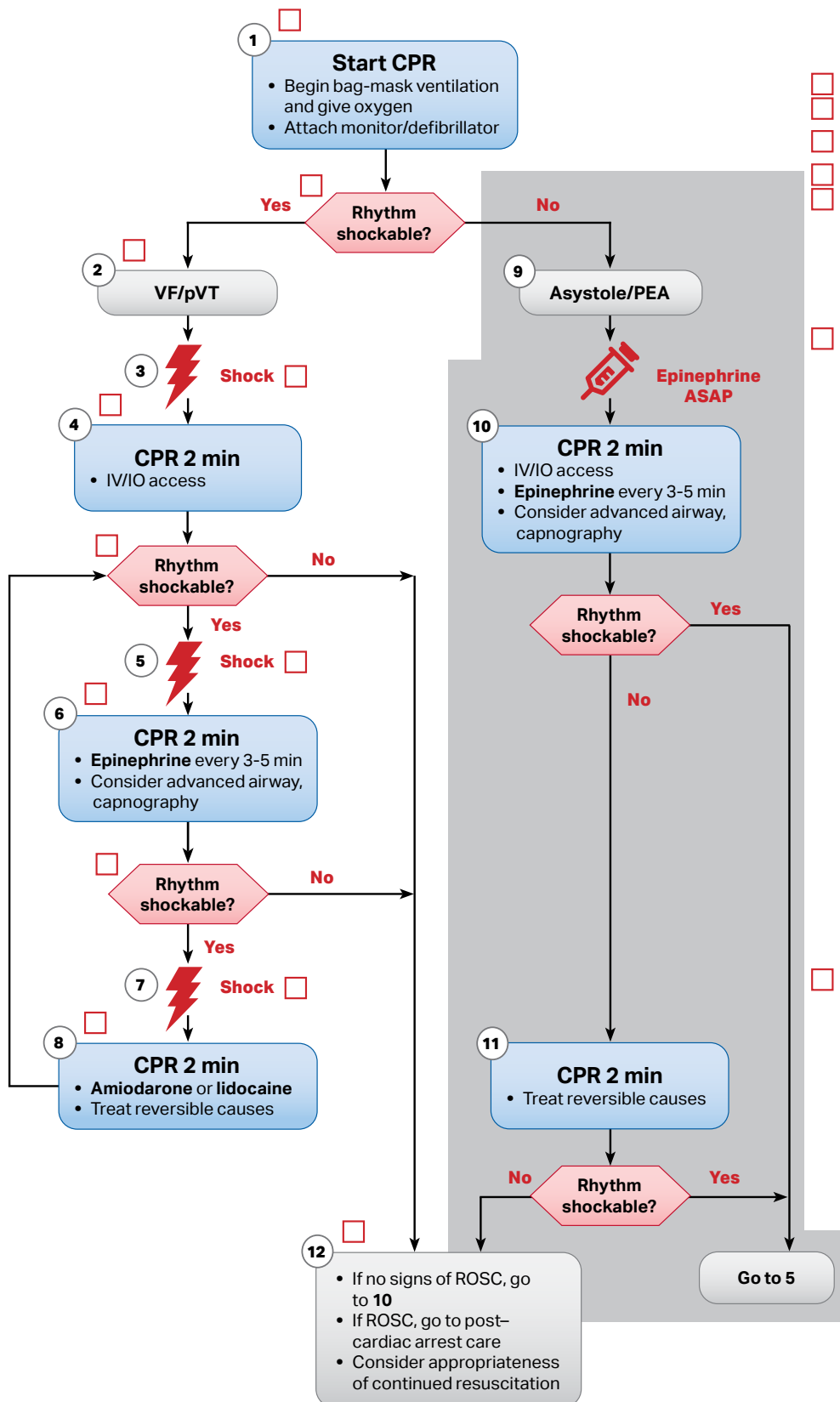


Adult Cardiac Arrest Learning Station Checklist (VF/pVT)

Adult Cardiac Arrest Algorithm (VF/pVT)



High-Quality CPR

- Push hard (at least 5 cm).
- Push fast (100-120/min) and allow complete chest recoil.
- Minimize interruptions in compressions.
- Avoid excessive ventilation.
- Change compressor every 2 minutes, or sooner if fatigued.
- If no advanced airway, use 30:2 compression-ventilation ratio.
- If advanced airway in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions.
- Continuous waveform capnography
 - If ETCO₂ is low or decreasing, reassess CPR quality.

Shock Energy for Defibrillation

- **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
- **Amiodarone IV/IO dose:** First dose: 300 mg bolus Second dose: 150 mg or
- **Lidocaine IV/IO dose:** First dose: 1-1.5 mg/kg Second dose: 0.5-0.75 mg/kg

