

Bradycardia

Heart Rate *less than 50/min*

Stable: Monitor – Seek expert help – Treat Reversible Causes

Unstable Signs and Symptoms: chest pain, shortness of breath, **altered mental status**, weak, **Hypotension**, orthostatic, diaphoresis, congestion on chest X ray, Saturation <94%,

Systolic BP < 90mmHg

Treatment: Initial Treatment Atropine .5mg IV if ineffective may repeat up to 3mg

Next Treatment: Pacing: Transcutaneous or Transvenous IV

Epinephrine 2-10mcg/min or Dopamine 2-10mcg/kg/min



Tachycardia Narrow Complex (SVT)

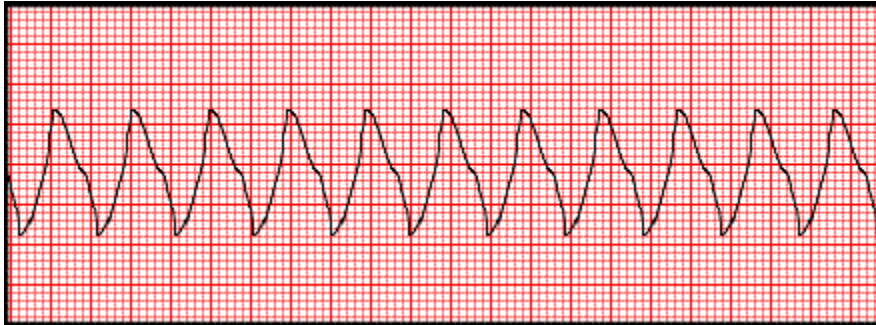
Heart Rate greater than 150

Stable: Attempt Vagal Maneuver – Monitor - Seek expert help – Treat Reversible Causes

Unstable: Hypotension/Shock, Fever, Altered Mental Status, Chest discomfort, Acute Heart Failure
Saturation <94%, Systolic BP < 90mmHg

Treatment: Initial treatment Adenosine 6mg – Second dose 12mg – 12mg IV fast

Synchronized Cardioversion – 120 - 200J Biphasic Monophasic 200J



Tachycardia Wide Complex (Stable V Tach) with a pulse

Heart Rate greater than 100 QRS complex greater than .12sec

Stable: Treat Amiodarone IV 150mg over 10 minutes can repeat this if Tachycardia persists

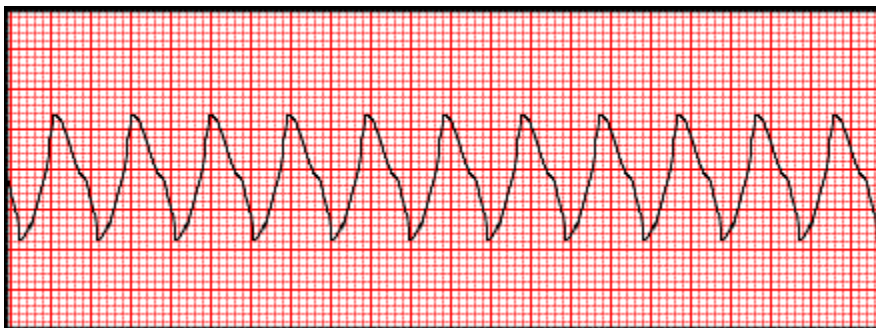
Maintenance Amiodarone Drip 1mg/min for first 6 hours

Monitor – Seek expert help – Treat Reversible Causes

Procainamide 20-50mg and Stalolol 100mg can be used

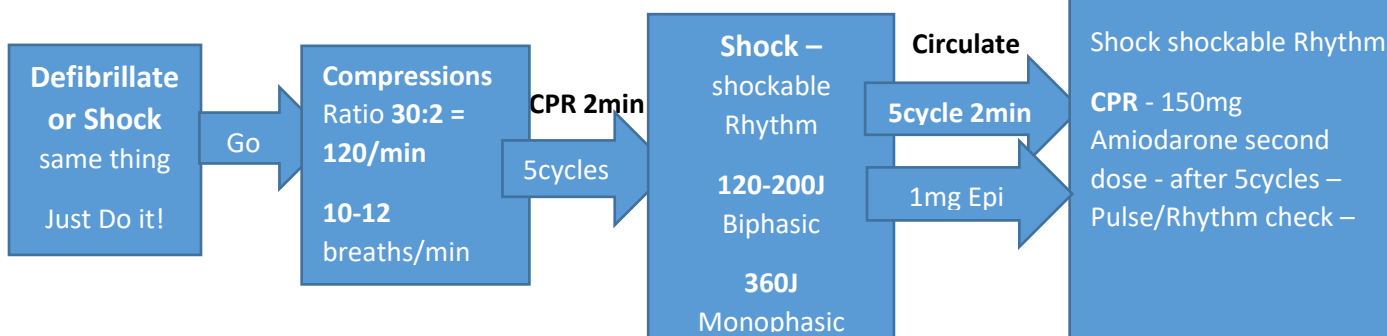
Unstable: Hypotension/Shock, Altered Mental Status, Chest discomfort, Acute Heart Failure with pulse present, Saturation <94%, Systolic BP < 90mmHg,

Treat with Synchronized Cardioversion



(Pulseless V Tach) Wide Complex Ventricular Tachycardia

Shout for Help/Activate Emergency Response



Pulse/Rhythm Check –
Shock Shockable rhythm
 – CPR - Amiodarone
 300mg initial dose –
 after 5cycles - 5-10
 seconds Pulse/Rhythm
 Check – **Shock** shockable
 Rhythm – CPR – Give
 1mg. Epi every 3-5 min.

