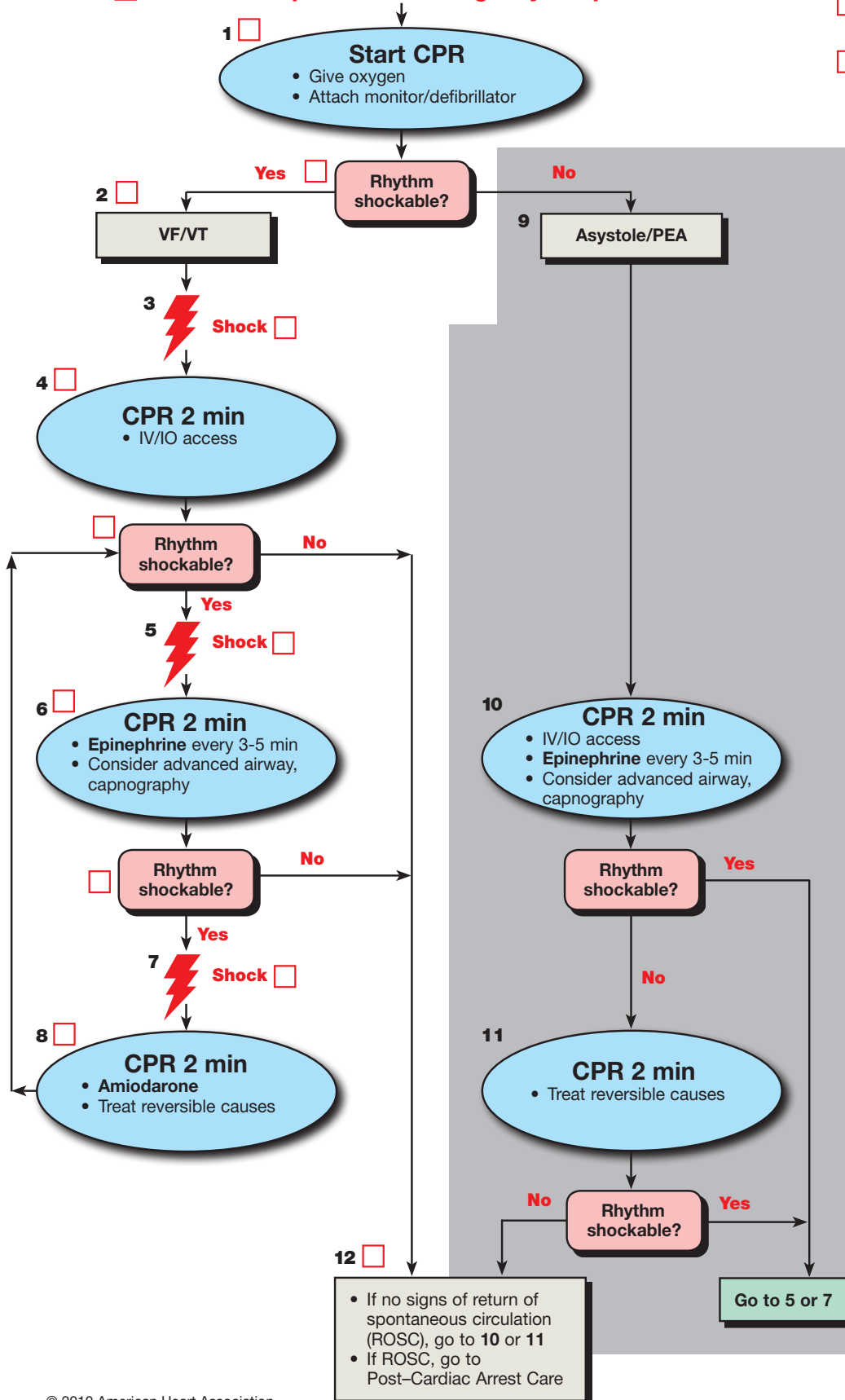


Cardiac Arrest VF/Pulseless VT Learning Station Checklist

Adult Cardiac Arrest

Shout for Help/Activate Emergency Response



CPR Quality

- Push hard (≥ 2 inches [5 cm]) and fast (≥ 100 /min) and allow complete chest recoil
- Minimize interruptions in compressions
- Avoid excessive ventilation
- Rotate compressor every 2 minutes
- If no advanced airway, 30:2 compression-ventilation ratio
- Quantitative waveform capnography
 - If $PETCO_2 < 10$ mm Hg, attempt to improve CPR quality
- Intra-arterial pressure
 - If relaxation phase (diastolic) pressure < 20 mm Hg, attempt to improve CPR quality