Advanced Airway

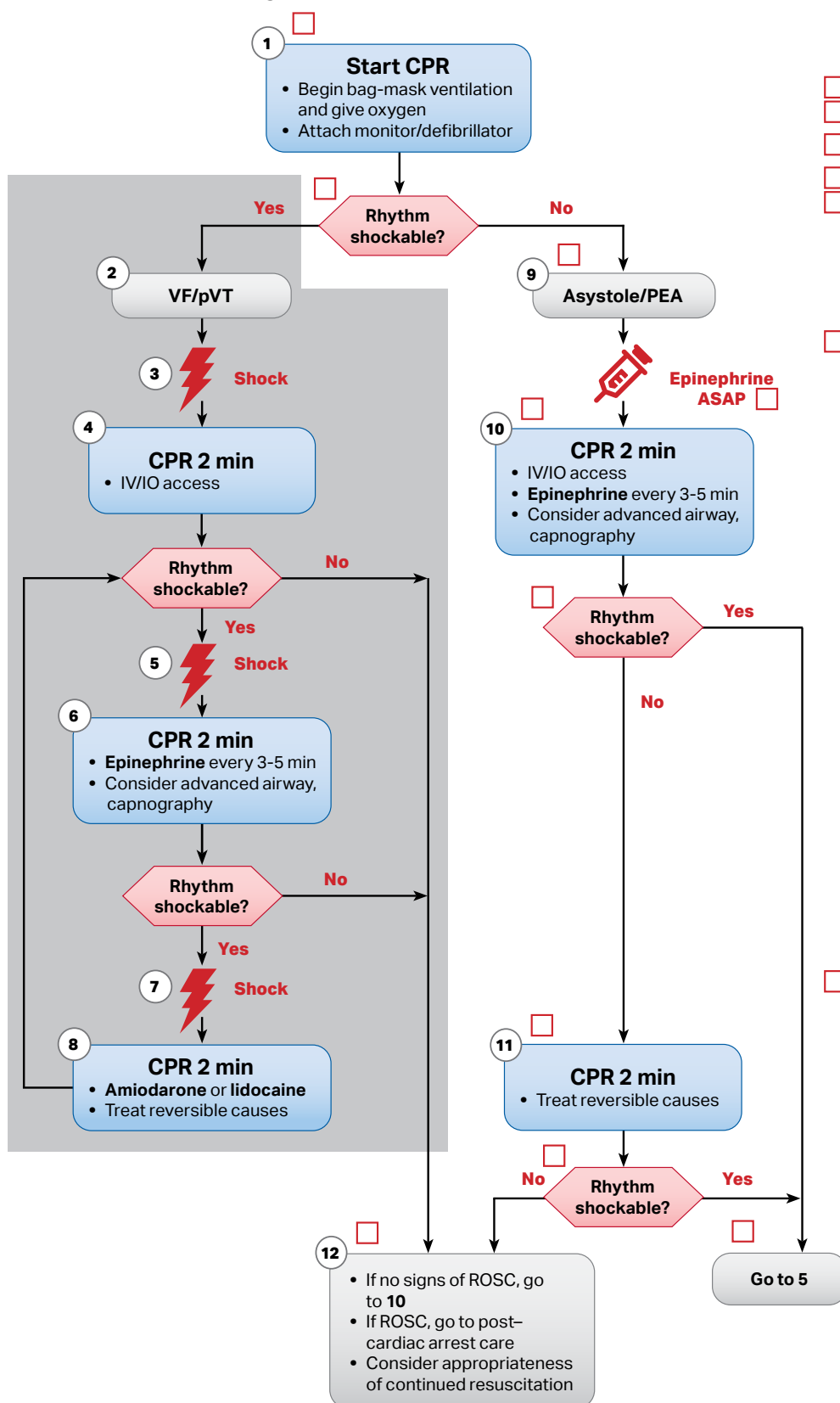
- ET intubation or supraglottic advanced airway
- Continuous waveform capnography or capnometry to confirm and monitor ET tube placement

Reversible Causes

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

Adult Cardiac Arrest Learning Station Checklist (Asystole/PEA)

Adult Cardiac Arrest Algorithm (Asystole/PEA)



High-Quality CPR

- Push hard (at least 5 cm).
- Push fast (100-120/min) and allow complete chest recoil.
- Minimize interruptions in compressions.
- Avoid excessive ventilation.
- Change compressor every 2 minutes, or sooner if fatigued.
- If no advanced airway, use 30:2 compression-ventilation ratio.
- If advanced airway in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions.
- Continuous waveform capnography
 - If ETCO₂ is low or decreasing, reassess CPR quality.

Shock Energy for Defibrillation

- **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
- **Amiodarone IV/IO dose:** First dose: 300 mg bolus Second dose: 150 mg or
- **Lidocaine IV/IO dose:** First dose: 1-1.5 mg/kg Second dose: 0.5-0.75 mg/kg

Advanced Airway

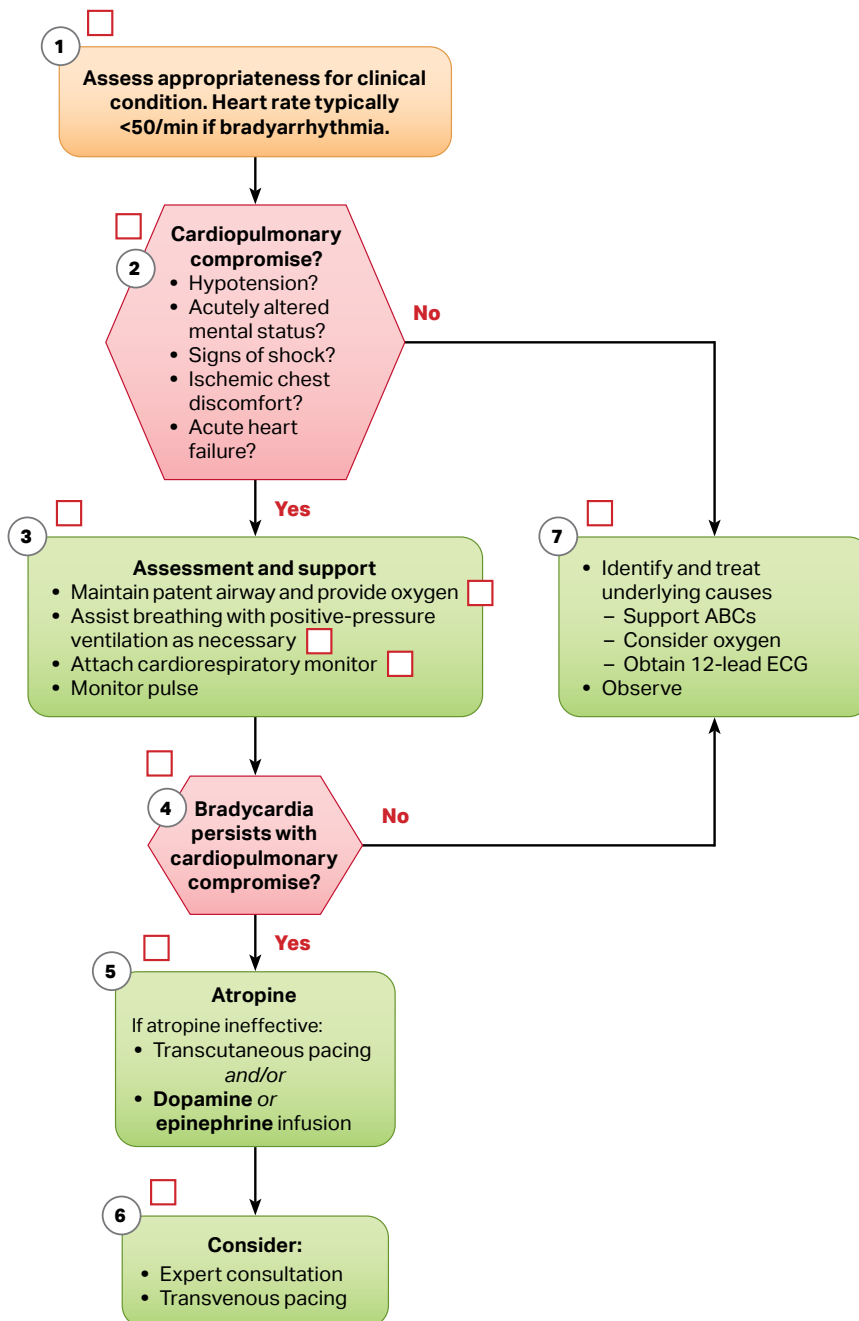
- ET intubation or supraglottic advanced airway
- Continuous waveform capnography or capnometry to confirm and monitor ET tube placement

Reversible Causes

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

Adult Bradycardia Learning Station Checklist

Adult Bradycardia With a Pulse Algorithm



Doses/Details

Atropine IV dose:

First dose: 1 mg bolus.
Repeat every 3-5 minutes.
Maximum total dose: 3 mg.

