PEDiatric DEFINITION AND DISCUSSION

(2017) Age definition for pediatrics “children without secondary signs of puberty” with emphasis on length-based dosing device and ideal body weight for dose calculations.

(2019) Age definition for pediatrics protocol consideration as “not having reached 15th birthday” with weight based calculation and emphasis on length-based dosing device use.

(1.0) GENERAL APPROACH TO PREHOSPITAL CARE

New addition to NYS Collaborative Protocol

(1.1) GENERAL APPROACH TO THE EMS CALL

New addition to NYS Collaborative Protocol

(1.2) GENERAL APPROACH TO THE PATIENT

New addition to NYS Collaborative Protocol

(1.3) GENERAL APPROACH TO SAFETY RESTRAINING DEVICES

New addition to NYS Collaborative Protocol

(1.4) GENERAL APPROACH TO TRANSPORTATION

New addition to NYS Collaborative Protocol

(2.0) EXTREMIS / CARDIAC ARREST PROTOCOLS

(2019) EMT: After 20 minutes consider calling medical control for: termination of resuscitation, continuing efforts, or transportation in extenuating circumstances

MC Option: Termination of resuscitation in instances that are not covered by standing order criteria may be authorized by medical control

Considerations updated to include emphasis on limiting delays of treatment, minimizing chest compression interruptions, AED & CPR related complications during transport and potentially needing to disable pop-off valves for adequate ventilation of patients in cardiac arrest.

(2.1.0) CARDIAC ARREST: GENERAL APPROACH — PEDIATRIC

New addition to NYS Collaborative Protocol
(A2.1.1) CARDIAC ARREST: ASYSTOLE OR PULSELESS ELECTRICAL ACTIVITY (PEA) - ADULT ...........................................24

No change

(P2.1.1) CARDIAC ARREST: ASYSTOLE / PULSELESS ELECTRICAL ACTIVITY (PEA) - PEDIATRIC .................................26

No change

(A2.1.2) CARDIAC ARREST: VENTRICULAR FIBRILLATION OR PULSELESS V TACHYCARDIA – ADULT .......................28

(2019) CC: Absent amiodarone bolus dilution

(2019) Removal of double sequential defibrillation consideration for persistent ventricular fibrillation

(P2.1.2) CARDIAC ARREST: VENTRICULAR FIBRILLATION OR PULSELESS V TACHYCARDIA – PEDIATRIC ..................30

(2019) Paramedic: Absent amiodarone bolus dilution

(A2.2) FOREIGN BODY OBSTRUCTED AIRWAY .........................................................................................................32

New addition to NYS Collaborative Protocol

(P2.2) FOREIGN BODY OBSTRUCTED AIRWAY - PEDIATRIC ......................................................................................33

New addition to NYS Collaborative Protocol

(2.3) OBVIOUS DEATH .........................................................................................................................................................34

No change

(A2.4) RESPIRATORY ARREST / FAILURE – ADULT .......................................................................................................36

New addition to NYS Collaborative Protocol

(P2.4) RESPIRATORY ARREST / FAILURE – PEDIATRIC .................................................................................................37

New addition to NYS Collaborative Protocol

(A2.5) RETURN OF SPONTANEOUS CIRCULATION – ADULT .........................................................................................38

(2019) Advanced: If needed, administer normal saline to a total of 2 L to maintain MAP > 65 mmHg or SBP > 100 mmHg, provided there is no concern of pulmonary edema
(2.6) TERMINATION OF RESUSCITATION ........................................................................................................40

Considerations updated to include EtCO2 when discussing termination with medical control

(3.0) GENERAL ADULT AND PEDIATRIC MEDICAL PROTOCOLS ..........................................................................................42

(P3.1) ALTE/BRUE – PEDIATRIC .................................................................................................................................43

New addition to NYS Collaborative Protocol

(3.2) ALTERED MENTAL STATUS .................................................................................................................................44

New addition to NYS Collaborative Protocol

(A3.3) ANAPHYLAXIS – ADULT ...........................................................................................................................................46

(2019) CFR/ALL LEVELS: If the patient does not improve within 5 minutes, you may repeat epinephrine once

(2019) CFR/ALL LEVELS: If SEVERE respiratory distress, facial or oral edema, and/or hypoperfusion:

  o Administer the epinephrine autoinjector (e.g. EpiPen®), as available and as trained Adult autoinjector 0.3 mg IM (e.g. EpiPen®) if ≥ 30 kg

