Pediatric BLS Standing Orders

- **Universal Patient Protocol**
- Vitals
- Apply continuous monitoring including ECG, pulse oximetry, capnography (if ALS available), and blood pressure cycling
- Determine 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

Stable Brady and Tachydysrhythmias:

- Supportive care until hospital arrival
- Frequent reassessments
- 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 if 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)]
- 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 compression if indicated
- Abnormally low heart rates:
  - <9 yrs HR <60 bpm
  - 9-14 yrs HR <40 bpm
- 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
- If performing CPR, go to **Cardiac Arrest and Airway Protocols**

Tachycardic and Unstable:

- Typically <4 yrs >220bpm, ≥4 yrs > 180 bpm
- Treat reversible causes
- 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
- If performing CPR, go to **Cardiac Arrest and Airway Protocols**

Pediatric LALS Standing Order Protocol

Brady and Tachydysrhythmias:

- Establish IV PRN
- Frequent reassessments
- Intervene as able on reversible causes
- If hypotensive, suspected dehydration, or high glucose (> 200 mmol/L), administer 20 ml/kg IVF bolus (Avoid if evidence of, or known heart failure, pediatrics included)
- Refer to **Shock Protocol** for further management

Bradycardia:

Stable:

- Apply AED pads, anterior and posterior placement PRN, sized to patient
- Frequent reassessments
- Consider 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
- If persistently low, begin CPR and administer medications
- Abnormally low heart rates:
  - <9 yrs HR <60 bpm
  - 9-14 yrs HR <40 bpm
- 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:

Narrow Complex Tachycardia:

Stable SVT/Atrial Fibrillation/Atrial Flutter:

- Apply AED pads, anterior and posterior placement PRN, sized to patient
- Frequent reassessments
- Consider Modified Valsalva Maneuver (MSM)

Unstable SVT (Regular, Narrow Complex Tachycardia):

- Typically <4 yrs >220bpm, ≥4 yrs > 180 bpm
- Apply AED pads, anterior and posterior placement, sized to patient
- Frequent reassessments
- Administer 0.9% NS 20 mL/kg IV
- Modified Valsalva Maneuver (MSM)

Unstable Atrial Fibrillation (Irregular Narrow Complex Tachycardia):

- Typically <4 yrs >220bpm, ≥4 yrs > 180 bpm
- Apply AED pads, anterior and posterior placement, sized to patient
- Frequent reassessments

- Administer 0.9% NS 20 mL/kg IV
- Modified Valsalva Maneuver (MSM)

Ventricular Tachycardia/Wide Complex Tachycardia:

Stable:

- Apply AED pads, anterior and posterior placement, sized to patient
- Frequent reassessments

Unstable VF:

- Typically <4 yrs >220bpm, ≥4 yrs > 180 bpm
- Treat reversible causes
- 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
- If performing CPR, go to **Cardiac Arrest and Airway Protocols**

Pediatric ALS Standing Order Protocol

Brady and Tachydysrhythmias:

- Maintain constant blood pressure, pulse oximetry, and continuous capnography monitoring
- Obtain 12 Lead ECG
- Establish IO PRN
- If hypotensive, suspected dehydration, or high glucose (> 200 mmol/L), administer 20 ml/kg IV/IO bolus (Avoid if evidence of, or known heart failure, pediatrics included)
- Refer to **Shock Protocol** for further management

Bradycardia:

Stable:

- Apply monitor pads, anterior and posterior placement PRN, sized to patient
- Frequent reassessments
- Consider oxygen and ventilation supplementation

Unstable:

- When heart rate indicates and patient is unstable, ventilate per BVM for 30 seconds, reassess HR and perfusion
- If persistently low, begin compressions and administer medications
- Abnormally low heart rates:
  - <9 yrs HR <60 bpm
  - 9-14 yrs HR <40 bpm
- Administer epinephrine (1:10,000) 0.01 mg/kg IV / IO (max 1 mg, see dosing chart), may repeat every 3-5 minutes x three (3)
- Following third epinephrine, or primary AV block, administer atropine sulfate 0.02 mg/kg, max 0.5 mg IV. May repeat 0.04 mg/kg with second dose. See dosing chart
- Use monitor if available. If pediatric pads not available, may use adult pads but ensure they do not touch each other when applied. Consider **BHP** for transcutaneous pacing

- If performing CPR, go to **Cardiac Arrest and Airway Protocols**

Tachycardia:

Narrow Complex Tachycardia/SVT/Atrial Flutter/Atrial Fibrillation:

Stable:

- Apply AED pads, anterior and posterior placement PRN, sized to patient
- Frequent reassessments
- Consider Modified Valsalva Maneuver (MSM)
- If MSM unsuccessful, administer Adenosine 0.1 mg/kg rapid IV or humeral IO push immediately followed by NS 0.9% 20 ml rapid IV or humeral IO push. **Do not use adenosine with an irregular rhythm. BHO if patient has known asthma or COPD.**
- Verify rhythm between doses
- If no response after 5 minutes, administer adenosine 0.2 mg/kg rapid IV or humeral IO push immediately followed by NS 0.9% 20 ml rapid IV or humeral IO push

Unstable:

- Apply defibrillation pads, anterior and posterior placement, sized to patient
- Modified Valsalva Maneuver
- Administer synchronized cardioversion per manufacturer's instructions
- Consider **Pain Medication Protocol** prior to cardioversion
- Consider **BHP** for adenosine

Ventricular Tachycardia/Wide Complex Tachycardia:

Stable:

- Apply defibrillation pads, anterior and posterior placement
- Frequent reassessments
- Consider **BHP** contact for Amiodarone administration

Unstable VT or VF:

- O_2 and/or ventilate per **Airway Policy**
- Use defibrillator if available. If pediatric pads not available, may use adult pads but ensure they do not touch each other when applied
- Begin CPR if unconscious. After first 30 compressions, give first ventilations
- Defibrillate per dosing chart. May repeat. Increase second defibrillation per dosing chart
- Contact **BHP** contact for Amiodarone administration
- CPR should be performed during charging of defibrillator
- 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
    - Begin with lowest joules, and titrate up until consistent beat capture
    - Consider **Pain Medication Protocol** while pacing if conscious

Unstable Narrow Complex Tachycardia/SVT/Atrial Flutter/Atrial Fibrillation:

- **BHP –** Adenosine
  - Administer adenosine per dosing chart via rapid IV/IO push, followed by 20 ml of NS
  - Increase dose per dosing chart
  - May repeat second dose (totally three doses of adenosine) x one (1)

Stable and Unstable Wide Complex Tachycardias:

- **BHP –** Amiodarone
  - Administer amiodarone per pediatric dosing chart, 5 mg/kg over 20-60 minutes, max dose 150 mg for conscious ventricular tachycardia

All Unstable Dysrhythmias:

- Dopamine for persistent hypotension, in patients with pulses, dosing per chart

APPROVED:

Signature on File
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