Dopamine IV infusion:

Usual infusion rate is 5-20 mcg/kg per minute.
Titrate to patient response; taper slowly.

Epinephrine IV infusion:

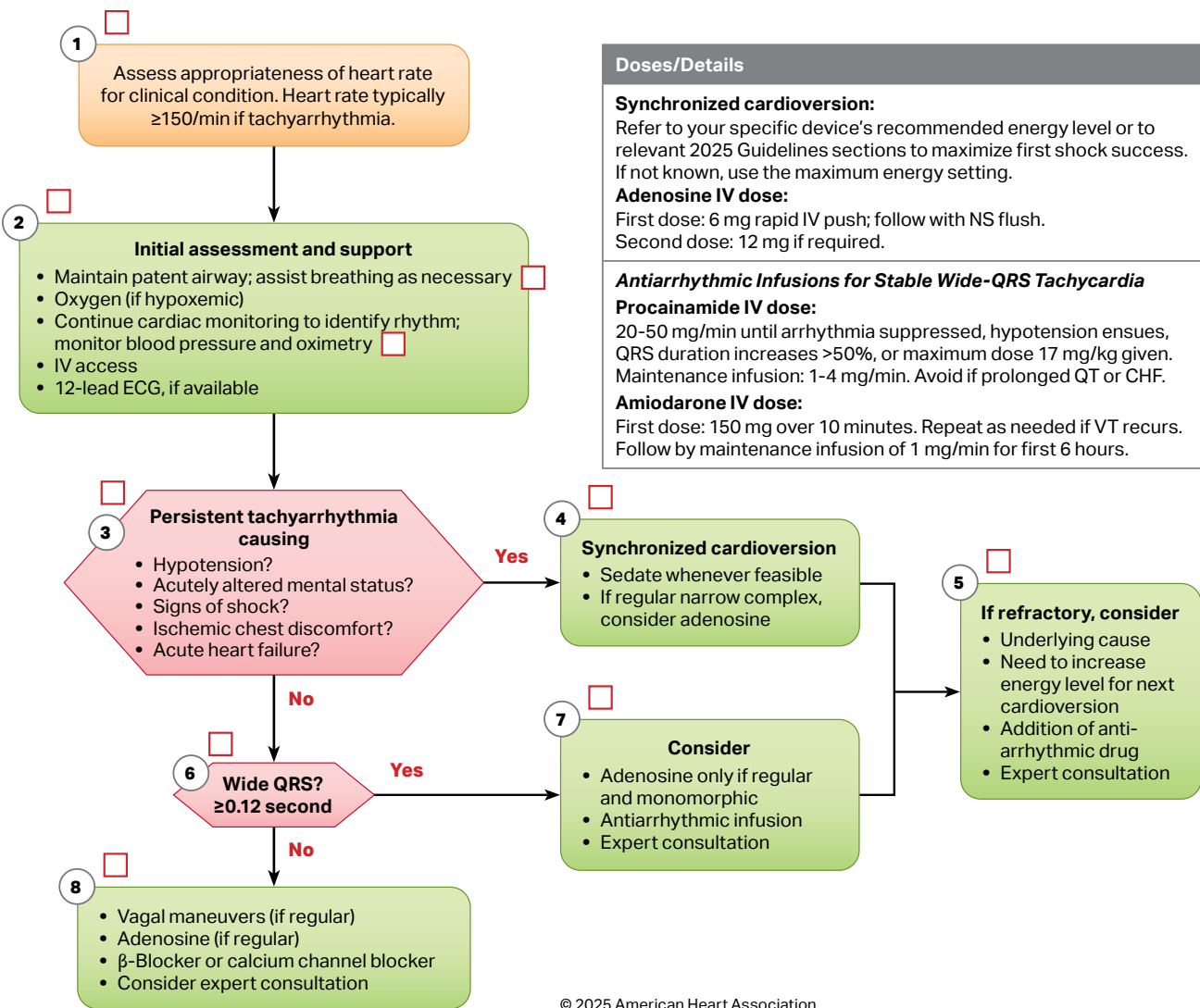
2-10 mcg per minute infusion.
Titrate to patient response.

Possible Causes

- Myocardial ischemia/infarction
- Drugs/toxicologic (eg, calcium-channel blockers, β -blockers, digoxin)
- Hypoxia
- Electrolyte abnormality (eg, hyperkalemia)