If patient has a history of anaphylaxis and has an exposure to an allergen developing respiratory distress and/or hypoperfusion and/or rash:

  o Administer the epinephrine autoinjector (e.g. EpiPen®), as available and as trained Adult autoinjector 0.3 mg IM (e.g. EpiPen®) if ≥ 30 kg

(2019) EMT: The Syringe Epinephrine for EMT may be substituted for an autoinjector

(2019) EMT: If the patient is wheezing, albuterol 2.5 mg in 3 mL (unit dose), via nebulizer; may repeat to a total of three doses

(2019) Advanced: Epinephrine (1:1,000 / 1mg/mL) 0.3 mg IM, ONLY if patient is hypotensive and/or is developing respiratory distress w/airway swelling, hoarseness, stridor, or wheezing. May repeat every 5 minutes if these symptoms persist

(2019) Advanced: Normal saline 500 mL bolus, if SBP < 100 mmHg or MAP < 65 mmHg; may repeat up to a total of 2 L if lung sounds remain clear. Goal SBP > 100 mmHg and MAP > 65 mmHg

Considerations include Anaphylaxis details: “may present with shock associated only with GI symptoms. In the setting of a known exposure to an allergen associated with shock, nausea, vomiting, abdominal pain, and/or diarrhea, consider anaphylaxis in consult with medical control” and clarification of use of syringe epinephrine kits if equipped and trained.
(P3.3) ANAPHYLAXIS – PEDIATRIC .................................................................48

(2019) CFR/ALL LEVELS: If the patient does not improve within 5 minutes, you may repeat epinephrine once

(2019) CFR/ALL LEVELS: If SEVERE respiratory distress, facial or oral edema, and/or hypoperfusion:
  
  o Administer the epinephrine autoinjector (e.g. EpiPen®), as available and as trained Adult autoinjector 0.3 mg IM (e.g. EpiPen®) if ≥ 30 kg*

If patient has a history of anaphylaxis and has an exposure to an allergen developing respiratory distress and/or hypoperfusion and/or rash:

  o Administer the epinephrine autoinjector (e.g. EpiPen®), as available and as trained Adult autoinjector 0.3 mg IM (e.g. EpiPen®) if ≥ 30 kg*

(2019) EMT: The Syringe Epinephrine for EMT may be substituted for an autoinjector

(2019) EMT: If the patient is wheezing, albuterol 2.5 mg in 3 mL (unit dose), via nebulizer; may repeat to a total of three doses

(2019) Advanced: Epinephrine (1:1,000 / 1mg/mL) 0.3 mg IM, ONLY if patient is hypotensive and/or is developing respiratory distress w/airway swelling, hoarseness, stridor, or wheezing. May repeat every 5 minutes if these symptoms persist

(2019) Advanced: Normal saline 500 mL bolus, if SBP < 100 mmHg or MAP < 65 mmHg; may repeat up to a total of 2 L if lung sounds remain clear. Goal SBP > 100 mmHg and MAP > 65 mmHg

Considerations include Anaphylaxis details: “may present with shock associated only with GI symptoms. In the setting of a known exposure to an allergen associated with shock, nausea, vomiting, abdominal pain, and/or diarrhea, consider anaphylaxis in consult with medical control” and clarification of use of syringe epinephrine kits if equipped and trained.

(A3.4.1) BEHAVIORAL EMERGENCIES: AGITATED PATIENT – ADULT .................................................................50

Considerations updated to include scene and crew safety considerations, rule-out causes of underlying condition, developmental disorder complications and emphasis on team based approach to management of patient.

(P3.4.1) BEHAVIORAL EMERGENCIES: AGITATED PATIENT – PEDIATRIC .................................................................52

New addition to NYS Collaborative Protocol

(A3.4.2) BEHAVIORAL EMERGENCIES: EXCITED DELIRIUM – ADULT .................................................................54

No change
(2019) CFR/ALL LEVELS: Any patient with suspected carbon monoxide poisoning should receive high flow oxygen via non-rebreather mask (NRB)

(2019) Paramedic: If there is no soot in the airway, consider CPAP* 5-10 cm H2O (if the device delivers 100% oxygen)

  o For the adult patient
  o For older pediatric patients consider CPAP, as equipment size allows if available and trained

