## TAB 5 GUIDELINE 1
### PEDIATRIC TABLES

<table>
<thead>
<tr>
<th>Age</th>
<th>Pulse (beats/min)</th>
<th>Respirations</th>
<th>Blood Pressure (SBP / DBP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newborn</td>
<td>120 – 160</td>
<td>30 – 60</td>
<td>74 – 100 / 50 – 68</td>
</tr>
<tr>
<td>Infant</td>
<td>100 – 140</td>
<td>30 – 60</td>
<td>84 – 106 / 56 – 70</td>
</tr>
<tr>
<td>Toddler</td>
<td>80 – 130</td>
<td>24 – 40</td>
<td>98 – 106 / 50 – 70</td>
</tr>
<tr>
<td>Preschool</td>
<td>80 – 120</td>
<td>22 – 34</td>
<td>98 – 112 / 64 – 70</td>
</tr>
<tr>
<td>School age</td>
<td>60 – 100</td>
<td>18 – 30</td>
<td>104 – 124 / 64 – 80</td>
</tr>
<tr>
<td>Adolescent</td>
<td>50 – 90</td>
<td>12 – 18</td>
<td>118 – 132 / 70 – 82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Estimated Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10 kg</td>
</tr>
<tr>
<td>3</td>
<td>15 kg</td>
</tr>
<tr>
<td>5</td>
<td>20 kg</td>
</tr>
<tr>
<td>7</td>
<td>25 kg</td>
</tr>
<tr>
<td>9</td>
<td>30 kg</td>
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</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>ORAL AIRWAY</th>
<th>ENDOTRACHEAL TUBE (uncuffed)</th>
<th>SUCTION CATHETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preemie</td>
<td>00</td>
<td>2.5 - 3.0</td>
<td>5 French</td>
</tr>
<tr>
<td>Newborn</td>
<td>0</td>
<td>3.0 - 3.5</td>
<td>6 French</td>
</tr>
<tr>
<td>6 Months</td>
<td>0-1</td>
<td>3.5</td>
<td>8 French</td>
</tr>
<tr>
<td>18 Months</td>
<td>1</td>
<td>4.0</td>
<td>8 French</td>
</tr>
<tr>
<td>3 Years</td>
<td>2</td>
<td>4.5</td>
<td>8 French</td>
</tr>
<tr>
<td>5 Years</td>
<td>2-3</td>
<td>5.0</td>
<td>10 French</td>
</tr>
<tr>
<td>8 Years</td>
<td>3</td>
<td>6.0 cuffed</td>
<td>10 French</td>
</tr>
<tr>
<td>Older</td>
<td>4</td>
<td>6.5 - 7.0 cuffed</td>
<td>12 French</td>
</tr>
</tbody>
</table>
### Weight 3 – 5 kg (Ave 4.0 kg)

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Rate</td>
<td>Resuscitation Bag Infant / Child</td>
</tr>
<tr>
<td>Respirations</td>
<td>Oxygen Mask (NRB) Pediatric</td>
</tr>
<tr>
<td>BP Systolic</td>
<td>Oral Airway 50 mm</td>
</tr>
<tr>
<td>Laryngoscope Blade Size</td>
<td>Laryngoscope Blade Size 0 – 1 straight</td>
</tr>
<tr>
<td>ET Tube Size</td>
<td>ET Tube Size 3.5 uncutted</td>
</tr>
<tr>
<td>ET Tube Insertion Depth</td>
<td>ET Tube Insertion Depth 3 Kg 9 – 9.5 cm</td>
</tr>
<tr>
<td>NG Tube</td>
<td>NG Tube 5 – 8 Fr</td>
</tr>
<tr>
<td>Suction Catheter</td>
<td>8 Fr</td>
</tr>
</tbody>
</table>

| IV Catheter (ga) | Normal Saline Bolus
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>22 – 24</td>
<td>60 – 100 mL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Defibrillation</th>
<th>Cardiovversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amiodarone</td>
<td>4 joules</td>
</tr>
<tr>
<td>Atropine</td>
<td>4 joules</td>
</tr>
<tr>
<td>Calcium Chloride</td>
<td>60 – 100 mg</td>
</tr>
<tr>
<td>Dextrose 25%</td>
<td>1.5 – 2.5 gram</td>
</tr>
<tr>
<td>Diazepam IV</td>
<td>0.6 – 1 mg</td>
</tr>
<tr>
<td>Diazepam Rectal</td>
<td>1.5 – 2.5 mg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Defibrillation</th>
<th>Cardiovversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>1.8 mL</td>
</tr>
<tr>
<td>Adenosine 1&lt;sup&gt;st&lt;/sup&gt; dose</td>
<td>0.3 – 0.5 mg</td>
</tr>
<tr>
<td>Adenosine 2&lt;sup&gt;nd&lt;/sup&gt; dose</td>
<td>0.6 – 1 mg</td>
</tr>
<tr>
<td>Albuterol</td>
<td>2.5 mg</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>HOLD</td>
</tr>
<tr>
<td>Atropine</td>
<td>0.10 mg</td>
</tr>
<tr>
<td>Calcium Chloride</td>
<td>60 – 100 mg</td>
</tr>
<tr>
<td>Dextrose 25%</td>
<td>1.5 – 2.5 gram</td>
</tr>
<tr>
<td>Diazepam IV</td>
<td>0.6 – 1 mg</td>
</tr>
<tr>
<td>Diazepam Rectal</td>
<td>1.5 – 2.5 mg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenhydramine</td>
<td>6.5 mg</td>
</tr>
<tr>
<td>Epinephrine 1:10,000</td>
<td>0.03 – 0.05 mg</td>
</tr>
<tr>
<td>Epinephrine 1:1000 ET</td>
<td>0.3 – 0.5 mg</td>
</tr>
<tr>
<td>Epinephrine 1:1000 IM</td>
<td>0.06 mg</td>
</tr>
<tr>
<td>Etomidate</td>
<td>0.9 – 1.5 mg</td>
</tr>
<tr>
<td>Fentanyl (Sedation)</td>
<td>9 – 15 mcg</td>
</tr>
<tr>
<td>Glucagon</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>Ibufrofen</td>
<td>2 mL</td>
</tr>
<tr>
<td>Ipratropium</td>
<td>500 mcg</td>
</tr>
<tr>
<td>Levobutol</td>
<td>0.31 mg</td>
</tr>
<tr>
<td>Lidocaine</td>
<td>3 – 5 mg</td>
</tr>
<tr>
<td>Magnesium Sulfate</td>
<td>150 – 250 mg</td>
</tr>
<tr>
<td>Midazolam (Induction)</td>
<td>0.9 – 1.5 mg</td>
</tr>
<tr>
<td>Morphine Sulfate</td>
<td>0.6 mg</td>
</tr>
<tr>
<td>Naloxone</td>
<td>0.3 – 0.5 mg</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>3 – 5 mEq</td>
</tr>
<tr>
<td>Succinylcholine</td>
<td>6 – 10 mg</td>
</tr>
</tbody>
</table>

### Weight 6 – 7 kg (Ave 6.5 kg)

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Rate</td>
<td>Resuscitation Bag Infant / Child</td>
</tr>
<tr>
<td>Respiration</td>
<td>Oxygen Mask (NRB) Pediatric</td>
</tr>
<tr>
<td>BP Systolic</td>
<td>Oral Airway 50 mm</td>
</tr>
<tr>
<td>Laryngoscope Blade Size</td>
<td>Laryngoscope Blade Size 1 straight</td>
</tr>
<tr>
<td>ET Tube Size</td>
<td>ET Tube Size 3.5 uncutted</td>
</tr>
<tr>
<td>ET Tube Insertion Depth</td>
<td>ET Tube Insertion Depth 10.5 – 11 cm</td>
</tr>
<tr>
<td>NG Tube</td>
<td>NG Tube 5 – 8 Fr</td>
</tr>
<tr>
<td>Suction Catheter</td>
<td>8 Fr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV Catheter (ga)</th>
<th>Normal Saline Bolus</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 – 24</td>
<td>120 – 140 mL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Defibrillation</th>
<th>Cardiovversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amiodarone</td>
<td>3 mL</td>
</tr>
<tr>
<td>Adenosine 1&lt;sup&gt;st&lt;/sup&gt; dose</td>
<td>0.65 mg</td>
</tr>
<tr>
<td>Adenosine 2&lt;sup&gt;nd&lt;/sup&gt; dose</td>
<td>1.3 mg</td>
</tr>
<tr>
<td>Albuterol</td>
<td>2.5 mg</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>HOLD</td>
</tr>
<tr>
<td>Atropine</td>
<td>0.13 mg</td>
</tr>
<tr>
<td>Calcium Chloride</td>
<td>130 mg</td>
</tr>
<tr>
<td>Dextrose 25%</td>
<td>3.25 g</td>
</tr>
<tr>
<td>Diazepam IV / Rectal</td>
<td>1.3 mg / 3.3 mg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Defibrillation</th>
<th>Cardiovversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>3 mL</td>
</tr>
<tr>
<td>Adenosine 1&lt;sup&gt;st&lt;/sup&gt; dose</td>
<td>0.85 mg</td>
</tr>
<tr>
<td>Adenosine 2&lt;sup&gt;nd&lt;/sup&gt; dose</td>
<td>1.7 mg</td>
</tr>
<tr>
<td>Albuterol</td>
<td>2.5 mg</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>42 mg</td>
</tr>
<tr>
<td>Atropine</td>
<td>0.17 mg</td>
</tr>
<tr>
<td>Calcium Chloride</td>
<td>170 mg</td>
</tr>
<tr>
<td>Dextrose 25%</td>
<td>4.25 g</td>
</tr>
<tr>
<td>Diazepam IV / Rectal</td>
<td>1.7 mg / 4.2 mg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenhydramine</td>
<td>6.5 mg</td>
</tr>
<tr>
<td>Epinephrine 1:10,000</td>
<td>0.065 mg</td>
</tr>
<tr>
<td>Epinephrine 1:1000 ET</td>
<td>0.6 mg</td>
</tr>
<tr>
<td>Epinephrine 1:1000 IM</td>
<td>0.06 mg</td>
</tr>
<tr>
<td>Etomidate</td>
<td>1.8 – 2.1 mg</td>
</tr>
<tr>
<td>Fentanyl (Sedation)</td>
<td>12 – 21 mcg</td>
</tr>
<tr>
<td>Glucagon</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>Ibufrofen</td>
<td>3.25 mL</td>
</tr>
<tr>
<td>Ipratropium</td>
<td>500 mcg</td>
</tr>
<tr>
<td>Levobutol</td>
<td>0.31 mg</td>
</tr>
<tr>
<td>Lidocaine</td>
<td>6.5 mg</td>
</tr>
<tr>
<td>Magnesium Sulfate</td>
<td>325 mg</td>
</tr>
<tr>
<td>Midazolam (Induction)</td>
<td>2 mg</td>
</tr>
<tr>
<td>Morphine Sulfate</td>
<td>0.6 mg</td>
</tr>
<tr>
<td>Naloxone</td>
<td>0.65 mg</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>6.5 mEq</td>
</tr>
<tr>
<td>Succinylcholine</td>
<td>13 mg</td>
</tr>
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</table>