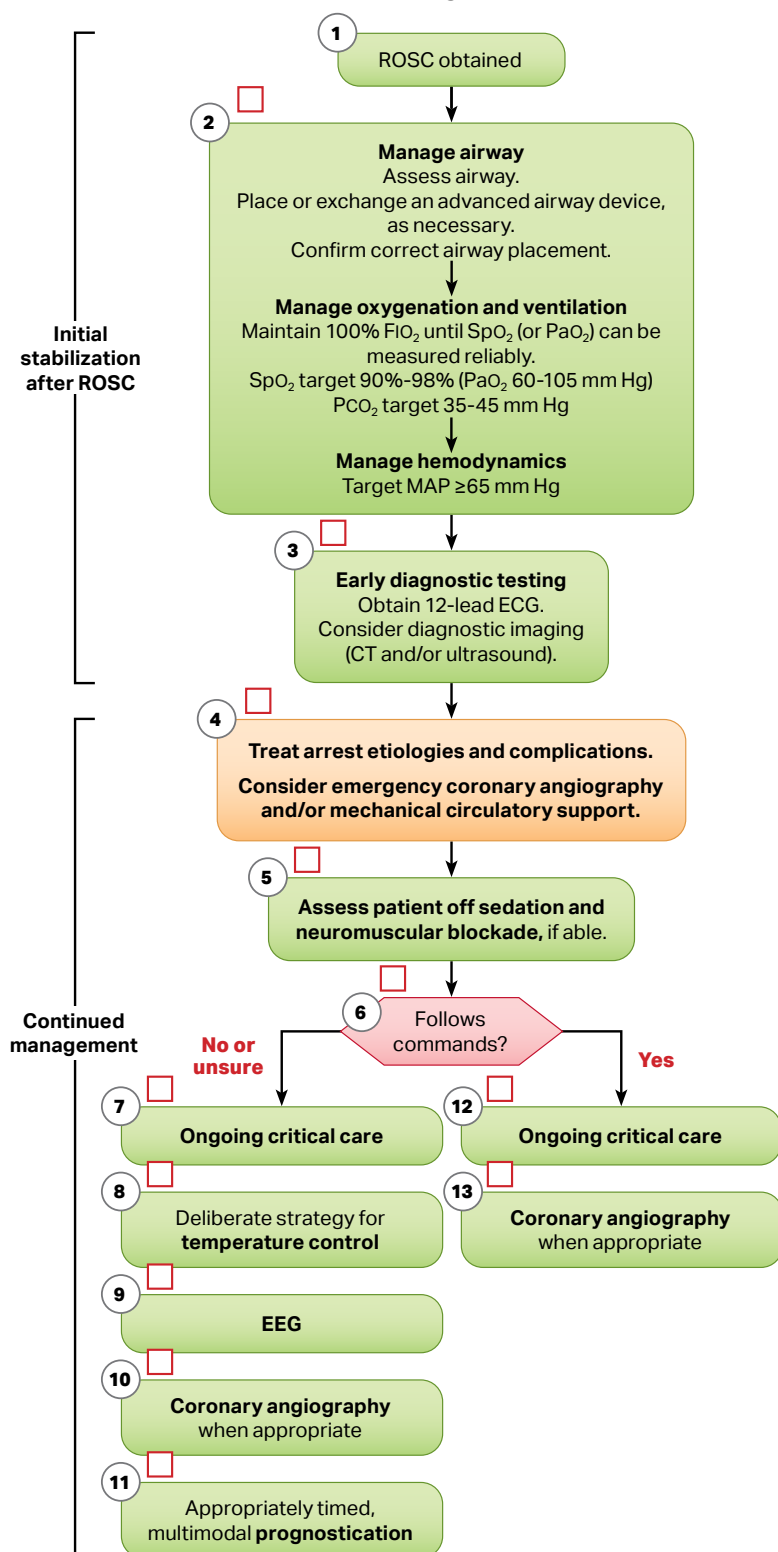
Adult Tachycardia With a Pulse Learning Station Checklist

Adult Tachyarrhythmia With a Pulse Algorithm



Adult Post-Cardiac Arrest Care Learning Station Checklist

Adult Post-Cardiac Arrest Care Algorithm



Initial Stabilization After ROSC

Resuscitation is ongoing during the post-ROSC phase, and many of these activities can occur concurrently.

Manage airway: Assess and consider placement or exchange of an advanced airway device (usually endotracheal tube or supraglottic device). Confirm correct placement of an advanced airway. This generally includes the use of waveform capnography or capnometry.

Manage oxygenation and ventilation: Titrate FiO_2 for SpO_2 90%-98% (or PaO_2 60-105 mm Hg). Adjust minute ventilation to target PCO_2 35-45 mm Hg in the absence of severe acidemia.

Manage hemodynamics: Initiate or adjust vasopressors and/or fluid resuscitation as necessary for goal MAP ≥ 65 mm Hg.

Early diagnostic testing: Obtain 12-lead ECG to assess for ischemia or arrhythmia. Consider CT head, chest, abdomen, and/or pelvis to determine cause of arrest or assess for injuries sustained during resuscitation. Point-of-care ultrasound or echocardiography may be reasonable to identify clinically significant diagnoses requiring intervention.

Continued Management

Treat arrest etiologies and complications.

Consider emergency cardiac intervention:

- Persistent ST-segment elevation present
- Cardiogenic shock
- Recurrent or refractory ventricular arrhythmias
- Severe myocardial ischemia

Temperature control: If patient is not following commands off sedation and neuromuscular blockade or is unable to assess, initiate a deliberate strategy of temperature control with goal 32°C - 37.5°C as soon as possible.

Evaluate for seizure: Evaluate for clinical seizure and obtain EEG to evaluate for seizure in patients not following commands.

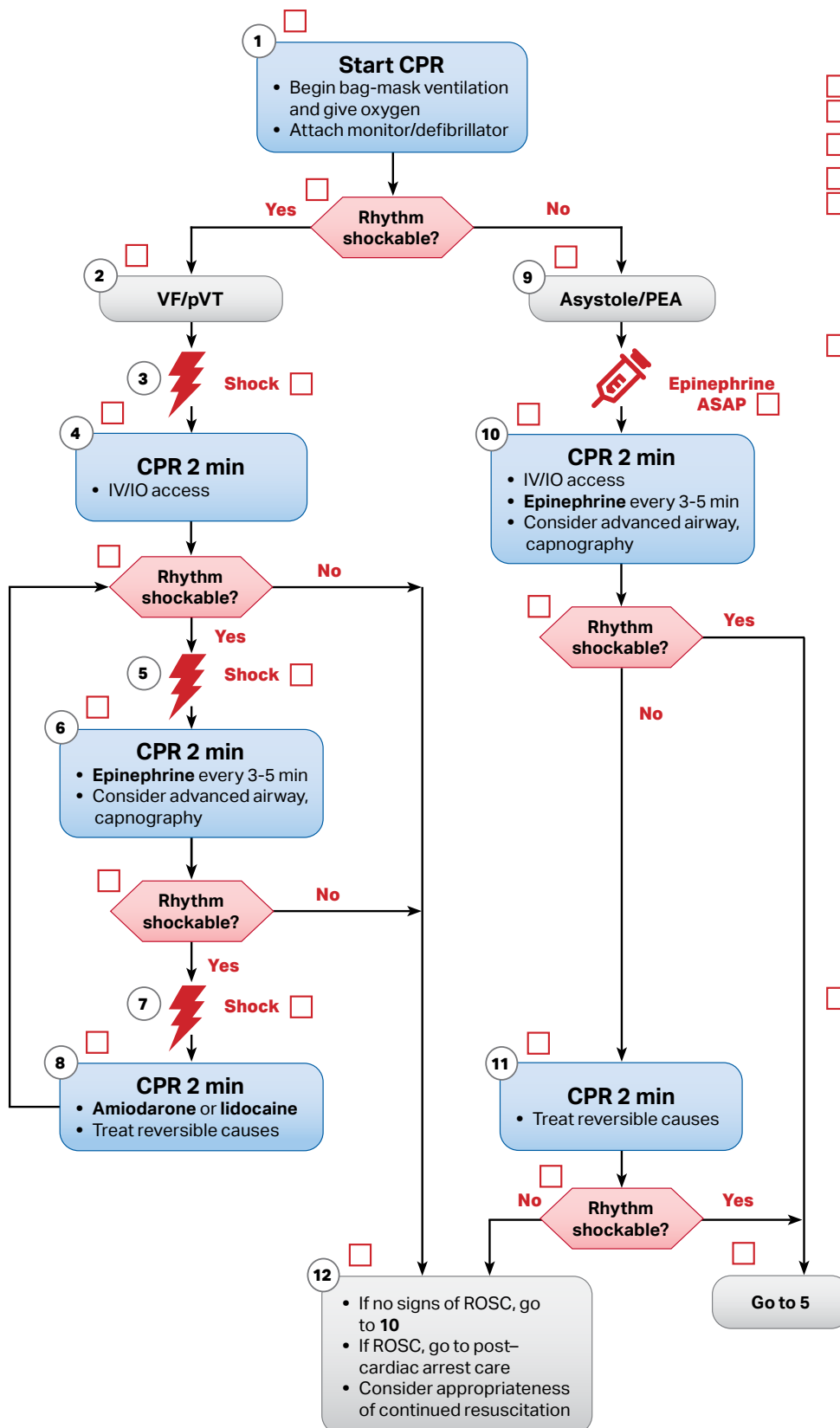
Prognostication: Multimodal approach with delayed impressions (≥ 72 hours from ROSC or achieving normothermia).

