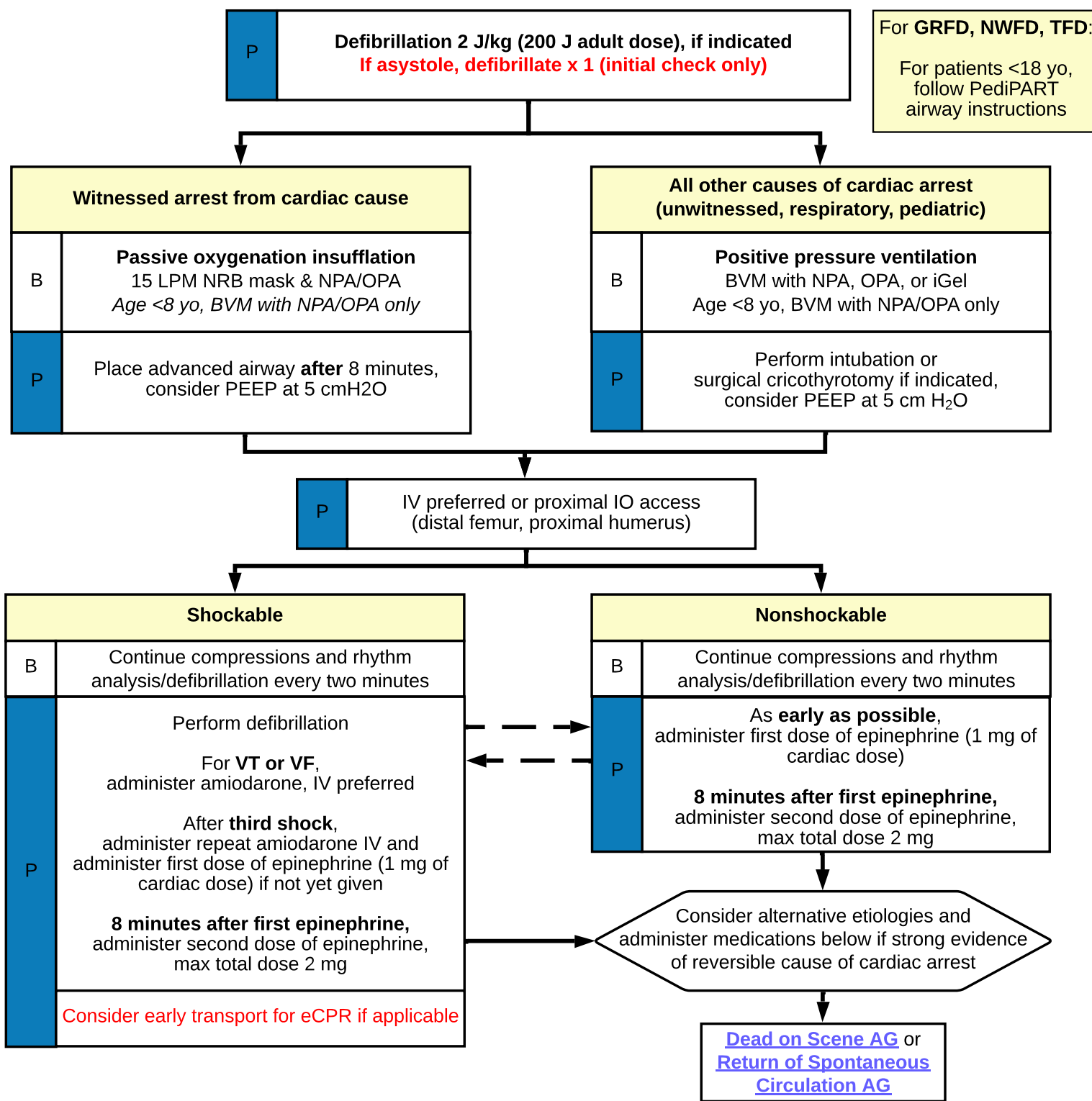


Adult and Pediatric Medical Cardiac Arrest Administrative Guideline



DRUG DOSAGES:

Neonate <10 days old

Perform heel stick glucose

Administer **Dextrose 10% (D10) 1 mL/kg IV/IO**, max dose 250 mL

Ventricular tachycardia or ventricular fibrillation

Administer **amiodarone 5 mg/kg IV/IO**, max initial 300 mg, IV preferred.