### Weight 8 – 9 kg (Ave 8.5 kg)

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Rate</td>
<td>Resuscitation Bag Infant / Child</td>
</tr>
<tr>
<td>Respiration</td>
<td>Oxygen Mask (NRB) Pediatric</td>
</tr>
<tr>
<td>BP Systolic</td>
<td>Oral Airway 50 mm</td>
</tr>
<tr>
<td>Laryngoscope Blade Size</td>
<td>Laryngoscope Blade Size 1 straight</td>
</tr>
<tr>
<td>ET Tube Size</td>
<td>ET Tube Size 3.5 uncutted</td>
</tr>
<tr>
<td>ET Tube Insertion Depth</td>
<td>ET Tube Insertion Depth 10.5 – 11 cm</td>
</tr>
<tr>
<td>NG Tube</td>
<td>NG Tube 5 – 8 Fr</td>
</tr>
<tr>
<td>Suction Catheter</td>
<td>8 Fr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV Catheter (ga)</th>
<th>Normal Saline Bolus</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 – 24</td>
<td>160 – 180 mL</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Defibrillation</th>
<th>Cardiovversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amiodarone</td>
<td>4 mL</td>
</tr>
<tr>
<td>Adenosine 1&lt;sup&gt;st&lt;/sup&gt; dose</td>
<td>0.85 mg</td>
</tr>
<tr>
<td>Adenosine 2&lt;sup&gt;nd&lt;/sup&gt; dose</td>
<td>1.7 mg</td>
</tr>
<tr>
<td>Albuterol</td>
<td>2.5 mg</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>42 mg</td>
</tr>
<tr>
<td>Atropine</td>
<td>0.17 mg</td>
</tr>
<tr>
<td>Calcium Chloride</td>
<td>170 mg</td>
</tr>
<tr>
<td>Dextrose 25%</td>
<td>4.25 g</td>
</tr>
<tr>
<td>Diazepam IV / Rectal</td>
<td>1.7 mg / 4.2 mg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Defibrillation</th>
<th>Cardiovversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>4 mL</td>
</tr>
<tr>
<td>Adenosine 1&lt;sup&gt;st&lt;/sup&gt; dose</td>
<td>0.85 mg</td>
</tr>
<tr>
<td>Adenosine 2&lt;sup&gt;nd&lt;/sup&gt; dose</td>
<td>1.7 mg</td>
</tr>
<tr>
<td>Albuterol</td>
<td>2.5 mg</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>42 mg</td>
</tr>
<tr>
<td>Atropine</td>
<td>0.17 mg</td>
</tr>
<tr>
<td>Calcium Chloride</td>
<td>170 mg</td>
</tr>
<tr>
<td>Dextrose 25%</td>
<td>4.25 g</td>
</tr>
<tr>
<td>Diazepam IV / Rectal</td>
<td>1.7 mg / 4.2 mg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenhydramine</td>
<td>7.5 mg</td>
</tr>
<tr>
<td>Epinephrine 1:10,000</td>
<td>0.085 mg</td>
</tr>
<tr>
<td>Epinephrine 1:1000 ET</td>
<td>0.8 mg</td>
</tr>
<tr>
<td>Epinephrine 1:1000 IM</td>
<td>0.08 mg</td>
</tr>
<tr>
<td>Etomidate</td>
<td>2.4 – 2.7 mg</td>
</tr>
<tr>
<td>Fentanyl (Sedation)</td>
<td>16 – 27 mcg</td>
</tr>
<tr>
<td>Glucagon</td>
<td>0.5 mg</td>
</tr>
<tr>
<td>Ibufrofen</td>
<td>4.25 mL</td>
</tr>
<tr>
<td>Ipratropium</td>
<td>500 mcg</td>
</tr>
<tr>
<td>Levobutol</td>
<td>0.31 mg</td>
</tr>
<tr>
<td>Lidocaine</td>
<td>6.5 mg</td>
</tr>
<tr>
<td>Magnesium Sulfate</td>
<td>325 mg</td>
</tr>
<tr>
<td>Midazolam (Induction)</td>
<td>2.5 mg</td>
</tr>
<tr>
<td>Morphine Sulfate</td>
<td>0.85 mg</td>
</tr>
<tr>
<td>Naloxone</td>
<td>0.85 mg</td>
</tr>
<tr>
<td>Sodium Bicarbonate</td>
<td>8.5 mEq</td>
</tr>
<tr>
<td>Succinylcholine</td>
<td>17 mg</td>
</tr>
</tbody>
</table>
### Weight 10 – 11 kg (Ave 10.5 kg)

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Equipment</th>
<th>Defibrillation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Rate</td>
<td>Resuscitation Bag</td>
<td>Defibrillation</td>
</tr>
<tr>
<td>115 – 120</td>
<td>Child</td>
<td>20 joules</td>
</tr>
<tr>
<td>Respirations</td>
<td>Oxygen Mask (NRB)</td>
<td>Cardioversion</td>
</tr>
<tr>
<td>22 – 30</td>
<td>Pediatric</td>
<td>10 joules</td>
</tr>
<tr>
<td>BP Systolic</td>
<td>Oral Airway</td>
<td></td>
</tr>
<tr>
<td>96 (+/-30)</td>
<td>60 mm</td>
<td></td>
</tr>
<tr>
<td>Length 7.4 –</td>
<td>Laryngoscope Blade Size</td>
<td>Acetaminophen</td>
</tr>
<tr>
<td>8.4 – 8.7 cm</td>
<td>1 straight</td>
<td>5 mL</td>
</tr>
<tr>
<td>ET Tube Size</td>
<td>4 uncuffed</td>
<td>Adenosine 1st dose</td>
</tr>
<tr>
<td>3.5 uncuffed</td>
<td>ET Tube Insertion Depth</td>
<td>1 mg</td>
</tr>
<tr>
<td>NG Tube</td>
<td>11 – 12 cm</td>
<td>2nd dose</td>
</tr>
<tr>
<td>8 – 10 Fr</td>
<td>Suction Catheter</td>
<td>2 mg</td>
</tr>
<tr>
<td></td>
<td>10 Fr</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Weight 12 – 14 Kg (Ave 13 Kg)

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Equipment</th>
<th>Defibrillation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Rate</td>
<td>Resuscitation Bag</td>
<td>Defibrillation</td>
</tr>
<tr>
<td>110 – 115</td>
<td>Child</td>
<td>26 joules</td>
</tr>
<tr>
<td>Respirations</td>
<td>Oxygen Mask (NRB)</td>
<td>Cardioversion</td>
</tr>
<tr>
<td>20 – 28</td>
<td>Pediatric</td>
<td>13 joules</td>
</tr>
<tr>
<td>BP Systolic</td>
<td>Oral Airway</td>
<td></td>
</tr>
<tr>
<td>100 (+/-30)</td>
<td>60 mm</td>
<td></td>
</tr>
<tr>
<td>Length 8.4 –</td>
<td>Laryngoscope Blade Size</td>
<td>Acetaminophen</td>
</tr>
<tr>
<td>9.7 – 9.7.5 cm</td>
<td>2 straight</td>
<td>6 mL</td>
</tr>
<tr>
<td>ET Tube Size</td>
<td>4.5 uncuffed</td>
<td>Adenosine 1st dose</td>
</tr>
<tr>
<td>4.0 uncuffed</td>
<td>ET Tube Insertion Depth</td>
<td>1.3 mg</td>
</tr>
<tr>
<td>13.5 cm</td>
<td>King LT Airway</td>
<td>2nd dose</td>
</tr>
<tr>
<td>2</td>
<td>Size 2</td>
<td>2.6 mg</td>
</tr>
<tr>
<td>NG Tube</td>
<td>10 Fr</td>
<td></td>
</tr>
<tr>
<td>10 Fr</td>
<td>Suction Catheter</td>
<td></td>
</tr>
</tbody>
</table>

### Weight 15 – 18 kg (Ave 16.5 kg)

<table>
<thead>
<tr>
<th>Vital Signs</th>
<th>Equipment</th>
<th>Defibrillation</th>
</tr>
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<tbody>
<tr>
<td>Heart Rate</td>
<td>Resuscitation Bag</td>
<td>Defibrillation</td>
</tr>
<tr>
<td>100-115</td>
<td>Child</td>
<td>35 joules</td>
</tr>
<tr>
<td>Respirations</td>
<td>Oxygen Mask (NRB)</td>
<td>Cardioversion</td>
</tr>
<tr>
<td>22-26</td>
<td>Pediatric</td>
<td>16 joules</td>
</tr>
<tr>
<td>BP Systolic</td>
<td>Oral Airway</td>
<td></td>
</tr>
<tr>
<td>100 (+/-20)</td>
<td>60 mm</td>
<td></td>
</tr>
<tr>
<td>Length 9.7 –</td>
<td>Laryngoscope Blade Size</td>
<td>Acetaminophen</td>
</tr>
<tr>
<td>110 cm</td>
<td>2 straight</td>
<td>7.5 mL</td>
</tr>
<tr>
<td>ET Tube Size</td>
<td>5.0 uncuffed</td>
<td>Adenosine 1st dose</td>
</tr>
<tr>
<td>4.5 cuffed</td>
<td>ET Tube Insertion Depth</td>
<td>1.7 mg</td>
</tr>
<tr>
<td>14 – 15 cm</td>
<td>King LT Airway</td>
<td>2nd dose</td>
</tr>
<tr>
<td>2 – 2.5</td>
<td>Size 2</td>
<td>3.3 mg</td>
</tr>
<tr>
<td>NG Tube</td>
<td>10 Fr</td>
<td></td>
</tr>
<tr>
<td>10 Fr</td>
<td>Suction Catheter</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
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NWO EMS ALS (LFML) – Tab 5 – Pediatric Medical Emergency Guidelines – Updated 2017_12_01
### Weight 19 – 22 kg (Ave 20.75 kg)