Ongoing critical care includes the following:

- Target PaO_2 60-105 mm Hg, PCO_2 35-45 mm Hg (unless severe acidemia); avoid hypoglycemia (glucose <70 mg/dL) and hyperglycemia (glucose >180 mg/dL); target MAP ≥ 65 mm Hg.
- Consider antibiotics.

Adult Cardiac Arrest Learning Station Checklist (VF/pVT/Asystole/PEA)

Adult Cardiac Arrest Algorithm (VF/pVT/Asystole/PEA)



High-Quality CPR

- Push hard (at least 5 cm).
- Push fast (100-120/min) and allow complete chest recoil.
- Minimize interruptions in compressions.
- Avoid excessive ventilation.
- Change compressor every 2 minutes, or sooner if fatigued.
- If no advanced airway, use 30:2 compression-ventilation ratio.
- If advanced airway in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions.
- Continuous waveform capnography
 - If ETCO₂ is low or decreasing, reassess CPR quality.

Shock Energy for Defibrillation

- 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
- Amiodarone IV/IO dose:** First dose: 300 mg bolus Second dose: 150 mg or **Lidocaine IV/IO dose:** First dose: 1-1.5 mg/kg Second dose: 0.5-0.75 mg/kg

Advanced Airway

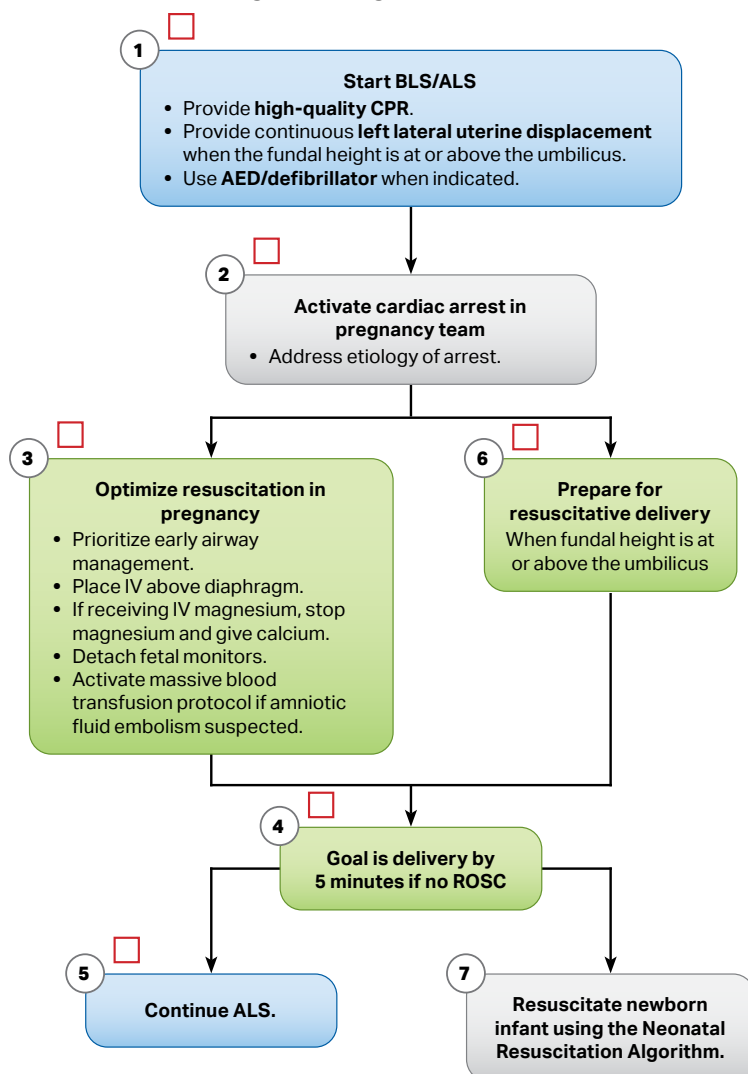
- ET intubation or supraglottic advanced airway
- Continuous waveform capnography or capnometry to confirm and monitor ET tube placement

