

TACHYCARDIA (ADULT)

DRAFT PUBLIC
COMMENT JULY
2026



Link to legend
will be added
before finalized

- Assess ABC's, vital signs, oxygen PRN (goal >94%)
- If pulseless → see Medical **Cardiac Arrest**
- If pediatric (prior to onset of puberty or age <14) → see next page

Assess appropriateness of heart rate for clinical condition. Heart rate typically ≥150/min, if tachyarrhythmia

Initial assessment and support

- Maintain patent airway; assist breathing as necessary
- Oxygen (if hypoxemic)
- Monitor blood pressure and oximetry
- Apply monitor and identify rhythm
- IV access
- 12-lead ECG, if available

Medication/Procedure Links:

- **Adenosine IV/IO**
- **Synchronized cardioversion**
 - SVT: 100-200J
 - Adult A-fib/A-flutter: 200J
 - Monomorphic VT: 100J
 - Polymorphic VT (Torsades dePointes): unsynchronized: defibrillation

Persistent tachyarrhythmia causing

- Hypotension?
- Acutely altered mental status?
- Signs of shock?
- Ischemic chest discomfort?
- Acute heart failure?

YES

Synchronized cardioversion

- Sedate (**Midazolam**) whenever feasible
- If regular narrow complex, consider **adenosine**

NO

Wide QRS?
≥0.12 second

YES

Consider

- **Amiodarone**

NO

- Vagal maneuver (if regular)
- **Adenosine** (if regular)

If refractory, consider

- Underlying cause
- Need to increase energy for next cardioversion

Transport to ED
(STAR Center preferred)

Comments

- Vagal Maneuvers to consider:
 - Ice cold water to face (place cold washcloth over forehead and face without obstructing airway)
 - Valsalva maneuvers
- Common causes of sinus tachycardia: exercise, dehydration, fever, infection, pain, medications, anxiety
- Strongly consider use of **Midazolam** for any patient that are awake and alert prior to cardioversion

Effective: xxxxx
Supersedes: NEW

TACHYCARDIA (PEDIATRIC)

Link to legend will be added before finalized

- Assess ABC's, vital signs, oxygen PRN (goal >94%)
- If pulseless → see **Pediatric Cardiac Arrest**
- If adult (after onset of puberty or age ≥14) → see prior page

DRAFT
EMSAC AUGUST
2026



Child with suspected tachycardia

Initial assessment and support

- Maintain patent airway
- Assist breathing with positive-pressure ventilation and oxygen as necessary
- Attach monitor
- IV/IO access
- 12-lead ECG

Medication/Procedure Links:

- Adenosine IV/IO**
- Synchronized cardioversion:** 1J/kg; if not effective increase to 2J/kg

Pediatric Dosage Chart

Probable sinus tachycardia if

- P waves present/normal
- Variable RR interval
- Infant rate usually <220/min
- Child rate usually <180/min

Search for and treat causes

Evaluate rhythm

Cardiopulmonary compromise?

- Acutely altered mental status
- Signs of shock
- Hypotension

YES

NO

Narrow
(≤ 0.09 sec)

Wide
(>0.09 sec)

Evaluate QRS duration

Probable SVT

Synchronized cardioversion

Transport to Critical Medical Pediatric Center

Evaluate QRS duration

Probable SVT

Consider vagal maneuvers

Adenosine

Transport to ED

Wide
(>0.09 sec)

Evaluate QRS duration

Possible VT or SVT with aberrancy

If rhythm is **regular** and QRS **monomorphic**, consider **adenosine**

Transport to Critical Medical Pediatric Center

Comments

- Probable SVT: P waves absent/abnormal, RR interval not variable, Infant HR >220/min, child rate >180, history of abrupt rate change
- Vagal Maneuvers to consider:
 - Ice cold water to face (place cold washcloth over forehead and face without obstructing airway)
 - Valsalva maneuvers
- Common causes of sinus tachycardia: exercise, dehydration, fever, infection, pain, medications, anxiety
- Strongly consider use of **Midazolam** for any patient that are awake and alert prior to cardioversion