May repeat once 6-8 min later at 2.5 mg/kg IV, max repeat dose 150 mg. Follow amiodarone doses with 20 mL flush.

Defibrillation: 2 J/kg → 4 J/kg → 6 J/kg → 10 J/kg (Max 200J)

Opioid overdose

Administer **naloxone 2 mg IV/IO or 4 mg IN**

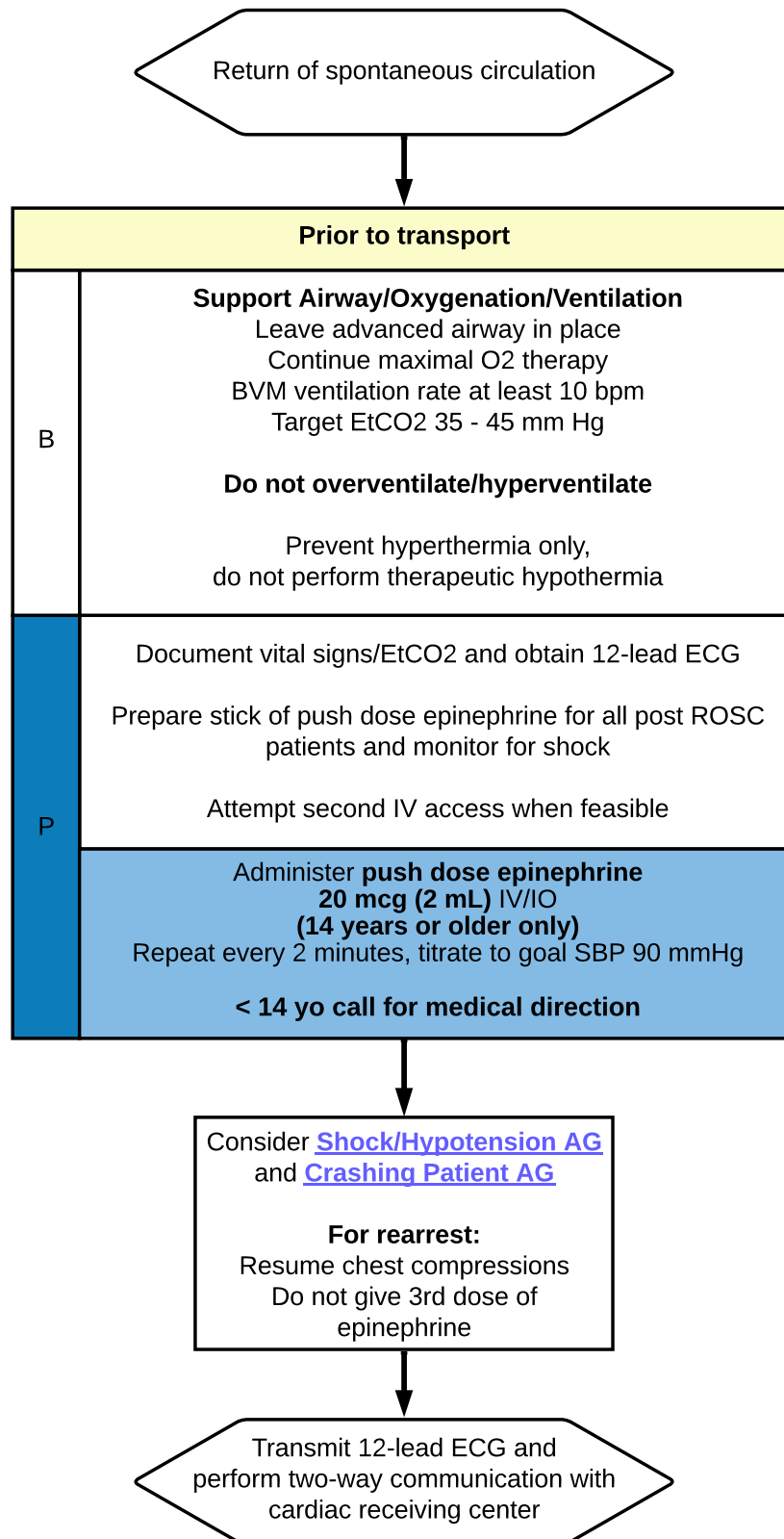
May repeat x 1 **naloxone 2 mg IV/IO**, max total 6 mg