Reversible Causes

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

Cardiac Arrest in Pregnancy Learning Station Checklist

Cardiac Arrest in Pregnancy Algorithm



Explanation of Cardiac Arrest Interventions

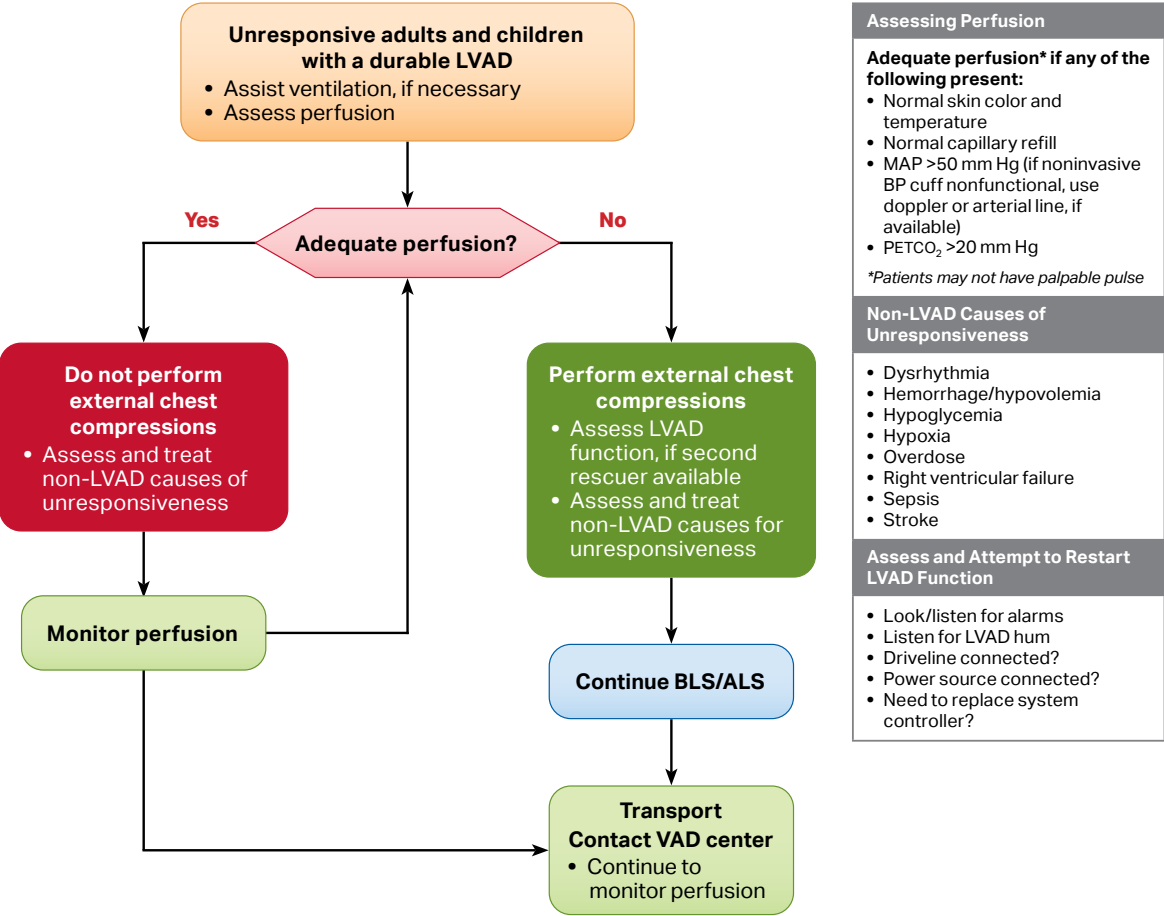
- Cardiac arrest in pregnancy team will vary according to local resources but may include:
 - Team Leader
 - Anesthesiologist
 - Obstetrician
 - Neonatologist
 - Nurses
 - Pharmacists
 - Other professionals
- The goal of left lateral uterine displacement is to relieve aortocaval compression and to facilitate effective chest compressions.
- The goal of resuscitative delivery is to improve the pregnant patient's outcome, and when feasible, the newborn infant's outcome.
- Ideally, perform resuscitative delivery by 5 minutes, depending on local resources.
- In pregnancy, difficult airway is common and is managed (eg, endotracheal intubation or supraglottic airway) by the most experienced professional.

Etiologies of Cardiac Arrest

- A** Anesthetic complications
- B** Bleeding
- C** Cardiovascular
- D** Drugs
- E** Embolic (amniotic fluid or pulmonary embolism)
- F** Fever
- G** General causes (H's and T's)
- H** Hypertension (eg, preeclampsia)

Adult Ventricular Assist Device Learning Station Checklist

Adult and Pediatric Durable Left Ventricular Assist Device Algorithm



Megacode Practice Learning Station Checklist: Case 67

Tachycardia → VF → Asystole → PCAC

Student Name _____ Date of Test _____

Critical Performance Steps						Check if done correctly
Team Leader/Team Members						
Team Leader assigns team member roles						
Ensures high-quality CPR at all times	Compression rate 100-120/min <input type="checkbox"/>	Compression depth of 5 cm <input type="checkbox"/>	Chest compression fraction >80% _____ %	Chest recoil <input type="checkbox"/>	Ventilation rate _____	
Team Leader ensures that team members communicate well						
Tachycardia Management						
Starts oxygen if needed, places monitor, starts IV						
Places monitor leads in proper position						
Recognizes unstable tachycardia						
Recognizes symptoms due to respiratory arrest (choking)						
VF Management						
Recognizes VF						
Clears before analyze and shock						
Immediately resumes CPR after shocks						
Appropriate airway management						
Appropriate cycles of drug-rhythm check/shock-CPR						
Administers appropriate drug(s) and doses						
Asystole Management						
Recognizes asystole						
Verbalizes potential reversible causes of asystole (H's and T's)						
Administers appropriate drug(s) and doses						
Immediately resumes CPR after rhythm and pulse checks						
Post-Cardiac Arrest Care						
Identifies ROSC						
Verbalizes need for endotracheal intubation and continuous waveform capnography, ensures BP and 12-lead ECG are performed and O ₂ saturation is monitored, and orders laboratory test						
Considers temperature control						

STOP TEST

Test Results	Circle PASS or NR to indicate pass or needs remediation:	PASS	NR
Instructor Initials _____ Instructor Number _____ Date _____			
Learning Station Competency			
<input type="checkbox"/> Bradycardia <input type="checkbox"/> Tachycardia <input type="checkbox"/> Cardiac Arrest/Post-Cardiac Arrest Care <input type="checkbox"/> Megacode Practice			