(2019) BiPAP removed as option in place of CPAP

(A3.6.1) CARDIAC ARRHYTHMIA: BRADYCARDIA / HEART BLOCKS – SYMPTOMATIC - ADULT .................................58

No change

(P3.6.1) CARDIAC ARRHYTHMIA: BRADYCARDIA - PEDIATRIC ........................................................................59

No change

(A3.6.2.1) CARDIAC ARRHYTHMIA: TACHYCARDIA – NARROW COMPLEX – ADULT..............................60

No change

(A3.6.2.1) CARDIAC ARRHYTHMIA: TACHYCARDIA – WIDE COMPLEX WITH A PULSE – ADULT ......................62

(2019) CC: If irregularly irregular, cardioversion may be initiated at 200 Joules

(P3.6.2) CARDIAC ARRHYTHMIA: TACHYCARDIA - PEDIATRIC ......................................................................64

No change

(A3.7) CARDIAC RELATED PROBLEM / CHEST PAIN – ADULT .............................................................66

(2019) Advanced: Nitroglycerin 0.4 mg SL per dose, as needed, 5 minutes apart, provided the patient’s systolic BP is > 120mmHg or MAP > 90 mmHg

(P3.7) CARDIAC RELATED PROBLEM – PEDIATRIC .........................................................................................68

New addition to NYS Collaborative Protocol
(A3.8) **Cardiogenic Shock – ADULT** ........................................................................................................................................... 70

(2019) **CFR/ALL LEVELS: Airway management and appropriate oxygen therapy**

(2019) **CFR/ALL LEVELS: Aspirin 324 mg (4 x 81 mg tabs) chewed, only if able to chew***

(3.9.0) **Childbirth: Obstetrics** ......................................................................................................................................................... 72

*No change*

(3.9.1) **Childbirth: Preterm Labor (24 – 37 weeks)** .......................................................................................................................... 74

*No change*

(P3.9.2) **Childbirth: Newborn / Neonatal Care** .......................................................................................................................... 75

*New addition to NYS Collaborative Protocol (which includes details on delivery AND neonatal resuscitation)*

(A3.10.0) **Diff Breathing: Asthma / COPD / Wheezing – ADULT** ................................................................................................. 77

(2019) **Advanced: Epinephrine (1:1,000 / 1mg/mL) dose 0.3 mg IM for severe distress o If severe distress persists, may repeat in 5 minutes**

(2019) **Advanced: Albuterol 2.5 mg in 3 mL (unit dose), via nebulizer or ET tube nebulizer; may repeat to a total of three doses for wheezing**

(2019) **Paramedic: For the patient with asthma, if the patient is not responding to treatments above, administer magnesium 2 grams in 100 mL normal saline IV over 10 minutes**

(2019) **MC Considerations: Use of albuterol via nebulizer by EMT for indications other than asthma**

(2019) **MC Considerations: Use of epinephrine by EMT for critical asthma attack (EMT Syringe Epinephrine or autoinjector)**

(2019) **MC Considerations: Epinephrine (1:1,000 / 1 mg/mL) 3 mg via nebulizer or racemic epinephrine (2.25%) 0.5 mL in 3 mL of normal saline via nebulizer**

(2019) **MC Considerations: Magnesium for COPD exacerbation**

(2019) **MC Considerations: Repeat magnesium**

(A3.10.1) **Diff Breathing: Pulmonary Edema – ADULT** ..................................................................................................................... 79

(2019) **MC Considerations: Nitroglycerin option for Advanced**
(P3.10.2) Diff Breathing: Asthma / Wheezing - Pediatric

(2019) CFR/ALL LEVELS: BLS management and updated with direction to additional protocols


(2019) Advanced: For older pediatric patients consider CPAP for EMT, as equipment size allows if available and trained

(P3.10.3) Diff Breathing: Stridor - Pediatric

(2019) Advanced: updated for condition specific protocol direction

Considerations updated

(3.11.1) Environmental - Cold Emergencies


(2019) Considerations include: “Pulse oxygenation measurement may be inaccurate if the patient is hypothermic. If the patient is cyanotic and in apparent respiratory distress, administer oxygen”

(3.11.2) Environmental - Heat Emergencies

No change

(3.12) Fever – Adult

New addition to NYS Collaborative Protocol

(P3.12) Fever – Pediatric

New addition to NYS Collaborative Protocol

(A3.13) Hyperkalemia - Adult

No change

(A3.14) Hyperglycemia – Adult

No change

(P3.14) Hyperglycemia - Pediatric

No change
(A3.15) HYPOGLYCEMIA – ADULT

(2019) EMT: Check pupils and, if constricted, consider “General: Opioid (Narcotic) Overdose” protocol