After 2 min 5-10
 seconds Pulse/Rhythm
 check

Shock shockable Rhythm
 CPR - 150mg
 Amiodarone second
 dose - after 5cycles –
 Pulse/Rhythm check –

Continue this rotation. Shock any shockable rhythms. Immediately afterwards, start CPR beginning with chest compressions. You have given maximum dose of Amiodarone.

1mg of Epinephrine every 3-5 minutes is recommended for the remainder of this scenario.

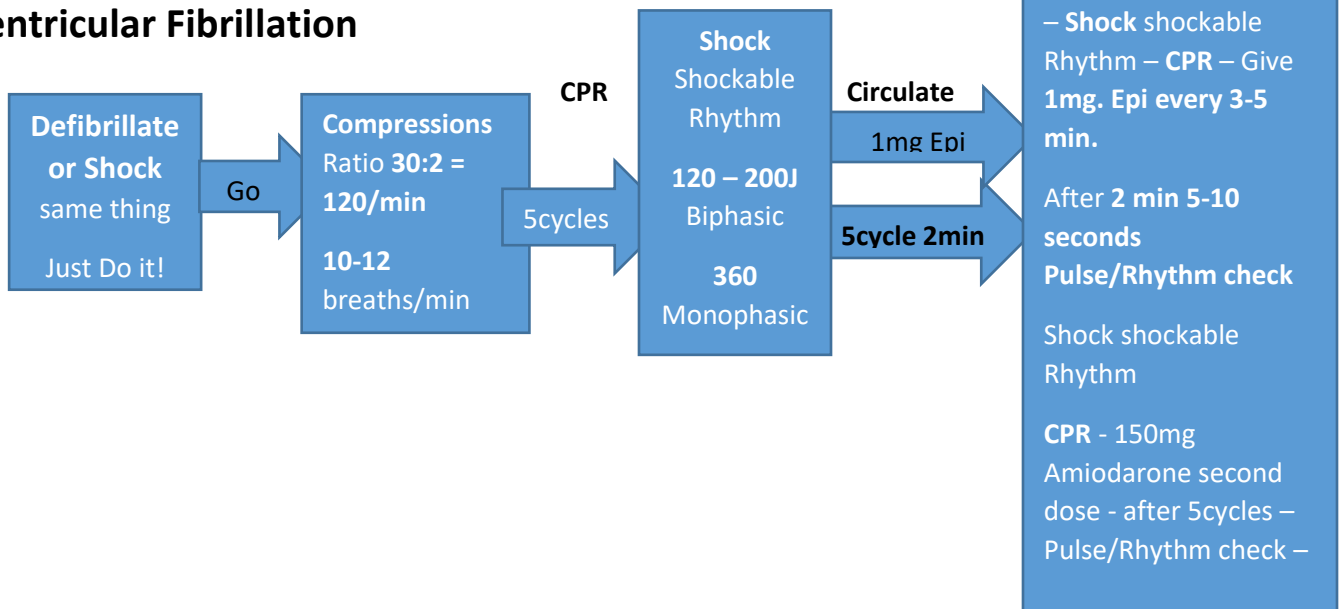
Shockable Rhythms: Ventricular Fibrillation and Ventricular Tachycardia

Consider termination of resuscitation efforts after 25 minutes.

Ventilation Rates	Adult Ventilations	Child/Infant Ventilations
Advanced Airway No interrupting compressions	1 breath every 6-8 seconds	1 breath every 3-5 seconds
No Advanced Airway Compressions are paused	1 breath every 5-6 seconds 10-12 breaths/min	1 breath every 6-8 seconds 12-20 breaths/min



Ventricular Fibrillation



Asystole/PEA do not shock



Acute Coronary Syndrome

Chest discomfort suggestive of ischemia.

Signs and Symptoms

Pressure, fullness, squeezing, pain in the center of the chest lasting several minutes

Chest discomfort spreading the shoulders, neck, one or both arms, or jaw

Chest discomfort spreading to the back or between the shoulders

Chest discomfort with light – headedness, dizziness, fainting, sweating, nausea, or vomiting

Unexplained shortness of breath with or without chest discomfort.

Treatment of Choice

Morphine	2-4mg
Oxygen	Titrate to Keep Saturation level greater than 94%
Nitroglycerin – tablet or spray – every 3-5min. with ongoing symptoms – Hemodynamic Stable > 90 mmHg:	.4mg sublingual tablet every 3 -5min. Do not administer Nitroglycerin with the following: Recent Phosphodiesterase Inhibitor Inferior Wall MI and (RV) Infarction Hypotension, Bradycardia, Tachycardia

	24hour wait sildenafil or vardenafil 48hour wait with tadalafil
Aspirin	160-325

Treatment for STEMI

Fibrinolytic Therapy TPA - within 30min - door to needle time

PCI (percutaneous coronary Intervention) within 90min from time of medical contact.

EMS should choose a facility that provides PCI (Cath Lab) over any others considering the 90min time frame.