Megacode Practice Learning Station Checklist: Case 68/71/76/79/81

Tachycardia → VF → PEA → PCAC

Student Name _____ Date of Test _____

Critical Performance Steps						Check if done correctly
Team Leader/Team Members						
Team Leader assigns team member roles						
Ensures high-quality CPR at all times	Compression rate 100-120/min <input type="checkbox"/>	Compression depth of ≥5 cm <input type="checkbox"/>	Chest compression fraction >80% _____ %	Chest recoil <input type="checkbox"/>	Ventilation rate _____	
Team Leader ensures that team members communicate well						
Tachycardia Management						
Starts oxygen if needed, places monitor, starts IV						
Places monitor leads in proper position						
Recognizes unstable tachycardia						
Performs immediate synchronized cardioversion						
VF Management						
Recognizes VF						
Clears before analyze and shock						
Immediately resumes CPR after shocks						
Appropriate airway management						
Appropriate cycles of drug–rhythm check/shock–CPR						
Administers appropriate drug(s) and doses						
PEA Management						
Recognizes PEA						
Verbalizes potential reversible causes of PEA (H's and T's)						
Administers appropriate drug(s) and doses						
Immediately resumes CPR after rhythm and pulse checks						
Post-Cardiac Arrest Care						
Identifies ROSC						
Verbalizes need for endotracheal intubation and continuous waveform capnography, ensures BP and 12-lead ECG are performed and O ₂ saturation is monitored, and orders laboratory test						
Considers temperature control						

STOP TEST

Test Results	Circle PASS or NR to indicate pass or needs remediation:	PASS	NR
Instructor Initials _____ Instructor Number _____ Date _____			
Learning Station Competency			
<input type="checkbox"/> Bradycardia <input type="checkbox"/> Tachycardia <input type="checkbox"/> Cardiac Arrest/Post-Cardiac Arrest Care <input type="checkbox"/> Megacode Practice			

Megacode Practice Learning Station Checklist: Case 69

Bradycardia → Pulseless VT → Asystole → PCAC

Student Name _____ Date of Test _____

Critical Performance Steps						Check if done correctly
Team Leader/Team Members						
Team Leader assigns team member roles						
Ensures high-quality CPR at all times	Compression rate 100-120/min <input type="checkbox"/>	Compression depth of ≥5 cm <input type="checkbox"/>	Chest compression fraction >80% _____ %	Chest recoil <input type="checkbox"/>	Ventilation rate _____	
Team Leader ensures that team members communicate well						
Bradycardia Management						
Starts oxygen if needed, places monitor, starts IV						
Places monitor leads in proper position						
Recognizes symptomatic bradycardia						
Administers correct dose of atropine						
Prepares for second-line treatment						
Pulseless VT Management						
Recognizes pVT						
Clears before analyze and shock						
Immediately resumes CPR after shocks						
Appropriate airway management						
Appropriate cycles of drug-rhythm check/shock-CPR						
Administers appropriate drug(s) and doses						
Asystole Management						
Recognizes asystole						
Verbalizes potential reversible causes of asystole (H's and T's)						
Administers appropriate drug(s) and doses						
Immediately resumes CPR after rhythm and pulse checks						
Post-Cardiac Arrest Care						
Identifies ROSC						
Verbalizes need for endotracheal intubation and continuous waveform capnography, ensures BP and 12-lead ECG are performed and O ₂ saturation is monitored, and orders laboratory test						
Considers temperature control						

STOP TEST

Test Results	Circle PASS or NR to indicate pass or needs remediation:	PASS	NR
Instructor Initials _____ Instructor Number _____ Date _____			
Learning Station Competency			
<input type="checkbox"/> Bradycardia <input type="checkbox"/> Tachycardia <input type="checkbox"/> Cardiac Arrest/Post-Cardiac Arrest Care <input type="checkbox"/> Megacode Practice			

Megacode Practice Learning Station Checklist: Case 70/73

Bradycardia → Pulseless VT → PEA → PCAC

Student Name _____ Date of Test _____

Critical Performance Steps						Check if done correctly
Team Leader/Team Members						
Team Leader assigns team member roles						
Ensures high-quality CPR at all times	Compression rate 100-120/min <input type="checkbox"/>	Compression depth of ≥5 cm <input type="checkbox"/>	Chest compression fraction >80% _____ %	Chest recoil <input type="checkbox"/>	Ventilation rate _____	
Team Leader ensures that team members communicate well						
Bradycardia Management						
Starts oxygen if needed, places monitor, starts IV						
Places monitor leads in proper position						
Recognizes symptomatic bradycardia						
Administers correct dose of atropine						
Prepares for second-line treatment						
Pulseless VT Management						
Recognizes pVT						
Clears before analyze and shock						
Immediately resumes CPR after shocks						
Appropriate airway management						
Appropriate cycles of drug–rhythm check/shock–CPR						
Administers appropriate drug(s) and doses						
PEA Management						
Recognizes PEA						
Verbalizes potential reversible causes of PEA (H's and T's)						
Administers appropriate drug(s) and doses						
Immediately resumes CPR after rhythm and pulse checks						
Post-Cardiac Arrest Care						
Identifies ROSC						
Verbalizes need for endotracheal intubation and continuous waveform capnography, ensures BP and 12-lead ECG are performed and O ₂ saturation is monitored, and orders laboratory test						
Considers temperature control						

STOP TEST

Test Results	Circle PASS or NR to indicate pass or needs remediation:	PASS	NR
Instructor Initials _____ Instructor Number _____ Date _____			
Learning Station Competency			
<input type="checkbox"/> Bradycardia <input type="checkbox"/> Tachycardia <input type="checkbox"/> Cardiac Arrest/Post-Cardiac Arrest Care <input type="checkbox"/> Megacode Practice			

Megacode Practice Learning Station Checklist: Case 72

Tachycardia → VF → Asystole → PCAC

Student Name _____ Date of Test _____

Critical Performance Steps						Check if done correctly
Team Leader/Team Members						
Team Leader assigns team member roles						
Ensures high-quality CPR at all times	Compression rate 100-120/min <input type="checkbox"/>	Compression depth of ≥5 cm <input type="checkbox"/>	Chest compression fraction >80% _____ %	Chest recoil <input type="checkbox"/>	Ventilation rate _____	
Team Leader ensures that team members communicate well						
Tachycardia Management						
Starts oxygen if needed, places monitor, starts IV						
Places monitor leads in proper position						
Recognizes unstable tachycardia						
Recognizes symptoms due to tachycardia						
Performs immediate synchronized cardioversion						
VF Management						
Recognizes VF						
Clears before analyze and shock						
Immediately resumes CPR after shocks						
Appropriate airway management						
Appropriate cycles of drug-rhythm check/shock-CPR						
Administers appropriate drug(s) and doses						
Asystole Management						
Recognizes asystole						
Verbalizes potential reversible causes of asystole (H's and T's)						
Administers appropriate drug(s) and doses						
Immediately resumes CPR after rhythm and pulse checks						
Post-Cardiac Arrest Care						
Identifies ROSC						
Verbalizes need for endotracheal intubation and continuous waveform capnography, ensures BP and 12-lead ECG are performed and O ₂ saturation is monitored, and orders laboratory test						
Considers temperature control						