<table>
<thead>
<tr>
<th>Vital Signs</th>
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<tbody>
<tr>
<td>Heart Rate</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Respiration</td>
<td>22-24</td>
<td></td>
</tr>
<tr>
<td>BP Systolic</td>
<td>100 (+/-15)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equipment</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Resuscitation Bag</td>
<td>Child</td>
<td></td>
</tr>
<tr>
<td>Oxygen Mask (NRP)</td>
<td>Pediatric</td>
<td></td>
</tr>
<tr>
<td>Oral Airway</td>
<td>70 mm</td>
<td></td>
</tr>
<tr>
<td>Laryngoscope Blade Size</td>
<td>2 straight or curved</td>
<td></td>
</tr>
<tr>
<td>ET Tube Size</td>
<td>5.5 uncuffed</td>
<td></td>
</tr>
<tr>
<td>ET Tube Insertion Depth</td>
<td>16.5 cm</td>
<td></td>
</tr>
<tr>
<td>King LT Airway</td>
<td>Size 2.5</td>
<td></td>
</tr>
<tr>
<td>NG Tube</td>
<td>12 – 14 Fr</td>
<td></td>
</tr>
<tr>
<td>Suction Catheter</td>
<td>10 Fr</td>
<td></td>
</tr>
</tbody>
</table>

| IV Catheter (ga) | 20 – 24 |   |
| IO (ga)          | 15 |   |
| Normal Saline Bolus | 380 – 440 mL |   |

<table>
<thead>
<tr>
<th>Defibrillation</th>
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</thead>
<tbody>
<tr>
<td>Defibrillation</td>
<td>40 joules</td>
<td></td>
</tr>
<tr>
<td>Cardioversion</td>
<td>20 joules</td>
<td></td>
</tr>
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<table>
<thead>
<tr>
<th>Drug</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>9.5 mL</td>
<td></td>
</tr>
<tr>
<td>Adenosine 1st dose</td>
<td>2.1 mg</td>
<td></td>
</tr>
<tr>
<td>Adenosine 2nd dose</td>
<td>2 mg</td>
<td></td>
</tr>
<tr>
<td>Albuterol</td>
<td>2.5 mg</td>
<td></td>
</tr>
<tr>
<td>Amiodarone</td>
<td>105 mg</td>
<td></td>
</tr>
<tr>
<td>Atropine</td>
<td>0.4 mg</td>
<td></td>
</tr>
<tr>
<td>Calcium Chloride</td>
<td>420 mg</td>
<td></td>
</tr>
<tr>
<td>Dextroser 25%</td>
<td>10.5 grams</td>
<td></td>
</tr>
<tr>
<td>Diazepam IV / Rectal</td>
<td>4.2 mg / 10 mg</td>
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</tr>
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### Weight 24 – 30 kg (Ave 27 Kg)

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<tr>
<th>Vital Signs</th>
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</thead>
<tbody>
<tr>
<td>Heart Rate</td>
<td>90</td>
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<tr>
<td>Respiration</td>
<td>18-22</td>
<td></td>
</tr>
<tr>
<td>BP Systolic</td>
<td>10 (+/-15)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equipment</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Resuscitation Bag</td>
<td>Child</td>
<td></td>
</tr>
<tr>
<td>Oxygen Mask (NRP)</td>
<td>Pediatric</td>
<td></td>
</tr>
<tr>
<td>Oral Airway</td>
<td>80 mm</td>
<td></td>
</tr>
<tr>
<td>Laryngoscope Blade Size</td>
<td>2 straight or curved</td>
<td></td>
</tr>
<tr>
<td>ET Tube Size</td>
<td>6 cuffed</td>
<td></td>
</tr>
<tr>
<td>ET Tube Insertion Depth</td>
<td>17 – 18 cm</td>
<td></td>
</tr>
<tr>
<td>King LT Airway</td>
<td>Size 3</td>
<td></td>
</tr>
<tr>
<td>NG Tube</td>
<td>14 – 16 Fr</td>
<td></td>
</tr>
<tr>
<td>Suction Catheter</td>
<td>10 Fr</td>
<td></td>
</tr>
</tbody>
</table>

| IV Catheter (ga) | 18 – 20 |   |
| IO (ga)          | 15 |   |
| Normal Saline Bolus | 480 – 600 mL |   |

<table>
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<th>Defibrillation</th>
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</thead>
<tbody>
<tr>
<td>Defibrillation</td>
<td>54 joules</td>
<td></td>
</tr>
<tr>
<td>Cardioversion</td>
<td>27 joules</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drug</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>12.5 mL</td>
<td></td>
</tr>
<tr>
<td>Adenosine 1st dose</td>
<td>2.7 mg</td>
<td></td>
</tr>
<tr>
<td>Adenosine 2nd dose</td>
<td>5.4 mg</td>
<td></td>
</tr>
<tr>
<td>Albuterol</td>
<td>2.5 mg</td>
<td></td>
</tr>
<tr>
<td>Amiodarone</td>
<td>130 mg</td>
<td></td>
</tr>
<tr>
<td>Atropine</td>
<td>0.5 mg</td>
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</tr>
<tr>
<td>Calcium Chloride</td>
<td>530 mg</td>
<td></td>
</tr>
<tr>
<td>Dextroser 25%</td>
<td>13.3 grams</td>
<td></td>
</tr>
<tr>
<td>Diazepam IV / Rectal</td>
<td>5.3 mg / 8 mg</td>
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</table>

### Weight 32 – 40 kg (Ave 36 kg)

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<th>Vital Signs</th>
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<tbody>
<tr>
<td>Heart Rate</td>
<td>85-90</td>
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<tr>
<td>Respiration</td>
<td>16-22</td>
<td></td>
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<tr>
<td>BP Systolic</td>
<td>115 (+/-20)</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equipment</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Resuscitation Bag</td>
<td>Child</td>
<td></td>
</tr>
<tr>
<td>Oxygen Mask (NRP)</td>
<td>Pediatric / Adult</td>
<td></td>
</tr>
<tr>
<td>Oral Airway</td>
<td>80 mm</td>
<td></td>
</tr>
<tr>
<td>Laryngoscope Blade Size</td>
<td>3 straight or curved</td>
<td></td>
</tr>
<tr>
<td>ET Tube Size</td>
<td>6.5 cuffed</td>
<td></td>
</tr>
<tr>
<td>ET Tube Insertion Depth</td>
<td>18.5 – 19.5 cm</td>
<td></td>
</tr>
<tr>
<td>King LT Airway</td>
<td>Size 3</td>
<td></td>
</tr>
<tr>
<td>NG Tube</td>
<td>16 – 18 Fr</td>
<td></td>
</tr>
<tr>
<td>Suction Catheter</td>
<td>10 – 12 Fr</td>
<td></td>
</tr>
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</table>

| IV Catheter (ga) | 16 – 20 |   |
| IO (ga)          | 15 |   |
| Normal Saline Bolus | 640 – 800 mL |   |

<table>
<thead>
<tr>
<th>Defibrillation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Defibrillation</td>
<td>70 joules</td>
<td></td>
</tr>
<tr>
<td>Cardioversion</td>
<td>40 joules</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drug</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>17 mL</td>
<td></td>
</tr>
<tr>
<td>Adenosine 1st dose</td>
<td>3.3 mg</td>
<td></td>
</tr>
<tr>
<td>Adenosine 2nd dose</td>
<td>36.6 mg</td>
<td></td>
</tr>
<tr>
<td>Albuterol</td>
<td>2.5 mg</td>
<td></td>
</tr>
<tr>
<td>Amiodarone</td>
<td>165 mg</td>
<td></td>
</tr>
<tr>
<td>Atropine</td>
<td>0.5 mg</td>
<td></td>
</tr>
<tr>
<td>Calcium Chloride</td>
<td>660 mg</td>
<td></td>
</tr>
<tr>
<td>Dextroser 25%</td>
<td>16.5 grams</td>
<td></td>
</tr>
<tr>
<td>Diazepam IV / Rectal</td>
<td>6.6 mg / 10 mg</td>
<td></td>
</tr>
</tbody>
</table>
### TAB 5 GUIDELINE 2
#### ABDOMINAL PAIN

**HISTORY**
- Age
- Past medical / surgical history
- Medications
- Onset
- Palliation / Provocation
- Quality (crampy, constant, sharp, dull, etc)
- Region / Radiation / Referred
- Severity (1-10)
- Time (duration / repetition)
- Fever
- Last meal eaten
- Last bowel movement
- Menstrual history (pregnancy)

**SIGNS / SYMPTOMS**
- Pain (location / migration)
- Tenderness
- Nausea
- Vomiting
- Diarrhea
- Dysuria
- Constipation
- Vaginal bleeding / discharge
- Pregnancy

**ASSOCIATED SYMPTOMS:**
- Fever, headache, weakness, malaise, myalgias, cough, headache, mental status changes, rash

**DIFFERENTIAL**
- Pneumonia or Pulmonary embolus
- Liver (hepatitis, CHF)
- Peptic ulcer disease / Gastritis
- Gallbladder / Pancreatitis
- Kidney stone
- Appendicitis / Diverticulitis
- Bladder / Prostate disorder
- Pelvic (PID, Ectopic pregnancy, Ovarian cyst)
- Spleen enlargement
- Bowel obstruction
- Gastroenteritis (infectious)

---

<table>
<thead>
<tr>
<th><strong>Universal Patient Care</strong></th>
<th><strong>Make NPO</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IV / IO Access</strong></td>
<td><strong>Hypotension / Signs of Dehydration</strong></td>
</tr>
<tr>
<td><strong>YES</strong></td>
<td><strong>NO</strong></td>
</tr>
<tr>
<td><strong>Fluid Bolus</strong> 20 mL / Kg NS (PRN)</td>
<td><strong>Nausea / Vomiting</strong></td>
</tr>
<tr>
<td><strong>NO</strong></td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td><strong>SBP ≥ 90 mmHg</strong></td>
<td><strong>NO</strong></td>
</tr>
</tbody>
</table>

**Minimum Systolic BP by Age**
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 x age in years)
- ≥ 10 y: 90 mmHg

**Contact Medical Control**
Transport to appropriate facility

**Pediatric Pain Control Guideline**

**LEGEND**
- EMT-P
- Nurse
- MC Order

Zofran 0.1 mg / Kg (max 4 mg) SL / PO / IV / IN / IM
Phenergan (> 6 yo) 6.25 mg IM (> 12 yo) 12.5 mg IM

Hypotension / Signs of Dehydration

NO

Fever, headache, weakness, malaise, myalgias, cough, headache, mental status changes, rash
## TAB 5 GUIDELINE 3
### ALLERGIC REACTION | ANAPHYLAXIS

#### HISTORY
- Onset and location
- Insect sting or bite
- Food allergy / exposure
- Medication history / allergy / exposure
- New clothing, soap, detergent
- Past history of reactions
- Past medical history

#### SIGNS / SYMPTOMS
- Itching or hives
- Coughing / wheezing or respiratory distress
- Chest or throat constriction
- Difficulty swallowing
- Hypotension or shock
- Hypotension or shock / Edema
- Abdominal cramps

#### DIFFERENTIAL
- Urticaria (rash only)
- Anaphylaxis (systemic effect)
- Shock (vascular effect)
- Angioedema (drug induced)
- Aspiration / Airway obstruction
- Vasovagal event
- Asthma
- CHF

