Pediatric BLS Standing Orders

- **Universal Patient Protocol**
- Apply continuous monitoring including, pulse oximetry, and blood pressure cycling
- Assess peripheral pulses
- Ensure patent airway, O_2 and/or ventilate PRN per **Airway Policy**
- Measure glucose PRN, treat hypoglycemia per **Altered Mental Status Protocol**
- Consider **Chest Pain Protocol** PRN
- Consider early **Base Hospital Contact**
- Capnography
- For the purposes of PALS (Pediatric ALS):
- "Child" guidelines apply to children approximately 1 year of age until puberty. Puberty is defined as breast development in females and the presence of axillary hair in males.
- For those with signs of puberty and beyond, adult basic life support guidelines should be followed referred to in this policy as "adolescents."

Stable Brady and Tachydysrhythmias:

- Supportive care until hospital arrival
- Consider that dehydration, high blood sugar and/or fever may cause tachycardias >200 bpm
- Intervene as able on reversible causes

Unstable Dysrhythmias:

Includes abnormal heart rate and any of the following:

- Poor perfusion (cyanosis, delayed capillary refill, mottling)
- Altered LOC (level of consciousness)
- Dyspnea or shortness of breath
- Chest pain
- SBP < [70+ (2 x age)] mmHg
- Diminished or absent peripheral pulses

Follow **Shock Protocol** and the specific dysrhythmia algorithm, if known, as below.

Bradycardic and Unstable

- When heart rate indicates and patient is unstable, ventilate per age-appropriate rate per BVM for 30 seconds, reassess HR and begin compressions if no improvement, and pediatric patient's heartrate is < 60 bpm
- If pediatric pads not available, may use adult pads but ensure they do not touch each other when applied, generally anterior-posterior placement (or per manufacturer's instructions)
- If performing CPR, go to **Cardiac Arrest and Airway Protocols**

Tachycardic and Unstable

- Typically, <4 yrs > 220 bpm, ≥4 yrs > 180 bpm
- Treat reversible causes

- Apply AED pads. Use pediatric pads if patient < 15 kg. If pediatric pads not available, may use adult pads but ensure they do not touch each other when applied, generally anterior-posterior placement (or per manufacturer's instructions)
- If performing CPR, go to **Cardiac Arrest and Airway Protocols**

Pediatric LALS Standing Order Protocol

- Establish IV PRN
- Capnography
- Intervene as able on reversible causes

If hypotensive, suspected dehydration, or high glucose (> 200 mmol/L)

- 10-20 mL/kg NS IV bolus; titrated to age-appropriate systolic BP MR x1, hold if overt signs of heart failure
- Refer to **Shock Protocol** for further management

Bradycardia

Stable

- Apply AED pads, anterior and posterior placement (or per manufacturer's instructions), sized to patient
- Consider early invasive oxygen and ventilation supplementation

Unstable

- When heart rate indicates and patient is unstable, place on high flow oxygen and ventilate per BVM for 30 seconds, reassess HR and perfusion
  - HR < 60 bpm in pediatric patients per the American Heart Association guidelines.
- Use AED if available. If pediatric pads not available, may use adult pads but ensure they do not touch each other when applied
- If performing CPR, go to **Cardiac Arrest and Airway Protocols**

Tachycardia

- Apply AED pads, anterior and posterior placement PRN, (or per manufacturer's instructions) sized to patient
- Frequent reassessments
- 10-20 mL/kg NS IV bolus; titrated to age-appropriate systolic BP MR x1, hold if overt signs of heart failure
- Refer to **Shock Protocol** for further management

Unstable:

- Use AED if available. Use pediatric pads if patient < 15 kg. If pediatric pads not available, may use adult pads but ensure they do not touch each other when applied, generally anterior-posterior placement (or per manufacturer's instructions)
- If performing CPR, go to **Cardiac Arrest and Airway Protocols**

Pediatric ALS Standing Order Protocol

- Monitor EKG
- Establish IV/IO
- Capnography
- Obtain 12 Lead ECG

If hypotensive, suspected dehydration, or high glucose (> 200 mmol/L)

- 10-20 mL/kg NS IV bolus; titrated to age-appropriate systolic BP MR x1, hold if overt signs of heart failure
- Refer to **Shock Protocol** for further management

Bradycardia:

Stable

- Apply monitor pads, anterior and posterior placement, PRN (or per manufacturer's instructions) sized to patient
- Consider early invasive oxygen and ventilation supplementation