Return of Spontaneous Circulation (ROSC)

- Pulse and blood pressure
- Abrupt sustained increase in $PETCO_2$ (typically ≥ 40 mm Hg)
- Spontaneous arterial pressure waves with intra-arterial monitoring

Shock Energy

- **Biphasic:** Manufacturer recommendation (eg, initial dose of 120-200 J); if unknown, use maximum available. Second and subsequent doses should be equivalent, and higher doses may be considered.
- **Monophasic:** 360 J

Drug Therapy

- **Epinephrine IV/IO Dose:** 1 mg every 3-5 minutes
- **Vasopressin IV/IO Dose:** 40 units can replace first or second dose of epinephrine
- **Amiodarone IV/IO Dose:** First dose: 300 mg bolus. Second dose: 150 mg.

Advanced Airway

- Supraglottic advanced airway or endotracheal intubation
- Waveform capnography to confirm and monitor ET tube placement
- 8-10 breaths per minute with continuous chest compressions

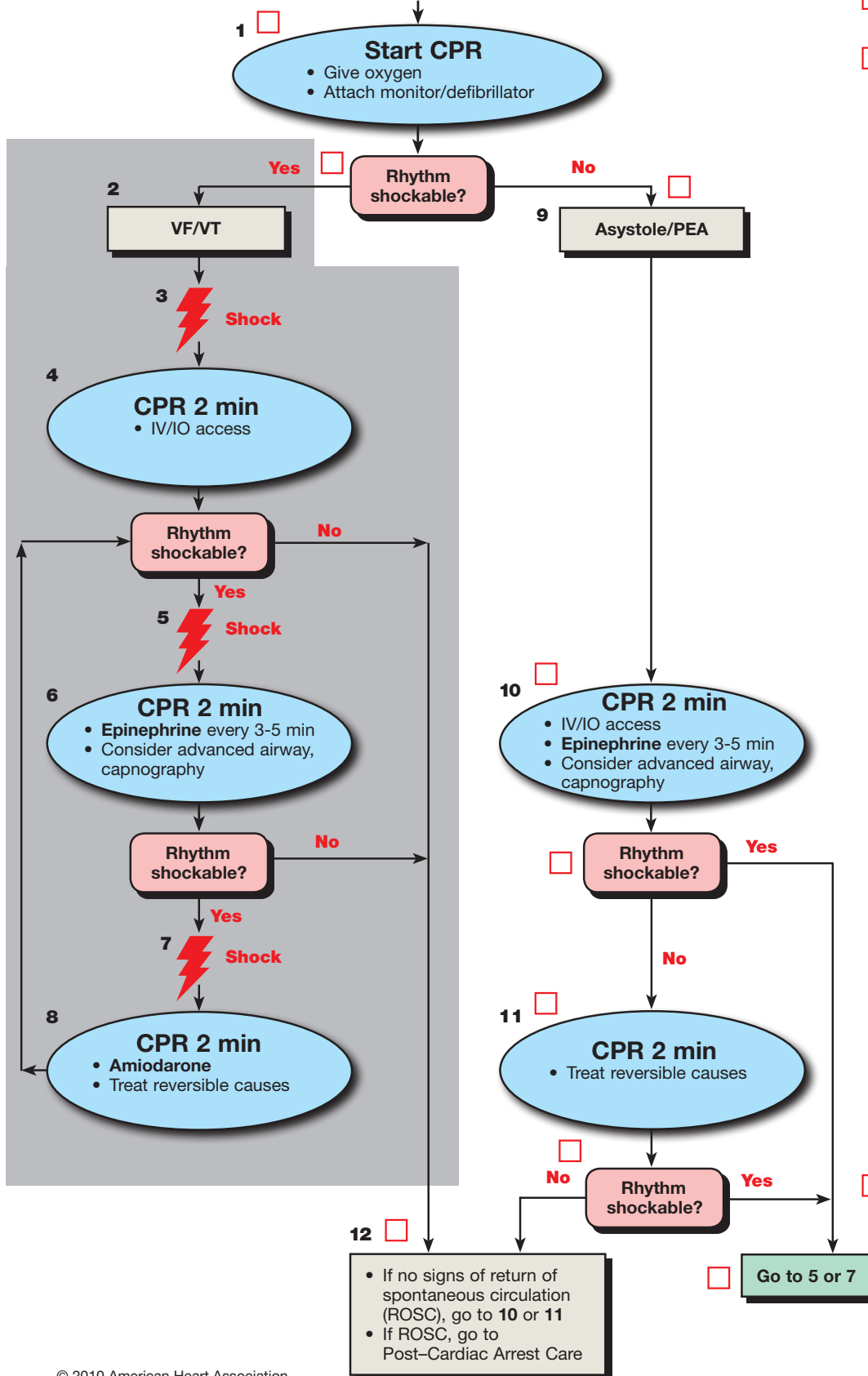
Reversible Causes

- Hypovolemia
- Hypoxia
- Hydrogen ion (acidosis)
- Hypo-/hyperkalemia
- Hypothermia
- Tension pneumothorax
- Tamponade, cardiac
- Toxins
- Thrombosis, pulmonary
- Thrombosis, coronary

Cardiac Arrest PEA/Asystole Learning Station Checklist

Adult Cardiac Arrest

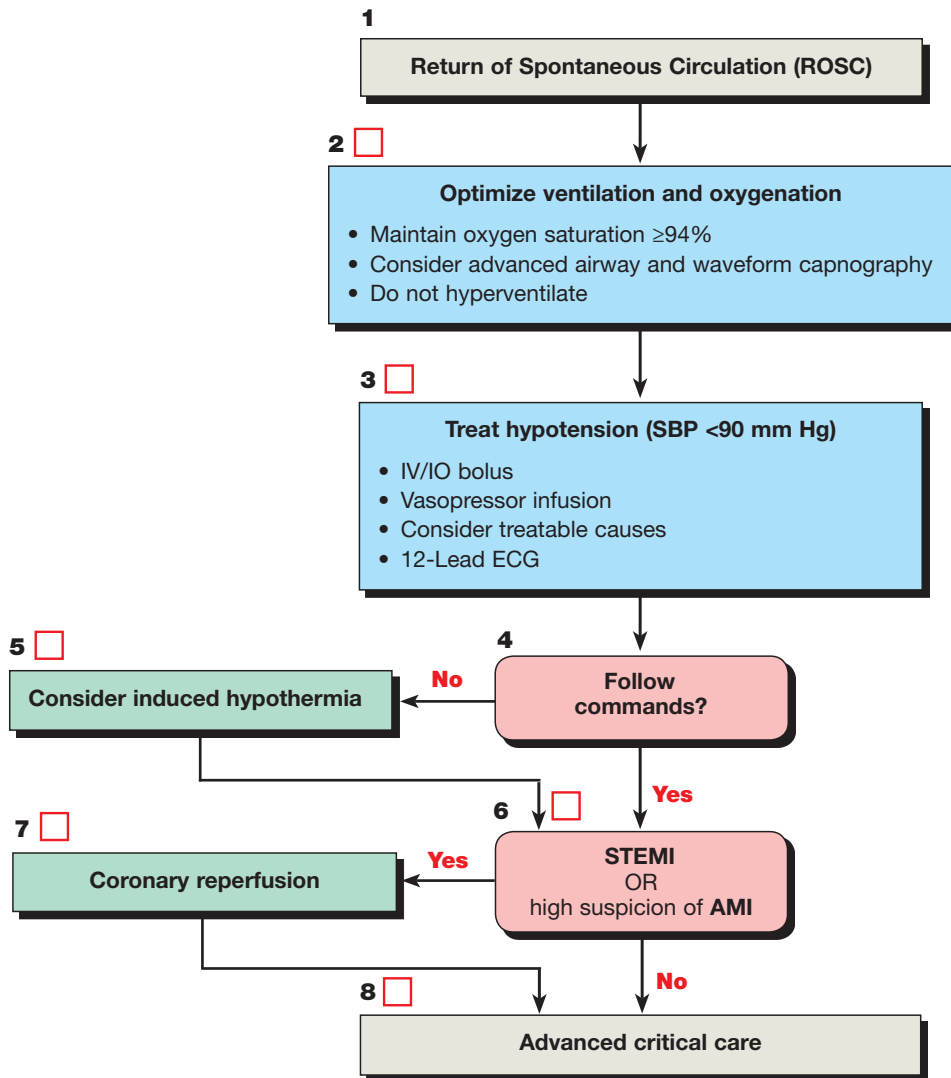
Shout for Help/Activate Emergency Response



