

**PEDIATRIC DEFINITION AND DISCUSSION.....7**

*(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 .....9**

*New addition to NYS Collaborative Protocol*

**(1.1) GENERAL APPROACH TO THE EMS CALL.....10**

*New addition to NYS Collaborative Protocol*

**(1.2) GENERAL APPROACH TO THE PATIENT .....12**

*New addition to NYS Collaborative Protocol*

**(1.3) GENERAL APPROACH TO SAFETY RESTRAINING DEVICES .....15**

*New addition to NYS Collaborative Protocol*

**(1.4) GENERAL APPROACH TO TRANSPORTATION .....16**

*New addition to NYS Collaborative Protocol*

**(2.0) EXTREMIS / CARDIAC ARREST PROTOCOLS.....18**

**(A2.1.0) CARDIAC ARREST: GENERAL APPROACH .....19**

*(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.*

**(P2.1.0) CARDIAC ARREST: GENERAL APPROACH – PEDIATRIC .....22**

*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*

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*(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*

(3.5) CARBON MONOXIDE EXPOSURE – SUSPECTED .....56

*(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) DIF 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) DIF BREATHING: PULMONARY EDEMA – ADULT .....79

*(2019) MC Considerations: Nitroglycerin option for Advanced*

|   |    |
|---|----|
| (P3.10.2) DIF BREATHING: ASTHMA / WHEEZING - PEDIATRIC.....   | 81 |
| <i>(2019) CFR/ALL LEVELS: BLS management and updated with direction to additional protocols</i>   |    |
| <i>(2019) Advanced: removal of Epi autoinjector under standard protocol (MC option)</i>   |    |
| <i>(2019) Advanced: For older pediatric patients consider CPAP for EMT, as equipment size allows if available and trained</i>   |    |
| (P3.10.3) DIF BREATHING: STRIDOR - PEDIATRIC .....  | 83 |
| <i>(2019) Advanced: updated for condition specific protocol direction</i>   |    |
| <i>Considerations updated</i>   |    |
| (3.11.1) ENVIRONMENTAL - COLD EMERGENCIES .....   | 85 |
| <i>(2019) General care for hypothermic patient added to CFR/ALL LEVELS with Paramedic level care including extremity rewarming.</i>   |    |
| <i>(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"</i> |    |
| (3.11.2) ENVIRONMENTAL - HEAT EMERGENCIES .....   | 87 |
| <i>No change</i>  |    |
| (3.12) FEVER – ADULT .....  | 88 |
| <i>New addition to NYS Collaborative Protocol</i>   |    |
| (P3.12) FEVER – PEDIATRIC .....   | 90 |
| <i>New addition to NYS Collaborative Protocol</i>   |    |
| (A3.13) HYPERKALEMIA - ADULT .....  | 92 |
| <i>No change</i>  |    |
| (A3.14) HYPERGLYCEMIA – ADULT.....  | 94 |
| <i>No change</i>  |    |
| (P3.14) HYPERGLYCEMIA - PEDIATRIC .....   | 95 |
| <i>No change</i>  |    |

(A3.15) HYPOGLYCEMIA – ADULT.....96

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

(P3.15) HYPOGLYCEMIA – PEDIATRIC .....98

*(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 ..... 100

*No change*

(P3.16) NAUSEA AND/OR VOMITING (> 2 Y/O) - PEDIATRIC ..... 101

*No change*

(3.17) OPIOID (NARCOTIC) OVERDOSE .....102

*(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.....104

*(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*



|  |            |
|--|------------|
| <b>(A3.19) PAIN MANAGEMENT - ADULT .....</b>   | <b>105</b> |
| <i>(2019) Advanced: If able to tolerate oral fluid consider one of the following:</i>  |            |
| <i>o Acetaminophen 650 mg / 20.3 mL PO (2 – 325 mg / 10.15 mL PO unit doses)*</i>  |            |
| <i>o Acetaminophen 640 mg / 20mL PO (160mg/5mL)*</i>   |            |
| <i>o Ibuprofen 400 mg / 20 mL PO (4 – 100 mg / 5 mL PO unit doses)*</i>  |            |
| <i>(2019) Paramedic: Ketorolac (Toradol) 15 mg IV or 30 mg IM</i>  |            |
| <i>(2019) Considerations updated to include details on NSAIDs (Acetaminophen/Ibuprofen)</i>                                  |            |
| <b>(P3.19) PAIN MANAGEMENT - PEDIATRIC.....</b>  | <b>107</b> |
| <i>(2019) Advanced: Addition of Nitrous Oxide and NSAIDs (Acetaminophen/Ibuprofen)</i>                                       |            |
| <i>(2019) Considerations updated to include details on NSAIDs (Acetaminophen/Ibuprofen)</i>                                  |            |
| <b>(3.20) POISONING / OVERDOSE: UNDIFFERENTIATED .....</b>   | <b>109</b> |
| <i>(2019) Considerations encourage redirection to agent specific protocol with removal of some specific protocol orders.</i> |            |
| <b>(P3.20) POISONING / OVERDOSE: UNDIFFERENTIATED- PEDIATRIC.....</b>  | <b>111</b> |
| <i>(2019) Considerations encourage redirection to agent specific protocol with removal of some specific protocol orders.</i> |            |
| <b>(A3.21) POST INTUBATION MANAGEMENT - ADULT.....</b>   | <b>113</b> |
| <i>No change</i>   |            |
| <b>(A3.22) PROCEDURAL SEDATION - ADULT.....</b>  | <b>114</b> |
| <i>No change</i>   |            |
| <b>(P3.22) PROCEDURAL SEDATION - PEDIATRIC .....</b>   | <b>116</b> |
| <i>No change</i>   |            |
| <b>(A3.23) RAPID SEQUENCE INTUBATION (RSI) - ADULT.....</b>  | <b>117</b> |
| <i>No change</i>   |            |
| <b>(3.24) SEIZURES .....</b>   | <b>119</b> |

*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:*

*o Tetracaine (0.5%) 2 drops in the affected eye for pain every 3 minutes, as needed*

*o 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.....156

*Considerations updated*

(A4.11) TRAUMA ASSOCIATED SHOCK - ADULT.....158

*(2019) Paramedic: Updated BP/MAP guidelines for fluid bolus administration in DECOMPENSATED SHOCK*

(4.12) TRAUMA PATIENT DESTINATION .....159

*No change*

(5.0) RESOURCES.....160

(5.1) ADVANCE DIRECTIVES / DNR / MOLST .....161

*Considerations updated*

(P5.2) APGAR .....163

*New addition to NYS Collaborative Protocol*

(5.3) AUTOMATIC TRANSPORT VENTILATOR.....164

*No change*

(P5.4) CHILD ABUSE REPORTING .....166

*No change*

(5.5) GLASGOW COMA SCORE (GCS) .....167

*New addition to NYS Collaborative Protocol*

(5.6) INCIDENT COMMAND .....168

*New standalone addition to NYS Collaborative Protocol*

(5.7) INTERFACILITY TRANSPORT .....169

*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*