### LEGEND
- Nurse
- MC Order
- EMT-P
- Epinephrine 1:1,000
  - 0.01 mg / Kg IM
  - (maximum 0.3 mg)
- Solu Medrol
  - 1 mg / Kg slow IV / IO
  - (max 125 mg)
- Epinephrine 1:10,000
  - 0.01 mg / Kg IV / IO
  - (maximum 0.3 mg)
- Atrovent
  - 0.5 mg nebulized
- Albuterol (Wgt < 10 Kg)
  - 1.25 mg nebulized
- Albuterol (Wgt > 10 Kg)
  - 2.5 mg nebulized
  - (May repeat x 2)
- Diphenhydramine
  - 1 mg / Kg (max 50 mg)
  - PO / IV / IO / IM / IN
- Fluid Bolus
  - 20 mL / Kg NS or LR
- SBP < normal for age

### Universal Patient Care
- IV / IO Access
- Cardiac Monitor
  - Assess Rhythm
- Hives / Rash Only
  - No Respiratory Component
- Diphenhydramine
  - 1 mg / Kg (max 50 mg)
  - PO / IV / IO / IM / IN
- Reassess Patient
- Patient Improved
- Patient Not Improved

### Respiratory Distress / Shock
- Pulse Oximetry
  - Airway Management
- Diphenhydramine
  - 1 mg / Kg (max 50 mg)
  - PO / IV / IO / IM / IN
- Epinephrine 1:1,000
  - 0.01 mg / Kg IM
  - (maximum 0.3 mg)
- Epinephrine 1:10,000
  - 0.01 mg / Kg IV / IO
  - (maximum 0.3 mg)
- Epinephrine drip
  - 0.01 – 1 mcg / kg / min IV

### Indications for Use of Epinephrine
- Shock
  - Absent or weak pulses
  - Rapid heartbeat
  - Decreased blood pressure [SBP < 70 + (2 x age) mmHg]
  - Deteriorating mental status

- Respiratory Compromise
  - Airway occlusion
  - Breathy difficulty or inadequate breathing with possible wheezing, stridor, or crowing

### Minimum Systolic BP by Age
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 x age in years)
- ≥ 10 y: 90 mmHg

### Minimum Systolic BP by Age
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 x age in years)
- ≥ 10 y: 90 mmHg

- Contact Medical Control
- Transport to appropriate facility
SPECIAL CONSIDERATIONS:

1. Patients with allergic reactions can deteriorate quickly. Airway is a prime concern.

2. Epinephrine (via Auto-Injector) should be administered for:
   a. **Respiratory Compromise**
      i. Airway occlusion
      ii. Breathy difficulty or inadequate breathing with possible wheezing, stridor, or crowing
   b. **Shock**
      i. Absent or weak pulses
      ii. Rapid heartbeat
      iii. Decreased blood pressure (SBP < 90 mmHg)
      iv. Deteriorating mental status

3. Lethal edema may be localized to the tongue, uvula or other upper airway structures. Examine closely and be prepared to intubate early before swelling occurs. Nasal tracheal intubation may be preferred.

4. Any patient with respiratory symptoms or extensive reaction should receive IV or IM diphenhydramine (Benadryl).
   a. **Pediatric Generalized Dosing Guidelines – Diphenhydramine (Benadryl)**
      i. 2 – 5 years 6.25 mg
      ii. 6 – 11 years 12.5 – 25 mg
      iii. > 12 years 25 – 50 mg
**TAB 5 GUIDELINE 4**

### ALTERED MENTAL STATUS

#### HISTORY
- < 16 years of age
- Known diabetic, medic alert tag
- Drugs, drug paraphernalia
- Report of illicit drug use or toxic ingestion
- Past medical history
- Medications
- History of trauma

#### SIGNS / SYMPTOMS:
- Decreased mental status
- Change in baseline mental status
- Bizarre behavior
- Hypoglycemia
  - Cool, diaphoretic skin
  - Hyperglycemia
  - Warm, dry skin
  - Fruity breath
  - Kussmaul respirations
  - Signs of dehydration

#### DIFFERENTIAL
- Head trauma
- CNS (stroke, tumor, seizure, infection)
- Cardiac (MI, CHF)
- Pulmonary (hypoxia)
- Infection
- Thyroid (hyper / hypo)
- Shock (septic, metabolic, traumatic)
- Diabetes (hyper / hypoglycemia)
- Toxicologic / Electrolyte abnormality
- Acidosis / Alkalosis
- Environmental exposure
- Psychiatric disorder

---

**Universal Patient Care**

- **Spinal Immobilization** (if necessary)
- **IV / IO Access**
- **Check Blood Glucose**

**Glucose < 60**
- **10% Dextrose** 5 – 10 mL / Kg IV / IO
  - Max 100 ml (10 grams)
  - q 3 – 5 minutes
  - D10 not available then -
  - 25% Dextrose (> 10 Kg)
  - 2 – 4 mL / Kg IV / IO

If no IV / IO access
- **Glucagon** (0.5 mg < 25 Kg) IN / IM
  - (1 mg > 25 Kg) IN / IM

Return to Baseline

**Glucose 60 – 250**
- **Consider other causes:**
  - BRUE
  - Head injury
  - Hypoxia
  - Overdose
  - Stroke

**Cardiac Monitor / 12-Lead ECG**

Assess Rhythm

**Glucose > 250**
- **Signs of Dehydration**
  - Fluid Bolus
  - 20 mL / Kg IV / IO

- **Consider Use of Restraints**

---

**LEGEND**

- EMT-P
- Nurse
- MC Order

**Nurse**

**MC Order**

**EMT-P**

**Combative Patient**

Consider Behavioral Guideline

---

**HISTORY**

- < 16 years of age
- Known diabetic, medic alert tag
- Drugs, drug paraphernalia
- Report of illicit drug use or toxic ingestion
- Past medical history
- Medications
- History of trauma

**SIGNS / SYMPTOMS:**

- Decreased mental status
- Change in baseline mental status
- Bizarre behavior
- Hypoglycemia
  - Cool, diaphoretic skin
  - Hyperglycemia
  - Warm, dry skin
  - Fruity breath
  - Kussmaul respirations
  - Signs of dehydration

**DIFFERENTIAL**

- Head trauma
- CNS (stroke, tumor, seizure, infection)
- Cardiac (MI, CHF)
- Pulmonary (hypoxia)
- Infection
- Thyroid (hyper / hypo)
- Shock (septic, metabolic, traumatic)
- Diabetes (hyper / hypoglycemia)
- Toxicologic / Electrolyte abnormality
- Acidosis / Alkalosis
- Environmental exposure
- Psychiatric disorder

---

**Minimum Systolic BP by Age**

- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 × age in years)
- ≥ 10 y: 90 mmHg
### TAB 5 GUIDELINE 5

#### BEHAVIORAL | EXCITED DELIRIUM

<table>
<thead>
<tr>
<th>HISTORY</th>
<th>SIGNS / SYMPTOMS</th>
<th>DIFFERENTIAL</th>
</tr>
</thead>
</table>
| • < 16 years of age or > 5 years of age  
• Situational crisis  
• Psychiatric illness / medications  
• Injury to self or threats to others  
• Medic alert tag  
• Substance abuse / overdose  
• Diabetes | • Anxiety, agitation, confusion  
• Affect change, hallucinations  
• Delusional thoughts, bizarre behavior  
• Expression of suicidal / homicidal thoughts  
• Poor concentration, easily distracted, psychosis  
• Combative, violent  
• Large pupils / light sensitivity  
• Tachycardic / Hypertension | • See Altered Mental Status differential  
• Hypoxia  
• Alcohol intoxication  
• Medication effect / overdose  
• Withdrawal syndromes  
• Depression  
• Bipolar (manic-depressive)  
• Schizophrenia, anxiety disorders, etc. |

#### Differential Diagnosis
- See Altered Mental Status differential
- Hypoxia
- Alcohol intoxication
- Medication effect / overdose
-Withdrawal syndromes
-Depression
-Bipolar (manic-depressive)
-Schizophrenia, anxiety disorders, etc.

#### Treatment Plan

1. **Universal Patient Care**
   - **Glucose ≤ 60**
     - **Check Blood Glucose**
     - **Treat suspected medical or trauma problems per appropriate protocol**
     - **Altered Mental Status**
     - **Poisoning and Overdose**
     - **Head Trauma**

2. **Remove patient from stressful environment**
   - **Verbal techniques**
     - (reassurance, calm, establish rapport)
   - **Rapid take-down w/ minimum (4) EMS crew members (If necessary)**
   - **Consider Restraints (for patient / personnel safety)**

3. **IV / IO Access**
   - **Fluid Bolus 20 mL / Kg**
   - **Consider**
     - **Ketamine**
       - 4 mg / Kg IM (max 400 mg)
       - or 2 mg / Kg IV (max 200 mg)
     - **Haloperidol**
       - 0.05 mg / kg (Max 5 mg) IM
       - (may repeat in 5 min)
     - **Diphenhydramine**
       - 1 mg / Kg (Max 25 mg) IM / IN
     - **Midazolam**
       - 0.1 mg / Kg IM / IN
       - (may repeat q 5 max 10 mg)

4. **Cardiac Monitor / 12-Lead EKG**
   - **Assess Rhythm**
   - **EKG Interpretation**
   - **Monitor Respiratory status, consider EtCO2**
   - **Contact Medical Control**
   - **Transport to appropriate facility**

#### Minimum Systolic BP by Age
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 × age in years)
- ≥ 10 y: 90 mmHg

#### Restraints
- No transport in hobble or prone position.
- Do not inhibit patient breathing, ventilations
SPECIAL CONSIDERATIONS:

1. Excited delirium is an extreme disturbance of consciousness and mental status that occurs in individuals especially when under the influence of stimulants or anti-psychotic medications and it represents an acute **LIFE THREATENING MEDICAL EMERGENCY**
   a. Combination of delirium, psychomotor agitation, anxiety, hallucinations, speech disturbances, disorientation, violent / bizarre behavior, insensitivity to pain, hyperthermia and increased strength. Potentially life-threatening and associated with use of physical control measures, including physical restraints and Tasers
      i. Need rapid take down, sedation, cooling measures and IV fluid replacement. These patients often suffer respiratory or cardiac arrest once subdued and should be closely monitored and transported by an ALS Unit to closest appropriate facility
   b. Most commonly seen in male subjects with a history of serious mental illness and/or acute or chronic drug abuse, particularly stimulant drugs such as cocaine, crack cocaine, methamphetamine, amphetamines or similar agents
   c. Alcohol withdrawal or head trauma may also contribute to the condition