Hyperkalemia

Administer **calcium chloride 20 mg/kg IV/IO**, max dose 1 g

Polymorphic ventricular tachycardia (Torsades)

Administer **magnesium 25 mg/kg IV/IO** over 2 min, max 2g



DRUG PREPARATION:

Preparation of push dose epinephrine (14 years or older only):
 Mix 1 mL of 1 mg/10 mL (CARDIAC) epinephrine with 9 mL NS. This results in a 10 mcg/mL concentration



Prehospital CPR Timeline

Minutes

0

2

4

6

8

10

12

14

16

18

20

EMT

Begin chest compressions
Perform initial rhythm check

Asystole initial rhythm
VT / VF

200 chest compressions

VT / VF only

200 chest compressions

VT / VF only

200 chest compressions

VT / VF only

200 chest compressions

VT / VF only

200 chest compressions

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200 chest compressions

VT / VF only

200 chest compressions

VT / VF only

200 chest compressions

VT / VF only

200 chest compressions

Passive Oxygen for witnessed cardiac/shockable rhythms
Positive pressure for hypoxia related (peds, drowning, OD) and unwitnessed arrests with unknown downtime

Place advanced airway (SGA or ETI) if not already performed
Begin positive pressure ventilation if not already.
Consider change in airway strategy when EtCO₂ less than 10

Place IO /IV (femoral and humeral preferred)

Administer Epi as soon as possible for shockable.

Administer Amiodarone early if VT/VF

Defib once if initial rhythm is asystole

Consider if indicated:
Naloxone
Calcium chloride
Magnesium

Administer initial dose of Epinephrine if shockable rhythm or additional dose of Epinephrine for nonshockable rhythms

Monitor EtCO₂

Consider if indicated:
Repeat Amiodarone
Consider transport decision

MEDIC



Return of Spontaneous Circulation (ROSC): The post-arrest period is dynamic, and re-arrest and dysrhythmias frequently occur. Prioritize vasopressor administration and target oxygen to optimize vital sign parameters. Dysrhythmias in this period are common and usually self-limiting; some warrant no further treatment, especially atrial dysrhythmias. Others, such as worsening bradycardia and wide-complex tachycardia, should be managed emergently. Due to the complex nature of post-arrest care, it is highly recommended to stay on scene to administer the interventions described in the AG.

After arrest,

- Monitor EtCO₂; EtCO₂ should remain above 20. Lower readings may indicate re-arrest or airway displacement.
- Monitor SpO₂ to maintain saturation between 94-99%
- Obtain a 12-lead; if STEMI, transmit ECG and expedite preparation for transport
- Prepare for transport and assure adequate personnel; once loaded, reassess airway and pulse
- Prepare your pressor; titrate fluid resuscitation and vasopressor administration to maintain SBP of 90-100 mmHg or Mean Arterial Pressure (MAP) of 65-80 mmHg.

Post-arrest Bradycardia: A common post-ROSC rhythm, the first-line treatment is push-dose epinephrine. Titrate the pressor as needed to target a perfusing heart rate (i.e. a SBP >90).

- **Pacing:** only attempt in severe bradycardia when mechanical capture can absolutely be verified (i.e. finger on the pulse with good blood pressure) and the patient is under constant monitoring. After ROSC, heart muscle is often stunned and pacing will be ineffective. **You must have a patient with a pulse for pacing to be an option.** If a patient is pulseless or you cannot verify a pulse with bradycardia, administer CPR.

Wide-complex tachycardia: See [Wide Complex Tachycardia AG](#)