(P3.15) HYPOGLYCEMIA – PEDIATRIC

(2019) EMT: Check pupils and, if constricted, consider “General: Opioid (Narcotic) Overdose” protocol

(2019) EMT: PO management of hypoglycemia outlined

(2019) Advanced: If unable to obtain adequate results with oral glucose consider glucagon 0.5 mg IM if < 20 kg, otherwise, 1 mg IM*, if needed

(A3.16) NAUSEA AND/OR VOMITING - ADULT

No change

(P3.16) NAUSEA AND/OR VOMITING (> 2 Y/o) - PEDIATRIC

No change

(3.17) OPIOID (NARCOTIC) OVERDOSE

(2019) EMT: In the pediatric patient, administer naloxone (Narcan®) 1 mg** intranasal; 1/2 mg per nostril, may repeat once in 5 minutes, if no significant improvement occurs

(2019) Advanced (from 2017 Paramedic): Titrate naloxone (Narcan) to max 2 mg per dose IV, IM, or intranasal, ONLY if hypoventilation or respiratory arrest. (Consider administering in ≤ 0.5 mg increments, if giving IV)

(2019) Considerations include: **May substitute alternative FDA and SEMAC approved, commercially prepared 4mg nasal spray unit dose device

  o This device is approved for the full 4 mg dose in the adult or pediatric patient
  
  o Administer 4mg in 1 nostril as a single spray

(3.18) ORGANOPHOSPHATE EXPOSURE

(2019) Paramedic: For the pediatric patient: Atropine 1 mg IV every 3-5 minutes, until secretions dry

  • For seizures:

  For adult seizures see, “General: Seizures – Adult” protocol

  For pediatric seizures see, “General: Seizures – Pediatric” protocol
(2019) Advanced: If able to tolerate oral fluid consider one of the following:

- Acetaminophen 650 mg / 20.3 mL PO (2 – 325 mg / 10.15 mL PO unit doses)*

- Ibuprofen 400 mg / 20 mL PO (4 – 100 mg / 5 mL PO unit doses)*

(2019) Paramedic: Ketorolac (Toradol) 15 mg IV or 30 mg IM

(2019) Considerations updated to include details on NSAIDs (Acetaminophen/Ibuprofen)

(P3.19) PAIN MANAGEMENT - PEDIATRIC ................................................................. 107

(2019) Advanced: Addition of Nitrous Oxide and NSAIDs (Acetaminophen/Ibuprofen)

(2019) Considerations updated to include details on NSAIDs (Acetaminophen/Ibuprofen)

(3.20) POISONING / OVERDOSE: UNDIFFERENTIATED ......................................... 109


(P3.20) POISONING / OVERDOSE: UNDIFFERENTIATED- PEDIATRIC ......................... 111


(A3.21) POST INTUBATION MANAGEMENT - ADULT ............................................. 113

No change

(A3.22) PROCEDURAL SEDATION - ADULT ............................................................... 114

No change

(P3.22) PROCEDURAL SEDATION - PEDIATRIC .......................................................... 116

No change

(A3.23) RAPID SEQUENCE INTUBATION (RSI) - ADULT ............................................. 117

No change

(3.24) SEIZURES ............................................................................................................. 119

No change other than formatting
(P3.24) SEIZURES - PEDIATRIC .................................................................121

No change other than formatting

(A3.25.1) SHOCK: SHOCK / HYPOPERFUSION - ADULT ...................................... 123

No change

(A3.25.2) SHOCK: SEVERE SEPSIS / SEPTIC SHOCK.........................................................125

No change

(P3.25.3) SHOCK: SEPSIS / SHOCK / HYPOPERFUSION - PEDIATRIC..............................127

New addition to NYS Collaborative Protocol

(3.26) SMOKE INHALATION / CYANIDE POISONING – SYMPTOMATIC .........................129

(2019) EMT: For older pediatric patients consider CPAP, as equipment size allows if available and trained

(A3.27) ST ELEVATION MI (STEMI) – CONFIRMED – ADULT ..............................................131

(2019) EMT: For patients with a STEMI, confirmed by medical control, begin transport to a facility capable of primary angioplasty if estimated arrival to that facility is within 90 minutes of patient contact or if directed by medical control or regional procedure

