SYMPTOMATIC BRADYCARDIA

ADULT	PEDIATRIC (≤34KG)
BLS	

• Universal Protocol #601
• Pulse Oximetry
  ○ O_2 administration per Airway Management Protocol #602
	• Same as Adult
	Unstable
	HR <60 bpm and decreased level of consciousness
	• Ventilate with BVM and O2
	• If HR<60 persists despite ventilations
	  ○ **HPCPR** – High Performance CPR Procedure #712

ALS Standing Orders	

• Obtain 12-lead ECG
• With STEMI contact STEMI base prior to administration of Atropine unless in extremis
Unstable
• **Normal Saline** fluid bolus 500 mL
  ○ Start concurrently with Atropine administration
• **Atropine** 0.5 mg IV
  ○ May repeat every 3-5 min (not to exceed 3 mg total)
• **TCP** – TCP Procedure #716
  ○ **I**nitiate TCP for any of the following:
  ▪ Patient in extremis
  ▪ Refractory to other treatments
  ▪ High-degree AVB with wide QRS complex
  ▪ Inability to rapidly establish vascular access for other treatments
• **Pain Management**
  ○ If pain is persistent with TCP refer to Pain Management Protocol # 603
	• Obtain 12-lead ECG
	Unstable
	• **Epinephrine 1:10,000** 0.01 mg/kg (0.1 ml/kg) slow IV not to exceed 0.3 mg per dose
	  ○ May repeat every 3-5 min

Base Hospital Orders Only	

• **Calcium Chloride** 1 Gm slow (over 5 min) IV/IO
  ○ Suspected Hyperkalemia with wide complex bradycardia
• **Atropine** 0.5 mg IV for stable patient or STEMI patient not in extremis
	• **Atropine** 0.02 mg/kg IV (minimum dose of 0.1 mg and maximum dose of 0.5 mg)
	  ○ May repeat every 3-5 min (not to exceed 1 mg total)
	• **Normal Saline** fluid bolus 20 mL/kg

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- **Push-Dose Epinephrine 10 mcg/mL**
  1 mL IV/IO every 1-3 min
  - repeat as needed titrated to SBP >90mmHg
  - See notes for mixing instructions

OR

- **Epinephrine Drip** 10 mcg/min IV/IO infusion
  - Consider for extended transport
  - See formulary for mixing instructions

Suspected Overdose
(Beta-Blocker, Calcium Channel Blocker, Tricyclic, Organophosphate)

- Ingestion/Poisoning/OD Protocol #614

- As needed

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Notes

- **Mixing Push-Dose Epinephrine 10 mcg/mL (1:100,000)**: Mix 9 mL of **Normal Saline** with 1 mL of **Epinephrine 1:10,000**, mix well
- Pediatric bradycardia is most commonly due to hypoxia. Treatment should focus on ventilation and oxygenation
- Atropine in pediatric patients may cause paradoxical bradycardia
- High degree heart blocks (Second degree type II, and Third degree) may respond poorly to Atropine
  - Consider obtaining Base Hospital Orders for pressor doses of **Epinephrine**
  - If unstable proceed directly to **TCP** consider early base notification to STEMI Receiving Center (French Hospital
- Ensure all **Calcium Chloride** is thoroughly flushed from IV tubing prior to administration of **Sodium Bicarbonate**
- Higher doses of **Atropine** may be needed for organophosphate OD

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