Start CPR
• Give oxygen
• Attach monitor/defibrillator

Rhythm shockable?
Yes

VF/pVT

Shock

No

CPR 2 min
• IV/IO access

Rhythm shockable?
Yes

CPR 2 min
• Epinephrine every 3-5 min
• Consider advanced airway, capnography

Shock

No

CPR 2 min
• Epinephrine every 3-5 min
• Consider advanced airway, capnography

Epinephrine ASAP

Asystole/PEA

Rhythm shockable?
Yes

CPR 2 min
• IV/IO access
• Epinephrine every 3-5 min
• Consider advanced airway, capnography

No

CPR 2 min
• Epinephrine every 3-5 min
• Consider advanced airway, capnography

Yes

CPR 2 min
• Amiodarone or lidocaine
• Treat reversible causes

No

Rhythm shockable?
Yes

CPR 2 min
• Treat reversible causes

No

Rhythm shockable?
Yes

Go to 5 or 7

• If no signs of return of spontaneous circulation (ROSC), go to 10 or 11
• If ROSC, go to Post–Cardiac Arrest Care • Consider appropriateness of continued resuscitation

CPR Quality
• Push hard (at least 2 inches [5 cm]) and 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, 30:2 compression-ventilation ratio, or 1 breath every 6 seconds.
• Quantitative waveform capnography
  – if PETCO₂ 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
• Endotracheal intubation or supraglottic advanced airway
• Waveform capnography or capnometry to confirm and monitor ET tube placement
• Once advanced airway in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions

Return of Spontaneous Circulation (ROSC)
• Pulse and blood pressure
• Abrupt sustained increase in PETCO₂ (typically ≥40 mm Hg)
• Spontaneous arterial pressure waves with intra-arterial monitoring

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

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