- CPR Quality**
 - Push hard (≥ 2 inches [5 cm]) and fast (≥ 100 /min) and allow complete chest recoil
 - Minimize interruptions in compressions
 - Avoid excessive ventilation
 - Rotate compressor every 2 minutes
 - If no advanced airway, 30:2 compression-ventilation ratio
 - Quantitative waveform capnography
 - If $PETCO_2 < 10$ mm Hg, attempt to improve CPR quality
 - Intra-arterial pressure
 - If relaxation phase (diastolic) pressure < 20 mm Hg, attempt to improve CPR quality
- Return of Spontaneous Circulation (ROSC)**
 - Pulse and blood pressure
 - Abrupt sustained increase in $PETCO_2$ (typically ≥ 40 mm Hg)
 - Spontaneous arterial pressure waves with intra-arterial monitoring
- Shock Energy**
 - **Biphasic:** Manufacturer recommendation (eg, initial dose of 120-200 J); if unknown, use maximum available. Second and subsequent doses should be equivalent, and higher doses may be considered.
 - **Monophasic:** 360 J
- Drug Therapy**
 - **Epinephrine IV/IO Dose:** 1 mg every 3-5 minutes
 - **Vasopressin IV/IO Dose:** 40 units can replace first or second dose of epinephrine
 - **Amiodarone IV/IO Dose:** First dose: 300 mg bolus. Second dose: 150 mg.
- Advanced Airway**
 - Supraglottic advanced airway or endotracheal intubation
 - Waveform capnography to confirm and monitor ET tube placement
 - 8-10 breaths per minute with continuous chest compressions
- Reversible Causes**
 - Hypovolemia
 - Hypoxia
 - Hydrogen ion (acidosis)
 - Hypo-/hyperkalemia
 - Hypothermia
 - Tension pneumothorax
 - Tamponade, cardiac
 - Toxins
 - Thrombosis, pulmonary
 - Thrombosis, coronary

Immediate Post-Cardiac Arrest Care Learning Station Checklist

Adult Immediate Post-Cardiac Arrest Care



Doses/Details

Ventilation/Oxygenation
 Avoid excessive ventilation. Start at 10-12 breaths/min and titrate to target PETCO₂ of 35-40 mm Hg. When feasible, titrate FIO₂ to minimum necessary to achieve SpO₂ ≥94%.

IV Bolus
 1-2 L normal saline or lactated Ringer's. If inducing hypothermia, may use 4°C fluid.

Epinephrine IV Infusion:
 0.1-0.5 mcg/kg per minute (in 70-kg adult: 7-35 mcg per minute)