2. Maintain objectivity during evaluation and treatment. Verbal aggression exhibited by patients can quickly escalate to physical violence. Always proceed with calm, reassuring directions for the patient. If a situation appears threatening, sufficient law enforcement presence may be necessary before patient restraint is attempted
   a. If needing to take the patient down, at minimum, utilize (4) ems crew members / police officers to secure each limb
   b. **If a patient suspected of excited delirium suffers cardiac arrest, consider a fluid bolus and sodium bicarbonate early**

3. Patients requiring physical restraint should be placed in the lateral recumbent position when possible. Consider your own safety and limitations when physical restraint is required.
   a. Restrained patients should never be left unattended. Continue to evaluate effectiveness of restraints and any compromise that may be caused by the restraint process (i.e., airway, breathing, circulation)
   b. Positional asphyxia – very large ventilation volumes are needed to oxygenate and blow off carbon dioxide overload. They should never be left prone or face down in handcuffs and should never by “hog-tied”

4. Do not overlook the possibility of associated domestic violence or abuse

5. Richmond Agitation-Sedation Scale
a. Validated agitation-sedation scale from age 2 months and older

b. Goal is for RASS between (0) to (-1)

<table>
<thead>
<tr>
<th>Score</th>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ 4</td>
<td>Combative</td>
<td>Overtly combative or violent; immediate danger to staff</td>
</tr>
<tr>
<td>+ 3</td>
<td>Very agitated</td>
<td>Pulls on or removes tube(s) or catheter(s) or has aggressive behavior toward staff</td>
</tr>
<tr>
<td>+ 2</td>
<td>Agitated</td>
<td>Frequent nonpurposeful movement or patient–ventilator dyssynchrony</td>
</tr>
<tr>
<td>+ 1</td>
<td>Restless</td>
<td>Anxious or apprehensive but movements not aggressive or vigorous</td>
</tr>
<tr>
<td>0</td>
<td>Alert and Calm</td>
<td>Spontaneously pays attention to caregiver</td>
</tr>
<tr>
<td>- 1</td>
<td>Drowsy</td>
<td>Not fully alert, but has sustained (more than 10 seconds) awakening, with eye contact, to voice</td>
</tr>
<tr>
<td>- 2</td>
<td>Light Sedation</td>
<td>Briefly (less than 10 seconds) awakens with eye contact to voice</td>
</tr>
<tr>
<td>- 3</td>
<td>Moderate Sedation</td>
<td>Any movement (but no eye contact) to voice</td>
</tr>
<tr>
<td>- 4</td>
<td>Deep Sedation</td>
<td>No response to voice, but any movement to physical stimulation</td>
</tr>
<tr>
<td>- 5</td>
<td>Unarousable</td>
<td>No response to voice or physical stimulation</td>
</tr>
</tbody>
</table>
TAB 5 GUIDELINE 6
BRIEF RESOLVED UNEXPLAINED EVENT (BRUE)

1. Specific information needed
   a. An episode in an infant or child less than (2) two years old which is frightening to the observer and is characterized by one or more of the following:
      i. Apnea (central or obstructive)
      ii. Skin color change: cyanosis, erythema (redness), pallor, plethora (fluid overload)
      iii. Marked change in muscle tone
      iv. Choking or gagging not associated with feeding or a witnessed foreign body aspiration
      v. Seizure-like activity

2. Guideline
   a. Safe scene, universal precautions
   b. ABC (airway, breathing, circulation)
   c. Establish responsiveness (A.V.P.U)
   d. Check Vitals, Pulse Oximeter, Reassure patient
   e. Oxygen by cannula or NRB Mask to keep pulse ox greater than 92% (may have to assist ventilation)
   f. Attach cardiac monitor (monitor lead II); Identify rhythm and treat per guideline; Documentation of rhythm should be attached to run sheet
   g. Consider establishing IV / IO with Normal Saline. Administer 20 ml / kg fluid bolus.
   h. Contact on-line MEDICAL CONTROL and transport accordingly

SPECIAL CONSIDERATIONS:
1. Most patients will appear stable and exhibit a normal physical examination. This episode may be a sign of an underlying serious illness or injury and further evaluation by medical staff is strongly recommended.
2. Provider must explain the potential risks of refusal to the caretaker on scene.
3. In the event that the legal guardian is not with the patient and transport is being refused, it is recommended that the legal guardian should be contacted
4. Always consider the possibility of abuse in these children
### HISTORY
- Events leading up to incident
- Trauma
- Aspiration
- Medication
- Allergic reaction

### SIGNS / SYMPTOMS
- Anxiety
- No air movement
- Clutching throat
- Unresponsive
- Sore throat, fever,
  “Hot potato” voice, drooling

### DIFFERENTIAL
- Foreign Body
- Infection
- Cancer
- Trauma
- Laryngeal or tracheal fracture
- Oropharyngeal laceration

---

#### Universal Patient Care
- Signs of Airway Obstruction
- Conscious

**NO**

<table>
<thead>
<tr>
<th>Chest Compressions</th>
<th>Unresponsive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attempt breaths, if air does not enter retilt head and reattempt breaths</td>
<td></td>
</tr>
<tr>
<td>Check airway / perform finger sweep if see object</td>
<td></td>
</tr>
<tr>
<td>Airway Obstruction Cleared</td>
<td></td>
</tr>
</tbody>
</table>

**NO**

| Consider Needle Cricothyrotomy |
| Cardiac Arrest Guideline |
| Contact Medical Control |

**YES**

| Perform Abdominal Thrusts |
| Airway Obstruction Cleared |

**NO**

| Contact Medical Control |
| Transport to appropriate facility |

---

#### Mild Airway Obstruction Signs
- Good air exchange
- Responsive and can cough forcefully
- May wheeze between coughs

#### Severe Airway Obstruction Signs
- Poor or no air exchange
- Weak, ineffective cough or no cough at all
- High-pitched noise while inhaling or no noise at all
- Increased respiratory difficulty
- Possible cyanosis (turning blue)
- Unable to speak or move air
- Clutching the neck with the thumb and fingers
- Unresponsive
SPECIAL CONSIDERATIONS:

1. Use abdominal thrusts (the Heimlich maneuver) to relieve choking in children > 1 year of age. Give each individual thrust with the intent of relieving the obstruction. It may be necessary to repeat the thrust several times to clear the airway.

2. Choking victims initially may be responsive and then may become unresponsive. With a child choking victim who becomes unresponsive, open the airway, remove an object if you see it and begin CPR.

3. For a child victim, every time you open the airway to give breaths, open the victim’s mouth wide and look for the object. If you see an object, remove it with your fingers. If you do not see an object, keep doing CPR.

4. You can tell you have successfully removed an airway obstruction in the unresponsive victim if you:
   a. Feel air movement and see the chest rise when you give breaths
   b. See and remove a foreign body from the victim’s pharynx
TAB 5 GUIDELINE 8
FOREIGN BODY AIRWAY OBSTRUCTION – INFANT

HISTORY
• Events leading up to incident
• Trauma
• Aspiration
• Medication
• Allergic reaction

SIGN/SYMPOMS
• Anxiety
• No air movement
• Unresponsive
• Fever
• “Hot potato” voice, drooling

DIFFERENTIAL
• Foreign Body
• Infection
• Trauma
• Laryngeal or tracheal fracture
• Oropharyngeal laceration

---

Universal Patient Care

Legends
- EMT-P
- Nurse
- MC Order

HISTORY
- Events leading up to incident
- Trauma
- Aspiration
- Medication
- Allergic reaction

SIGN/SYMPTOMS
- Anxiety
- No air movement
- Unresponsive
- Fever
- “Hot potato” voice, drooling

DIFFERENTIAL
- Foreign Body
- Infection
- Trauma
- Laryngeal or tracheal fracture
- Oropharyngeal laceration

---

Initial Care

Universal Patient Care

Conscious

NOT

Chest Compressions

Attempt breaths, if air does not enter retilt head and reattempt breaths

Check airway / perform finger sweep if see object

Airway Obstruction Cleared

NOT

Unresponsive

Perform (5) Back blows / (5) Chest Compression Maneuver

Airway Obstruction Cleared

Cardiac Arrest Guideline

Consider Needle Cricothyrotomy

Mild Airway Obstruction Signs
- Good air exchange
- Responsive and can cough forcefully
- May wheeze between coughs

Severe Airway Obstruction Signs
- Poor or no air exchange
- Weak, ineffective cough or no cough at all
- High-pitched noise while inhaling or no noise at all
- Increased respiratory difficulty
- Possible cyanosis (turning blue)
- Unable to speak or move air
- Clutching the neck with the thumb and fingers
- Unresponsive

NOT

YES

PULSE

Contact Medical Control

Transport to appropriate facility

---
SPECIAL CONSIDERATIONS:

1. Clearing an object from an infant’s airway requires a combination of back slaps and chest thrusts.

2. Do not perform blind finger sweeps in infants and children because the foreign body may be pushed back into the airway, causing further obstruction or injury.

3. If the victim becomes unresponsive, you will stop giving back slaps and will begin CPR. Chest compressions give effective pressure in the chest and may be able to relieve the obstruction.
**TAB 5 GUIDELINE 9**

**HYPOTENSION (SHOCK)**

### HISTORY
- < 16 years of age
- Blood loss
- Fluid loss
- Vomiting
- Diarrhea
- Infection

### SIGNS / SYMPTOMS
- Restlessness, confusion, weakness
- Dizziness
- Increased HR, rapid pulse
- Decreased BP
- Pale, cool, clammy skin
- Delayed capillary refill

### DIFFERENTIAL
- Trauma
- Infection
- Dehydration
- Vomiting
- Diarrhea
- Fever
- Congenital heart disease
- Medication or Toxin

### Universal Patient Care
- Re-evaluate blood pressure
- Hypotension is defined as a SBP < 70 + (age in years x 2) mmHg

### IV / IO Access
- Evidence or History of Trauma
- Evidence or History of CHF or requiring PGE1

### Pediatric Trauma Guideline
- YES

### Cardiogenic Shock Guideline
- YES

### Minimum Systolic BP by Age
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 × age in years)
- ≥ 10 y: 90 mmHg

### Glucose < 60
- 10% Dextrose
  - 5 – 10 mL / Kg IV / IO
  - Max 100 ml (10 grams)
  - q 3 – 5 minutes
- D10 not available then
- 25% Dextrose (> 10 Kg)
  - 2 – 4 mL / Kg IV / IO
- If no IV / IO access
- Glucagon
  - (0.5 mg < 25 Kg) IN / IM
  - (1 mg > 25 Kg) IN / IM

### Glucose ≥ 60
- Fluid Bolus
  - 20 mL / Kg IV / IO
  - (repeat PRN)

### Consider Norepinephrine
- Initial dose of 0.05 – 0.1 mcg / Kg / min
  - or –
- Dopamine
  - 5 – 20 mcg / Kg / min
  - Titrate for SBP > 90 mmHg