(2019) Paramedic: Updated BP/MAP guidelines for fluid bolus administration

(3.28) STROKE .................................................................................................................133

No change

(P3.29) TECHNOLOGY ASSISTED CHILDREN .................................................................135

New addition to NYS Collaborative Protocol

(3.30) TOTAL ARTIFICIAL HEART (TAH) ...........................................................................137

New addition to NYS Collaborative Protocol

(3.31) VENTRICULAR ASSIST DEVICE (VAD)..................................................................139

Updated information on ALL levels including VAD specific info
(4.0) TRAUMA PROTOCOLS ...........................................141

(4.1) AMPUTATION ...........................................142

No change

(4.2) AVULSED TOOTH ...........................................143

No change

(4.3) BLEEDING / HEMORRHAGE CONTROL ...........................................144

Addition of junctional tourniquet use into “Criteria” contingent on regional approval

(4.4) BURNS ...........................................146

(2019) Paramedic: For eye exposures:

- Tetracaine (0.5%) 2 drops in the affected eye for pain every 3 minutes, as needed
- For chemical exposure to the eye, you may use a Morgan Lens® for irrigation

(4.5) CHEST TRAUMA ...........................................148

(2019) Advanced: If the patient is in cardiac arrest, proceed with bilateral needle chest decompression and refer to appropriate arrest protocol* (TEMS)

(A4.6) CRUSH INJURIES – ADULT ...........................................150

No change

(4.7) EYE INJURIES ...........................................152

(2019) See treatment specific protocol redirections

(2019) Paramedic: Vascular access and “Pain management protocol” referral moved from Advanced

(4.8) MUSCULOSKELETAL TRAUMA ...........................................153

(2019) No major changes and see treatment specific protocol redirections

(4.9) PATELLA DISLOCATION ...........................................155

(2019) No major changes and see treatment specific protocol redirections
(4.10) Suspected Spinal Injuries

Considerations updated

(A4.11) Trauma Associated Shock - Adult

(2019) Paramedic: Updated BP/MAP guidelines for fluid bolus administration in Decompensated Shock

(4.12) Trauma Patient Destination

No change

(5.0) Resources

No change

(5.1) Advance Directives / DNR / MOLST

Considerations updated

(P5.2) APGAR

New addition to NYS Collaborative Protocol

(5.3) Automatic Transport Ventilator

No change

(P5.4) Child Abuse Reporting

No change

(5.5) Glasgow Coma Score (GCS)

New addition to NYS Collaborative Protocol

(5.6) Incident Command

New standalone addition to NYS Collaborative Protocol

(5.7) Interfacility Transport

No change
(5.8) MEDICATION FORMULARY ................................................................................................................. 171

(2019) Addition of Ibuprofen and Acetaminophen

(5.9) MEDICATION INFUSION ........................................................................................................................ 174

No change

(5.10) NEEDLESTICK / INFECTIOUS EXPOSURE ........................................................................................... 176

Considerations updated

(5.11) NERVE AGENT – SUSPECTED ............................................................................................................. 177

No change

(P5.12) NORMAL VITAL SIGNS FOR INFANTS / CHILDREN ........................................................................... 179

No change

(5.13) OXYGEN ADMINISTRATION AND AIRWAY MANAGEMENT .................................................................. 180

(2019) CFR/ALL LEVELS: Updated information on pediatrics and oxygenation guidelines

(2019) EMT: Updated for nebulizer and pediatric CPAP

(P5.14) PEDIATRIC ASSESSMENT TRIANGLE ............................................................................................... 182

New addition to NYS Collaborative Protocol

(5.15) PRESCRIBED MEDICATION ASSISTANCE .......................................................................................... 183

(2019) Paramedic: Steroids (SoluCortef and others) via IM injection

(5.16) REFUSAL OF MEDICAL ATTENTION ..................................................................................................... 185

New addition to NYS Collaborative Protocol

(5.17) RESPONSIBILITIES OF PATIENT CARE .................................................................................................. 187

No change

(5.18) TRANSFER OF PATIENT CARE .............................................................................................................. 188

New addition to NYS Collaborative Protocol
(5.19) VASCULAR ACCESS ...........................................................................................................189

No change

(5.20) VASCULAR DEVICES – PRE-EXISTING...............................................................................191

No change