Dopamine IV Infusion:
 5-10 mcg/kg per minute

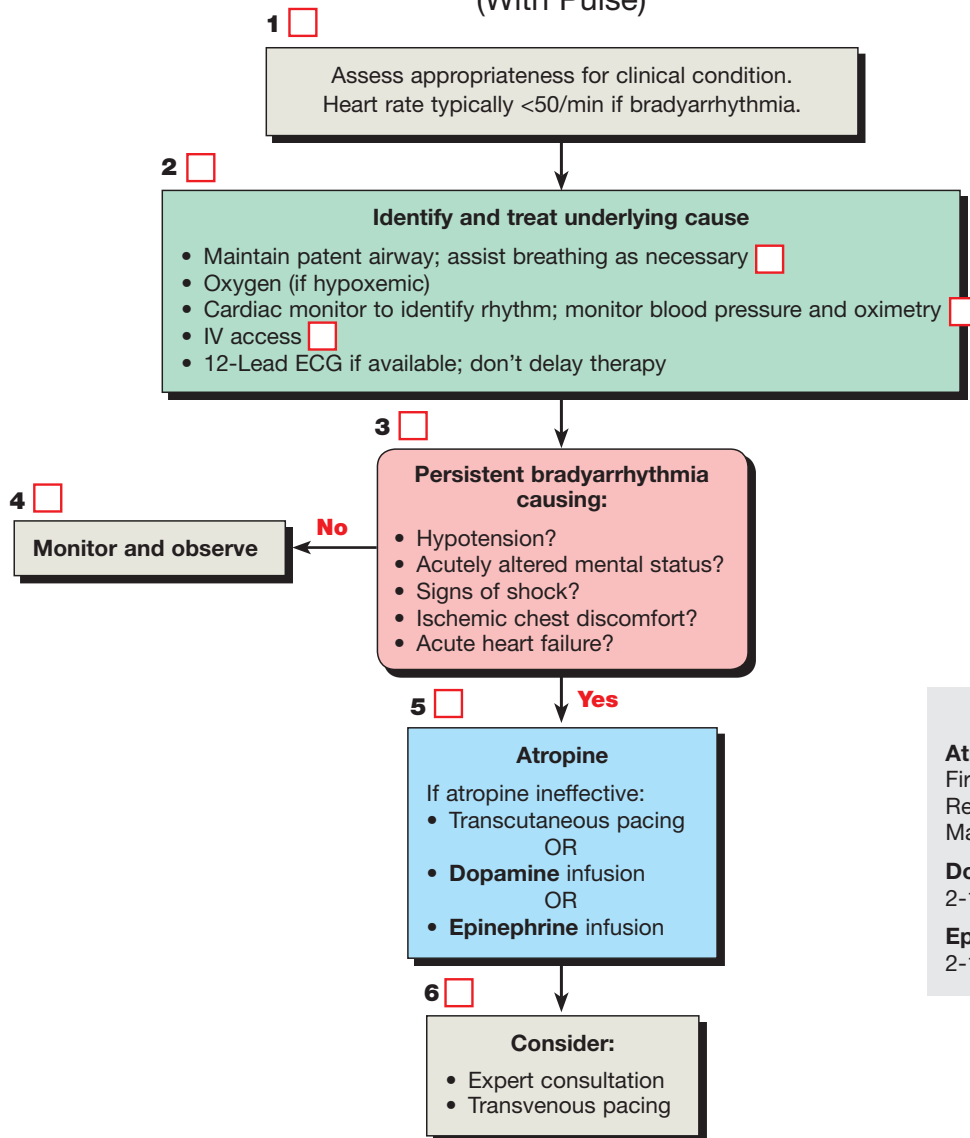
Norepinephrine IV Infusion:
 0.1-0.5 mcg/kg per minute (in 70-kg adult: 7-35 mcg per minute)

Reversible Causes

- Hypovolemia
- Hypoxia
- Hydrogen ion (acidosis)
- Hypo-/hyperkalemia
- Hypothermia
- Tension pneumothorax
- Tamponade, cardiac
- Toxins
- Thrombosis, pulmonary
- Thrombosis, coronary

Bradycardia Learning Station Checklist

Adult Bradycardia (With Pulse)