### Epinephrine drip
- 0.01 – 1 mcg / Kg / min IV

### Solu Medrol
- 1 mg / Kg slow IV / IO
  - (max 125 mg)

### Contact Medical Control
- Transport to appropriate facility

---

**LEGEND**
- EMT-P
- Nurse
- MC Order

---

**HISTORY**
- < 16 years of age
- Blood loss
- Fluid loss
- Vomiting
- Diarrhea
- Infection

**SIGNS / SYMPTOMS**
- Restlessness, confusion, weakness
- Dizziness
- Increased HR, rapid pulse
- Decreased BP
- Pale, cool, clammy skin
- Delayed capillary refill

**DIFFERENTIAL**
- Trauma
- Infection
- Dehydration
- Vomiting
- Diarrhea
- Fever
- Congenital heart disease
- Medication or Toxin
SPECIAL CONSIDERATIONS:

1. Dehydration Scale

<table>
<thead>
<tr>
<th>Score</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Normal</td>
<td>Thirsty, restless, sleepy, irritable</td>
<td>Drowsy, limp, cold, may comatose</td>
</tr>
<tr>
<td>Eye</td>
<td>Normal</td>
<td>Slightly sunken</td>
<td>Deeply sunken</td>
</tr>
<tr>
<td>Tongue</td>
<td>Moist</td>
<td>Sticky</td>
<td>Dry</td>
</tr>
<tr>
<td>Tears</td>
<td>Present</td>
<td>Decreased</td>
<td>Absent Tears</td>
</tr>
</tbody>
</table>

2. Maintenance fluid is calculated using the 4-2-1 rule
   a. 1st 10 kg of body weight x 4 ml
   b. 2nd 10 kg of body weight x 2 ml
   c. Remaining kg of body weight x 1 ml
   d. Example for 40 kg person
      i. 10 kg x 4 ml = 40 ml
      ii. 10 kg x 2 ml = 20 ml
      iii. 20 kg x 1 ml = 20 ml
      iv. Total maintenance fluid = 80 ml
3. Consider transfer of pediatric patients to ECMO center for refractory shock
TAB 5 GUIDELINE 10
INFANT ABANDONMENT (OPERATION SAFE HAVEN)

Dispatch may receive calls requesting evaluation of an infant (< 30 days old) who has been delivered by parent(s) to any fire or police station. (Pursuant to ORC 2152.3515 et. Seq., effective 03/24/2009 and local safety service entity agreement).

- EMS provider shall be dispatched to perform any evaluation or intervention necessary to protect the infant’s health or safety, and
- Transport the child to the closest appropriate hospital emergency department.

Emergency Medical Services Workers Obligations to Whom a Child which is Less Than 30 Days Old is Delivered (ORC 2151.3515 et.seq. Effective 03/24/2009)

While acting in their official capacity an EMS provider (EMR, EMT, AEMT or Paramedic) on behalf of the Emergency Services Organization (as defined by 4765.01) that employs the worker or for which the worker provides services, shall take possession of a child who is seventy-two hours old or younger if that child’s parent has voluntarily delivered the child to that person without the parent expressing an intent to return for the child.

Upon taking possession of the child the Emergency Services Organization shall do all of the following:

1. Perform any act necessary to protect the child’s health or safety;
2. Notify EMS Dispatch that the child has been taken into possession;
3. When forms developed by the Ohio Department of Jobs and Family Service (ODJFS) are available designed to gather medical information concerning the child and the child’s parents, provide such to surrendering parent;
4. If available, offer written materials developed by ODJFS that describe services available to assist parents and newborns;
5. Only if the child appears to have a condition which reasonably indicates physical or mental abuse or neglect- attempt to identify and, if necessary, pursue the person who delivered the child;
EMS Workers Shall Not:

1. Coerce or otherwise try to force the caregiver into revealing the identity of the child’s parents;
2. Pursue or follow the caregiver after the caregiver leaves the place at which the child was delivered;
3. Coerce or otherwise try to force the caregiver / parent not to desert the child;
4. Coerce or otherwise try to force the caregiver / parent to accept the medical information forms promulgated by the ODJFS;
5. Coerce or otherwise try to force caregiver / parent to accept materials promulgated by the ODJFS;

Items (1) and (2) above do not apply to a person who delivers or attempts to deliver a child who has suffered any physical or mental wound, injury, disability, or condition of a nature that reasonably indicates abuse or neglect of the child.
**TAB 5 GUIDELINE 11**

**POISONING | OVERDOSE | TOXIC INGESTION**

<table>
<thead>
<tr>
<th>HISTORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>• &lt; 16 years of age</td>
</tr>
<tr>
<td>• Ingestion or suspected ingestion of a potentially toxic substance</td>
</tr>
<tr>
<td>• Substance ingested, route, quantity</td>
</tr>
<tr>
<td>• Time of ingestion</td>
</tr>
<tr>
<td>• Reason (suicidal, accidental, criminal)</td>
</tr>
<tr>
<td>• Available medication in home</td>
</tr>
<tr>
<td>• Past medical history, medications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SIGNS / SYMPTOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mental status changes</td>
</tr>
<tr>
<td>• Hypotension / Hypertension</td>
</tr>
<tr>
<td>• Decreased respiratory rate</td>
</tr>
<tr>
<td>• Tachycardia, dysrhythmias</td>
</tr>
<tr>
<td>• Seizures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIFFERENTIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tricyclic antidepressants (TCAs)</td>
</tr>
<tr>
<td>• Acetaminophen (Tylenol)</td>
</tr>
<tr>
<td>• Depressants</td>
</tr>
<tr>
<td>• Stimulants</td>
</tr>
<tr>
<td>• Anticholinergic</td>
</tr>
<tr>
<td>• Cardiac medications</td>
</tr>
<tr>
<td>• Solvents, alcohols, cleaning agents</td>
</tr>
<tr>
<td>• Insecticides (organophosphates)</td>
</tr>
</tbody>
</table>

### Appropriate Guideline

**Universal Patient Care**

- **Cardiac Monitor**
- **IV / IO Access**
  - Fluid Bolus 20 mL / Kg
- **Altered Mental Status**
  - Blood Sugar < 60 mg / dl
  - Respiratory Depression
- **Beta Blocker**
- **Calcium Channel Blocker**
- **CO Poisoning**
- **Cyanide**
- **Organophosphate / Nerve Agent**
- **Tricyclic Antidepressant**
  - (Cardiac Arrhythmia???)
- **Other**

**Contact Medical Control**

**Transport to appropriate facility**

**10% Dextrose**

- 5 – 10 mL / Kg IV / IO
- Max 100 mL (10 grams)
- q 3 – 5 minutes
- D10 not available then - 25%
- Dextrose (> 10 Kg)
- 2 – 4 mL / Kg IV / IO

**Glucagon**

- (0.5 mg < 25 Kg) IN / IM
- (1 mg > 25 Kg) IN / IM

**Naloxone**

- 0.1 mg / Kg IV / IO / IM / IN

**Glucagon**

- IV / IN / IM
  - (0.5 mg < 25 Kg)
  - (1.0 mg > 25 Kg)

**Calcium Gluconate (10%)**

- 20 mg / Kg slow IV / IO

**Calcium Gluconate (10%)**

- 20 mg / Kg slow IV / IO

**Naloxone**

- 0.1 mg / Kg IV / IO / IM / IN

**Amyl Nitrite**

- 0.3 ml in 4 x 4
  - Hold q 30 sec / minute

**Hydroxycobalamin**

- 5 grams IV / IO over 10 min

**Atropine**

- 0.02 mg / Kg IV / IO
  - (Minimum 0.1 mg)

**Sodium Bicarbonate**

- 1 mEq / Kg IV / IO

**HYPERSENSITIVITY**

- Hypotension, Seizures, Ventricular dysrhythmias, or Mental status changes

**Minimum Systolic BP by Age**

- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 × age in years)
- ≥ 10 y: 90 mmHg

**LEGEND**

- EMT-P
- Nurse
- MC Order
SPECIAL CONSIDERATIONS:

1. General:
   a. For this guideline, the pediatric patient is defined as < 16 years of age with suspected
      overdose or toxic ingestion.
   b. Contact Poison Control Center 1-800-222-1222 if necessary.
   c. Do not induce vomiting for.
      i. Hydrocarbons.
      ii. Strong acids.
      iii. Strong base iodides.
      iv. Silver nitrate.
      v. Strychnine.
      vi. Who are not alert.
   d. Do not neutralize acids with alkali or Do not neutralize alkali with acids.
   e. Product labels and home kits may be misleading and dangerous.
   f. All empty containers of ingested material should accompany patient to the hospital.
   g. Do not rely on patient history of ingestion, especially in suicide attempts.
   h. For blood glucose values < 60mg/dl, administer Dextrose (1-2mL/kg IV).
      i. The following Dextrose concentrations and dosing are recommended:
         1. Pediatrics < 10 kg – Dextrose 10 % give 5 – 10 mL / Kg.
         2. Pediatrics > 10 kg – Dextrose 25 % give 2 – 4 mL / Kg.

2. Maximum drug dosages:
   a. Atropine = 2 mg / dose (minimum 0.1mg)
   b. Calcium Chloride = 1 Gram
   c. Glucagon = 1 mg
   d. Narcan = 2 mg
   e. Sodium Bicarbonate = 50 mEq

3. Overdose / Ingestion concerns:
   a. Acetaminophen – Initial presentation normal or nausea/vomiting. If not detected and
      treated, will cause irreversible liver failure
   b. Anticholinergic – increased HR, increased temperature, dilated pupils, mental status
      changes
   c. Cardiac Meds – dysrhythmias and mental status changes
d. **Depressants** – decreased HR, decreased BP, decreased temperature, decreased respirations, non-specific pupils

e. **Insecticides** – increased or decreased HR, increased secretions, nausea, vomiting, diarrhea, pinpoint pupils

f. **Solvents** – nausea, vomiting, and mental status changes

g. **Stimulants** – increased HR increased BP, increased temperature, dilated pupils, seizures

h. **Tricyclics** – 4 major areas of toxicity: seizures; dysrhythmias; hypotension; decreased mental status or coma; rapid progression from alert mental status to death
### TAB 5 GUIDELINE 12
#### POISONING | OVERDOSE | OPIATE

<table>
<thead>
<tr>
<th>HISTORY</th>
<th>SIGNS / SYMPTOMS</th>
<th>ENVIRONMENT</th>
</tr>
</thead>
</table>
| • What type of ingestion  
• When did ingestion occur  
• How Much  
• Reason for ingestion  
• Actions of bystanders  
• Previous psychiatric disorders  
• Diseases / Medications: ie depressants  
• Medical alert tags  | • Increased salivation  
• Soot or burns in mouth  
• Irritation of the eyes  
• Sweating and skin burns  
• Decreased respiratory rate  
• Lung findings (ie edema)  
• Delayed capillary refill  
• Tachycardia / Arrhythmias  
• Seizures  | • Acetaminophen  
• Anticholinergic  
• Aspirin  
• Cardiac medications  
• Insecticides (organophosphates)  
• Solvents, alcohols, cleaning agents  
• Stimulants  |