STOP TEST

Test Results	Circle PASS or NR to indicate pass or needs remediation:	PASS	NR
Instructor Initials _____ Instructor Number _____ Date _____			
Learning Station Competency			
<input type="checkbox"/> Bradycardia <input type="checkbox"/> Tachycardia <input type="checkbox"/> Cardiac Arrest/Post-Cardiac Arrest Care <input type="checkbox"/> Megacode Practice			

Megacode Practice Learning Station Checklist: Case 74/77

Tachycardia → Pulseless VT → PEA → PCAC

Student Name _____ Date of Test _____

Critical Performance Steps						Check if done correctly
Team Leader/Team Members						
Team Leader assigns team member roles						
Ensures high-quality CPR at all times	Compression rate 100-120/min <input type="checkbox"/>	Compression depth of ≥5 cm <input type="checkbox"/>	Chest compression fraction >80% _____ %	Chest recoil <input type="checkbox"/>	Ventilation rate _____	
Team Leader ensures that team members communicate well						
Tachycardia Management						
Starts oxygen if needed, places monitor, starts IV						
Places monitor leads in proper position						
Recognizes unstable tachycardia						
Recognizes symptoms due to tachycardia						
Performs immediate synchronized cardioversion						
Pulseless VT Management						
Recognizes pulseless VT						
Clears before analyze and shock						
Immediately resumes CPR after shocks						
Appropriate airway management						
Appropriate cycles of drug-rhythm check/shock-CPR						
Administers appropriate drug(s) and doses						
PEA Management						
Recognizes PEA						
Verbalizes potential reversible causes of PEA (H's and T's)						
Administers appropriate drug(s) and doses						
Immediately resumes CPR after rhythm and pulse checks						
Post-Cardiac Arrest Care						
Identifies ROSC						
Verbalizes need for endotracheal intubation and continuous waveform capnography, ensures BP and 12-lead ECG are performed and O ₂ saturation is monitored, and orders laboratory test						
Considers temperature control						

STOP TEST

Test Results	Circle PASS or NR to indicate pass or needs remediation:	PASS	NR
Instructor Initials _____ Instructor Number _____ Date _____			
Learning Station Competency			
<input type="checkbox"/> Bradycardia <input type="checkbox"/> Tachycardia <input type="checkbox"/> Cardiac Arrest/Post-Cardiac Arrest Care <input type="checkbox"/> Megacode Practice			

Megacode Practice Learning Station Checklist: Case 75/78

Bradycardia → VF → Asystole → PCAC

Student Name _____ Date of Test _____

Critical Performance Steps						Check if done correctly
Team Leader/Team Members						
Team Leader assigns team member roles						
Ensures high-quality CPR at all times	Compression rate 100-120/min <input type="checkbox"/>	Compression depth of ≥5 cm <input type="checkbox"/>	Chest compression fraction >80% _____ %	Chest recoil <input type="checkbox"/>	Ventilation rate _____	
Team Leader ensures that team members communicate well						
Bradycardia Management						
Starts oxygen if needed, places monitor, starts IV						
Places monitor leads in proper position						
Recognizes symptomatic bradycardia						
Administers correct dose of atropine						
Prepares for second-line treatment						
VF Management						
Recognizes VF						
Clears before analyze and shock						
Immediately resumes CPR after shocks						
Appropriate airway management						
Appropriate cycles of drug-rhythm check/shock-CPR						
Administers appropriate drug(s) and doses						
Asystole Management						
Recognizes asystole						
Verbalizes potential reversible causes of asystole (H's and T's)						
Administers appropriate drug(s) and doses						
Immediately resumes CPR after rhythm and pulse checks						
Post-Cardiac Arrest Care						
Identifies ROSC						
Verbalizes need for endotracheal intubation and continuous waveform capnography, ensures BP and 12-lead ECG are performed and O ₂ saturation is monitored, and orders laboratory test						
Considers temperature control						

STOP TEST

Test Results	Circle PASS or NR to indicate pass or needs remediation:	PASS	NR
Instructor Initials _____ Instructor Number _____ Date _____			
Learning Station Competency			
<input type="checkbox"/> Bradycardia <input type="checkbox"/> Tachycardia <input type="checkbox"/> Cardiac Arrest/Post-Cardiac Arrest Care <input type="checkbox"/> Megacode Practice			

Megacode Practice Learning Station Checklist: Case 80

Tachycardia → VF → PEA → PCAC

Student Name _____ Date of Test _____

Critical Performance Steps						Check if done correctly
Team Leader/Team Members						
Team Leader assigns team member roles						
Ensures high-quality CPR at all times	Compression rate 100-120/min <input type="checkbox"/>	Compression depth of ≥5 cm <input type="checkbox"/>	Chest compression fraction >80% _____ %	Chest recoil <input type="checkbox"/>	Ventilation rate _____	
Team Leader ensures that team members communicate well						
Tachycardia Management						
Starts oxygen if needed, places monitor, starts IV						
Places monitor leads in proper position						
Recognizes unstable tachycardia						
Recognizes symptoms due to gunshot wound						
VF Management						
Recognizes VF						
Clears before analyze and shock						
Immediately resumes CPR after shocks						
Appropriate airway management						
Appropriate cycles of drug–rhythm check/shock–CPR						
Administers appropriate drug(s) and doses						
PEA Management						
Recognizes PEA						
Verbalizes potential reversible causes of PEA (H's and T's)						
Administers appropriate drug(s) and doses						
Immediately resumes CPR after rhythm and pulse checks						
Post-Cardiac Arrest Care						
Identifies ROSC						
Verbalizes need for endotracheal intubation and continuous waveform capnography, ensures BP and 12-lead ECG are performed and O ₂ saturation is monitored, and orders laboratory test						
Considers temperature control						

STOP TEST

Test Results	Circle PASS or NR to indicate pass or needs remediation:	PASS	NR
Instructor Initials _____ Instructor Number _____ Date _____			
Learning Station Competency			
<input type="checkbox"/> Bradycardia <input type="checkbox"/> Tachycardia <input type="checkbox"/> Cardiac Arrest/Post-Cardiac Arrest Care <input type="checkbox"/> Megacode Practice			