Doses/Details

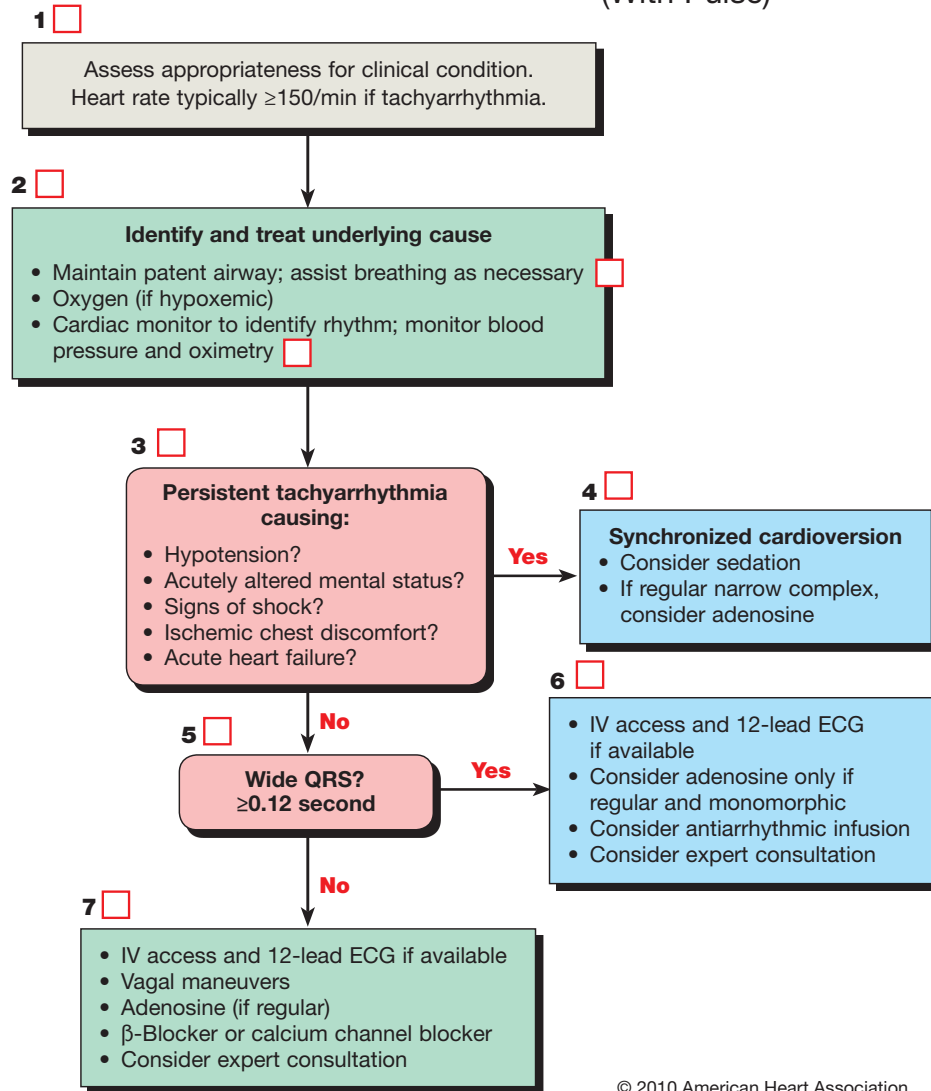
Atropine IV Dose:
First dose: 0.5 mg bolus
Repeat every 3-5 minutes
Maximum: 3 mg

Dopamine IV Infusion:
2-10 mcg/kg per minute

Epinephrine IV Infusion:
2-10 mcg per minute

Tachycardia Learning Station Checklist

Adult Tachycardia (With Pulse)



© 2010 American Heart Association

Doses/Details

Synchronized Cardioversion

Initial recommended doses:

- Narrow regular: 50-100 J
- Narrow irregular: 120-200 J biphasic or 200 J monophasic
- Wide regular: 100 J
- Wide irregular: defibrillation dose (NOT synchronized)

Adenosine IV Dose:

First dose: 6 mg rapid IV push; follow with NS flush.

Second dose: 12 mg if required.

Antiarrhythmic Infusions for Stable Wide-QRS Tachycardia

Procainamide IV Dose:

20-50 mg/min until arrhythmia suppressed, hypotension ensues, QRS duration increases $>50\%$, or maximum dose 17 mg/kg given. Maintenance infusion: 1-4 mg/min. Avoid if prolonged QT or CHF.

Amiodarone IV Dose:

First dose: 150 mg over 10 minutes. Repeat as needed if VT recurs. Follow by maintenance infusion of 1 mg/min for first 6 hours.

Sotalol IV Dose:

100 mg (1.5 mg/kg) over 5 minutes. Avoid if prolonged QT.