#### Universal Patient Care

| Exposure control  
(PPE = Non-Porous Gloves / Eye Protection / N95 Mask / Gown)  | Ensure crew safety  
Avoid evidence tampering  |  

|  

|  

| Apply Pulse Ox  
Administer Oxygen for Saturation < 94%  | Airway Management  |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Check Blood Glucose</td>
<td>Glucose ≤ 60</td>
</tr>
<tr>
<td>Cardiac Monitor / 12-Lead ECG</td>
<td></td>
</tr>
</tbody>
</table>
Assess Rhythm  |  
IV / IO Access  |
| Altered Mental Status  
Presumed Opiate Overdose  
Respiratory Rate ≤ 8  |  
10% Dextrose  
5 – 10 mL / Kg IV / IO  
Max 100 mL (10 grams)  
q 3 – 5 minutes  
- D10 not available then –  
25% Dextrose (> 10 Kg)  
2 – 4 mL / Kg IV / IO  |
| Glucagon  
(0.5 mg < 25 Kg) IN / IM  
(1 mg > 25 Kg) IN / IM  |  
Naloxone 0.1 mg / Kg IN  
(administer max dose 0.5 mg / dose every 1 – 2 minutes)  |
| Naloxone 0.1 mg / Kg IV / IO / IM  
(administer max dose 0.5 mg / dose every 1 – 2 minutes)  |  
May repeat to max 8 mg  |

| Contact Medical Control  | Transport to appropriate facility  
Decontaminate Ambulance and Equipment after Transport  |  
Minimum Systolic BP by Age  
• < 1 mo: 60 mmHg  
• 1 mo to 10 y: 70 + (2 × age in years)  
• ≥ 10 y: 90 mmHg  |
SPECIAL CONSIDERATIONS:

1. The main focus for treatment is to ensure proper respiratory and oxygen saturation status. The goal is “NOT TO WAKE” the patient up, but to ensure adequate oxygenation and ventilation. Naloxone administration should be at no more than 0.5 mg aliquots every 1 – 2 minutes. While naloxone is being administered ensure that proper ventilation is being performed with bag-valve mask and oxygen.

2. All suspected patients with opiate overdose should be handled using non-porous type gloves (nitrile style, non-latex) and eye protection. Consider wearing N-95 mask and gowns for any patient that has visible powder on body, or if there is visible powder in patient care area.

3. All pediatric patients with suspected opiate overdose MUST BE transported for continued monitoring and medical.

4. Vehicle and Equipment Decontamination
   a. Any concern for opiate contamination within the vehicle or on the equipment should be cleaned using N95 mask with non-porous type gloves (nitrile style, non-latex) and eye protection.
   b. Spill Clean Up Instructions
      i. Wear appropriate PPE
      ii. Add one teaspoon full of powder OxiClean™ to 500 mL water
      iii. Shake gently until all powder is in solution
      iv. Completely cover spill with spray
      v. Within 15 minutes, scrub with a paper towel until dry (solution evaporates over time and this decreases the effectiveness of decontamination)
      vi. All PPE (except goggles) and paper towels must be disposed of in a biohazardous waste bin.
TAB 5 GUIDELINE 13
PSYCHIATRIC PATIENT

**HISTORY**
- Situational crisis
- Psychiatric illness / medications
- Injury to self or threats to others
- Medic alert tag
- Substance abuse / overdose
- Diabetes

**SIGNS / SYMPTOMS**
- Anxiety, agitation, confusion
- Affect change, hallucinations
- Delusional thoughts, bizarre behavior
- Expression of suicidal / homicidal thoughts
- Poor concentration, easily distracted, psychosis
- Combative, violent

**DIFFERENTIAL**
- See Altered Mental Status differential
- Hypoxia
- Alcohol intoxication
- Medication effect / overdose
- Withdrawal syndromes
- Depression
- Bipolar (manic-depressive)
- Schizophrenia, anxiety disorders, etc.

---

**Universal Patient Care**
- Remove patient from stressful environment

**YES**
- Consider

**Midazolam**
- 0.1 mg / kg IM / IN (may repeat q 5 max 5 mg)
- or- Alternative Benzodiazepine Equivalent

**Haldol**
- 0.05 mg / kg IM (Age 6 – 12) (max 5 mg)
- 5 mg IM (Age > 12)

---

**Patient having anxiety attack**
- Verbal techniques (reassurance, calm, establish rapport)

**Patient Depressed / Suicidal / Homicidal**
- Rapid take-down w/ minimum (4) EMS crew members (If necessary)

**Consider Restraints**
- (for patient / personnel safety)

**Check Blood Glucose**
- Glucose < 60

**Minimum Systolic BP by Age**
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 × age in years)
- ≥ 10 y: 90 mmHg

---

**LEGEND**
- EMT-P
- Nurse
- MC Order

---

**MINIMUM SISTOLIC BP BY AGE**
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 × age in years)
- ≥ 10 y: 90 mmHg

---

**LEGEND**
- EMT-P
- Nurse
- MC Order
SPECIAL CONSIDERATIONS:

1. Richmond Agitation-Sedation Scale
   a. Validated agitation-sedation scale from age 2 months and older
   b. Goal is for RASS between (0) to (-1)

<table>
<thead>
<tr>
<th>Score</th>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ 4</td>
<td>Combative</td>
<td>Overtly combative or violent; immediate danger to staff</td>
</tr>
<tr>
<td>+ 3</td>
<td>Very agitated</td>
<td>Pulls on or removes tube(s) or catheter(s) or has aggressive behavior toward staff</td>
</tr>
<tr>
<td>+ 2</td>
<td>Agitated</td>
<td>Frequent nonpurposeful movement or patient–ventilator dyssynchrony</td>
</tr>
<tr>
<td>+ 1</td>
<td>Restless</td>
<td>Anxious or apprehensive but movements not aggressive or vigorous</td>
</tr>
<tr>
<td>0</td>
<td>Alert and Calm</td>
<td>Spontaneously pays attention to caregiver</td>
</tr>
<tr>
<td>- 1</td>
<td>Drowsy</td>
<td>Not fully alert, but has sustained (more than 10 seconds) awakening, with eye contact, to voice</td>
</tr>
<tr>
<td>- 2</td>
<td>Light Sedation</td>
<td>Briefly (less than 10 seconds) awakens with eye contact to voice</td>
</tr>
<tr>
<td>- 3</td>
<td>Moderate Sedation</td>
<td>Any movement (but no eye contact) to voice</td>
</tr>
<tr>
<td>- 4</td>
<td>Deep Sedation</td>
<td>No response to voice, but any movement to physical stimulation</td>
</tr>
<tr>
<td>- 5</td>
<td>Unarousable</td>
<td>No response to voice or physical stimulation</td>
</tr>
</tbody>
</table>

2. Mental Health Holds (Pink Slip)
   a. If a patient has an isolated mental health complaint (e.g. suicidality), and does not have a medical complaint or need specific medical intervention, then that patient may be appropriately transported by law enforcement according to their guidelines.
   b. If a patient has a psychiatric complaint with associated illness or injury (e.g. overdose, altered mental status, chest pain, etc), then the patient should be transported by EMS.
   c. If a patient with a psychiatric complaint is intoxicated or otherwise lacks decision making capacity for any other reason, than no Mental Health Hold is needed and such a patient should be brought to an emergency department for evaluation and stabilization with implied consent.
   d. If EMS is called to evaluate a patient with an isolated psychiatric complaint who is not intoxicated, or otherwise lacking decision making capacity, and who refuses treatment or transport, and law enforcement are not willing to transport patient, then EMS should contact MEDICAL CONTROL.
i. If there is a reasonable concern for suicidal or homicidal ideation, or grave disability from another mental health condition, then **MEDICAL CONTROL** may give a verbal order placing the patient on a Mental Health Hold and direct EMS personnel to transport the patient against his or her will in accordance with State of Ohio statutes.

ii. The physician’s name, and time and date of the Mental Health Hold must be recorded on the PCR. Effort should be made to obtain consent for transport from the patient, and to preserve the patient’s dignity throughout the process.

e. A patient being transported on a Mental Health Hold may be transported to any appropriate receiving emergency department
TAB 5 GUIDELINE 14
RESPIRATORY DISTRESS

HISTORY
- < 16 years of age
- Time of onset
- Possibility of foreign body
- Medical history
- Medications
- Fever or respiratory infection
- Other sick siblings
- History of trauma

SIGNS / SYMPTOMS
- Wheezing or stridor
- Respiratory retractions
- Increased heart rate
- Altered level of consciousness
- Anxious appearance

DIFFERENTIAL
- Asthma
- Aspiration
- Foreign body
- Infection
  - Pneumonia
  - Croup
  - Epiglottitis
  - Congenital heart disease
  - Medication or toxin
  - Trauma

LEGEND
- Nurse
- MC Order
- EMT-P

Universal Patient Care

YES
Respiratory Insufficiency

NO
Position of patient comfort

Airway Management

Pulse Oximetry

Cardiac Monitor

Assess Rhythm

Wheezing

Age < 18 months with 1st wheeze
- Albuterol 1.25 mg nebulized
  Wgt < 10 Kg
- Albuterol 2.5 mg nebulized
  Wgt > 10 Kg
  (May repeat x 2)

Severe symptoms
- Hypoxia despite O₂
- Severe retractions
- Cyanosis
- Altered LOC

Nebulized Epi (1:1000)
0.25 mL / Kg with 2 mL NS

Wheezing

Age > 18 months or history of wheeze
- Albuterol 2.5 mg nebulized
  (May repeat x 2)
  Wgt > 10 Kg
- Atrovent 0.25 mg nebulized with
  1st or 2nd albuterol treatment
  (children age 5 - 12)
- Atrovent 0.5 mg nebulized
  (children age > 12)

Stridor / Croup

3 mL Normal Saline
Nebulized -or- Epinephrine (1:1000)
0.25 mL / Kg nebulized -or-
Racemic Epi 0.5 ml with 3 mL
Normal Saline nebulized

IV / IO Access

Severe symptoms
- Stridor at rest
- Severe retractions
- Cyanosis
- Altered LOC

Contact Medical Control
Transport to appropriate facility

Minimum Systolic BP by Age
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 x age in years)
- ≥ 10 y: 90 mmHg

Contact Medical Control
Transport to appropriate facility

Solu Medrol 1 mg / Kg IV / IO

Consider Epinephrine (1:1000)
0.01 mg / Kg IM
(maximum 0.3 mg / dose)

Epinephrine (1:1000)
0.01 mg / Kg IM
(maximum 0.3 mg / dose)

Solu Medrol 1 mg / Kg IV / IO
-or- Prednisone 2 mg / Kg PO
SPECIAL CONSIDERATIONS:

1. Do not force a child into a position. They will protect their airway by their body position.

2. Upper airway obstruction and stridor are usually due to croup, viral disease with inflammation, edema, or narrowing of the larynx, trachea or bronchioles. Croup usually affects infants and toddlers (< 2 years of age). Most children with croup present with a history of cold-type symptoms followed by the development of a barking or “seal” cough, stridor and various levels of respiratory distress.