Unstable

- When heart rate indicates and patient is unstable, ventilate BVM for 30 seconds, reassess HR and perfusion
- If persistently low, begin compressions and administer medications
  - HR < 60 bpm in pediatric patients per the American Heart Association guidelines
- Epinephrine (1:10,000) 0.01 mg/kg IV/IO (max 1 mg, see dosing chart), may repeat every 3-5 min x3

After Epinephrine x3, or with concern for primary AV block

- Atropine sulfate 0.02 mg/kg, max 0.5 mg IV, for children 1.0 mg for adolescents, MR at 0.04 mg/kg x2
- Transcutaneous pacing **BHP**
- Begin with lowest joules, and titrate up until consistent beat capture to maintain HR of 60 bpm
- If performing CPR, go to **Cardiac Arrest and Airway Protocols**

Tachycardia

Narrow Complex Tachycardia/SVT:

Stable

- Modified Valsalva Maneuver (MSM)
- **If MSM unsuccessful**
- Adenosine 0.1 mg/kg rapid IV rapid push immediately followed by 20 ml NS rapid push. Maximum initial dose 6 mg.
- **Do not use adenosine with an irregular rhythm, or known WPW. BHO if patient has known asthma or COPD.**
- Verify rhythm between doses
- **If no response or refractory to first dose after 3 min**
- Adenosine 0.2 mg/kg IV rapid push immediately followed by 20 ml NS rapid push. Maximum dose 12 mg.

Atrial Flutter/Atrial Fibrillation:

Unstable Narrow Complex Tachycardias

- Synchronized cardioversion per manufacturer's recommended dose
- Consider **Pain Medication Protocol** prior to cardioversion
- Adenosine for regular rhythm **BHP Do not use adenosine with an irregular rhythm, known WPW. BHO if patient has known asthma or COPD.**

Ventricular Tachycardia/Wide Complex Tachycardia:

Stable

- Apply defibrillation pads, anterior and posterior placement, (or per manufacturer's instructions)
- Consider **BHP** contact for amiodarone or lidocaine administration

Unstable VT or VF

- Oxygenate and/or ventilate per **Airway Policy**
- Begin CPR if the patient goes unconscious. After first 30 compressions, give first ventilations
- Unstable VT – Perform synchronized cardioversion per dosing chart. MR. Increase second cardioversion energy per dosing chart.
- VF - Defibrillate per dosing chart. MR. Increase second defibrillation energy per dosing chart
- Unstable VT/VF - Amiodarone or lidocaine **BHP**
  - Amiodarone per 5 mg/kg over 20-60 minutes, max dose 150 mg for conscious ventricular tachycardia or unstable VT/VF, MR x 2, max total doses 450 mg OR
  - Lidocaine 1 mg/kg over 5 minutes, MR x2 (max dose 3 mg/kg) for conscious ventricular tachycardia or unstable VT/VF
- CPR should be performed during charging of defibrillator. Metronome is to be used, and perishock pauses should last less than10 seconds
- Go to **Cardiac Arrest Protocol,** provide medications per protocol

Pediatric Base Hospital Orders

Unstable Bradycardia:

- **BHP –** Transcutaneous pacing (TCP)
  - Apply pacer pads, anterior and posterior. If pediatric pads not available, may use adult pads but ensure they do not touch each other when applied
    - Transcutaneous Pace (TCP) to maintain HR of 60 bpm
    - Begin with lowest joules, and titrate up until consistent beat capture
    - Consider **Pain Medication Protocol** while pacing if conscious

Unstable Regular Rate, Narrow Complex Tachycardia SVT:

- **BHP –** Adenosine
  - Administer adenosine per dosing chart via rapid IV push, followed by 20 ml of NS
  - Increase dose per dosing chart
  - May repeat second dose (totally three doses of adenosine)

Stable and Unstable Wide Complex Tachycardias:

- **BHP –** Amiodarone or Lidocaine
  - Administer amiodarone per 5 mg/kg over 20-60 minutes, max dose 150 mg for conscious ventricular tachycardia or unstable VT/VF, MR x 2, max total doses 450 mg OR

  - Administer lidocaine per pediatric dosing chart, 1 mg/kg over 5 minutes, may repeat twice (2) (max dose 3 mg/kg) for conscious ventricular tachycardia or unstable VT/VF

All Unstable Dysrhythmias:

- Dopamine for persistent hypotension, in patients with pulses per **Shock Protocol**

APPROVED:
SIGNATURE ON FILE – 07/01/25
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