocol #602
  - Same as Adult

ALS Standing Orders

Stable
- Attempt vagal maneuvers
- Adenosine 6 mg IV followed by 20 mL NS bolus
- Adenosine 12 mg followed by 20 mL NS bolus
  - May repeat once

Unstable
- Synchronized cardioversion (see notes)
- Midazolam up to 2 mg slow IV or 5 mg IN (split into two doses 2.5 mg each nostril) to pre-medicate prior to cardioversion

Stable
- Attempt vagal maneuvers
- Adenosine 0.1 mg/kg IV followed by 20 mL NS bolus
- Adenosine 0.2 mg/kg IV followed by 20 mL NS bolus

Unstable
- Synchronized cardioversion (see notes)
- Midazolam 0.1 mg/kg slow IV/IN, not to exceed 2 mg to pre-medicate prior to cardioversion

Base Hospital Orders Only

- Cardioversion of unstable Atrial Fibrillation with RVR
  - As needed

Notes
- Obtain 12-lead ECG before and after conversion if possible
- Preferred IV site for Adenosine administration is in a proximal vein with a large bore catheter
- Vascular access may be omitted prior to cardioversion if in extremis
- Typical SVT in adults is a QRS < 0.12 seconds
- Typical SVT in pediatric patients is a QRS < 0.09 seconds with rates >180 for children and >220 in infants
- Avoid Adenosine in atrial fibrillation and atrial flutter
- Consider and treat underlying causes in unstable patients with atrial fibrillation and atrial flutter, i.e. sepsis, dehydration/hypovolemia, medication errors, etc.
- Synchronized/Unsynchronized Sequences (if synchronized mode is unable to capture use unsynchronized cardioversion)
- Use manufacturer recommended energy settings if different from below

<table>
<thead>
<tr>
<th>ADULT</th>
<th>PEDIATRIC</th>
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<tbody>
<tr>
<td>50 J</td>
<td>1 J/kg</td>
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<tr>
<td>70/75 J</td>
<td>2 J/kg</td>
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<tr>
<td>100 J</td>
<td>2 J/kg</td>
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<tr>
<td>120 J</td>
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<tr>
<td>150 J</td>
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<tr>
<td>200 J</td>
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(start at 120J in adult patient with unstable Atrial Fibrillation with RVR)