3. Wheezing is the hallmark of lower airway obstruction. Decreased unequal or absent breath sounds also can occur. The respiratory rate is generally rapid (although when expiration becomes prolonged, the rate may fall). Bronchiolitis, asthma, and foreign body obstruction should be strongly considered. Bronchiolitis is a lower airway obstruction from viral illness with wheezing in the toddler or infant under the age of 2 years.

4. Atrovent (Ipratropium bromide)
   a. **Give with either the 1st or 2nd albuterol treatment. The combination treatment of albuterol and atrovent should only be administered once.**
   b. **Do not give to children age < 5**

5. With respiratory distress of sudden onset, think of foreign body airway aspiration. The mouth is a major sensory organ for children. The paramedic must anticipate infants and children placing a multitude of obstructive hazards in their airway.

6. Total airway obstructions that cannot be cleared by conventional methods may require surgical needle cricothyrotomy in emergency situations.

7. Epiglottitis typically affects children > 2 years of age. It is bacterial, with fever, rapid onset, possible stridor, patient wants to sit up to keep airway open, and drooling is common. Airway manipulation and patient agitation may lead to total airway obstruction and worsening of the patient’s condition. IV attempts, which may increase patient agitation, are strongly discouraged.

8. If children with croup, Epiglottitis or laryngeal edema present in respiratory arrest, it is usually due to exhaustion or airway obstruction. Ventilation by bag-valve mask may be difficult due to airway edema. Epiglottitis and croup can become total airway obstructions very quickly.
# TAB 5 GUIDELINE 14
## SEIZURE

### HISTORY
- Fever
- Prior history of seizures
- Seizure medications
- Reported seizure activity
- History of recent head trauma
- Congenital abnormality

### SIGNS / SYMPTOMS
- Observed seizure activity
- Altered mental status
- Hot, dry skin or elevated body temperature

### DIFFERENTIAL
- Infection / Fever
- Head trauma
- Medication or toxin
- Hypoxia or respiratory failure
- Hypoglycemia
- Metabolic abnormality / acidosis
- Tumor

---

### Universal Patient Care

**Evidence of shock or trauma?**
- **Consider**
  - Fluid Bolus 20 mL / Kg IV / IO
  - Appropriate Guideline

**Febrile**
- Tympanic temperature measurement
- **YES**
  - Cooling Measures
  - **YES**
    - Active Seizure

- **NO**

**Minimum Systolic BP by Age**
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 × age in years)
- ≥ 10 y: 90 mmHg

---

**10% Dextrose**
- 5 – 10 mL / Kg IV / IO
- Max 100 ml (10 grams)
- q 3 – 5 minutes
- **- D10 not available then -**
  - 25% Dextrose (> 10 Kg)
  - 2 – 4 mL / Kg IV / IO

If no IV / IO access

**Glucagon**
- (0.5 mg < 25 Kg) IN / IM
- (1 mg > 25 Kg) IN / IM

**IV / IO Access**
- Check Blood Glucose

**IV / IO Access**
- Cardiac Monitor / 12-Lead EKG
- Assess Rhythm
- EKG Interpretation

**Consider Spinal Immobilization**

---

**Midozalam**
- 0.1 mg / Kg IV / IO
- 0.2 mg / Kg IN / IM
- (Repeat PRN)

**Diazepam**
- 0.2 mg / Kg IV / IO / IM
- (Repeat PRN)

**Lorazepam**
- 0.05 mg / Kg IV / IO / IM
- (Repeat PRN)

**Keppra**
- 20 mg / Kg IV / IO
- (max 1 Gram)

**Uncontrolled with Benzodiazepine**

---

**LEGEND**
- EMT-P
- Nurse
- MC Order

---

**HISTORY**

- **•** Fever
- **•** Prior history of seizures
- **•** Seizure medications
- **•** Reported seizure activity
- **•** History of recent head trauma
- **•** Congenital abnormality

---

**SIGNS / SYMPTOMS**

- **•** Observed seizure activity
- **•** Altered mental status
- **•** Hot, dry skin or elevated body temperature

---

**DIFFERENTIAL**

- **•** Infection / Fever
- **•** Head trauma
- **•** Medication or toxin
- **•** Hypoxia or respiratory failure
- **•** Hypoglycemia
- **•** Metabolic abnormality / acidosis
- **•** Tumor
SPECIAL CONSIDERATIONS:

1. If actively seizing patient is encountered, move hazardous material away from the patient. Protect the patient’s head from injury. Remember to always immediately check for pulses after seizure activity stops.

2. Trauma to the tongue during seizure activity is unlikely to cause serious problems. Attempt to force anything into the patient’s airway may cause complete obstruction.

3. If febrile, remove clothing and sponge with room temperature water. Do not delay transport for cooling measures. Removal of clothing may be all that is necessary.

4. Unlike the adult with a diagnosis of Epilepsy, a child who has had a seizure usually requires transport. Do not be falsely reassured by a child who appears to return to normal status quickly.

5. Seizures in children may not always present tonic-clonic (generalized) in nature. Unusual gaze/eye movement, unresponsiveness, or localized twitching may be the only clue. Parents or caregivers are usually very sensitive to the abnormality and potential seriousness of the child’s presentation.

6. The diagnosis of “febrile seizures” can be difficult to make in the field. Other causes must be excluded. Temperature measurements (tympanic thermometer) should be acquired with suspicion of fever.

7. Status epilepticus is defined as two or more successive seizures without a period of consciousness or recovery. This is a true emergency requiring rapid airway control, treatment, and transport. Grand Mal seizures (generalized) are associated with loss of consciousness, incontinence, and tongue trauma. Focal seizures (petit mal) effect only a part of the body and are not usually associated with a loss of consciousness. Jacksonian seizures are seizures that start as a focal seizure and become generalized.

8. If evidence or suspicion of trauma, full c-spine immobilization is required.

9. The following Dextrose concentrations and dosing are recommended:
   a. Pediatrics < 10 kg – Dextrose 10 % give 5 – 10 mL / Kg
   b. Pediatrics > 10 kg – Dextrose 25 % give 2 – 4 mL / Kg
HISTORY
- Fever
- Infection
- Medications
- Pregnancy
- Fluid loss - vomiting, diarrhea
- History of poor oral intake

SIGNS / SYMPTOMS
- Fever
- Restlessness, confusion
- Weakness, dizziness
- Weak, rapid pulse
- Pale, cool, clammy skin
- Delayed capillary refill
- Hypotension

DIFFERENTIAL
- Shock
- Hypovolemia
- Cardiogenic
- Septic
- Neurogenic
- Anaphylactic
- Bacterial, viral or fungal infection

Transport to appropriate facility
- Contact Medical Control
- Consider Alternative Guidelines
- Observe and Reassess

Universal Patient Care
- SIRS Criteria
  - Temp > 38.5°C or < 36°C
  - Tachycardia (or bradycardia if < 1 yo)
  - Tachypnea or Intubated

Consider Airway Management
Check Blood Glucose
- IV / IO Access
- SBP < normal for age

Fluid maintenance

Minimum Systolic BP by Age
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 × age in years)
- ≥ 10 y: 90 mmHg

10% Dextrose
5 – 10 mL / Kg IV / IO
Max 100 ml (10 grams)
q 3 – 5 minutes
- D10 not available then -
25% Dextrose (> 10 Kg)
2 – 4 mL / Kg IV / IO
If no IV / IO access
Glucagon
(0.5 mg < 25 Kg) IN / IM
(1 mg > 25 Kg) IN / IM

Glucose ≤ 60

Tachycardia > normal for age

NO

YES

Fluid Bolus 20 ml / kg lactated ringers

Norepinephrine
0.05 / kg / min IV / IO
(max 30 mcg / min)
Remains hypotensive (SBP < normal for age)

Epinephrine drip
0.01 – 1 mcg / kg / min IV

Solu Medrol 1 mg / kg IV / IO (max 125 mg)

For interfacility septic patient transports, delay transport until antibiotics have been initiated, or initiate antibiotics enroute
- Contact Medical Control
- Transport to appropriate facility

SBP > normal for age after fluid bolus

Fluid Bolus 20 ml / kg lactated ringers

LR 20 ml / kg
If no evidence of pulmonary edema
Norepinephrine
0.05 / kg / min IV / IO
(max 30 mcg / min)
Remains hypotensive (SBP < normal for age)

Epinephrine drip
0.01 – 1 mcg / kg / min IV

Solu Medrol 1 mg / kg IV / IO (max 125 mg)

Epinephrine drip 1 - 4 mcg / kg / min IV

NO

YES

SBP < normal for age

Transport to appropriate facility
- Contact Medical Control
- Consider Alternative Guidelines
- Observe and Reassess

Legend
- EMT-P
- Nurse
- MC Order

Solu Medrol
1 mg / kg
IV / IO (max 125 mg)

For interfacility septic patient transports, delay transport until antibiotics have been initiated, or initiate antibiotics enroute

Contact Medical Control
SPECIAL CONSIDERATIONS:

1. Sepsis is a vasodilatory shock. Patients have relative volume depletion. Aggressive fluid resuscitation is the mainstay of treatment.

2. Acute sepsis management should be initiated as soon as possible and completed within 6 hours. If patient is > 6 hours from presentation contact medical control for direction.

3. Patients with sepsis require aggressive therapy including IV fluids (lactated ringer is the fluid of choice), antibiotic administration and if necessary vasopressors and airway management.

4. Patient should receive at minimum 20 ml / kg fluid bolus before initiation of vasopressors.

5. **Maintenance fluid is calculated using the 4-2-1 rule**
   a. 1st 10 kg of body weight x 4 ml
   b. 2nd 10 kg of body weight x 2 ml
   c. Remaining kg of body weight x 1 ml
   d. Example for 80 kg person
      i. 10 kg x 4 ml = 40 ml
      ii. 10 kg x 2 ml = 20 ml
      iii. 60 kg x 1 ml = 60 ml
      iv. Total maintenance fluid = 120 ml

6. Epinephrine
   a. Drip
      i. Mix 1 mg epinephrine (1:10,000 or 1:1000 concentration) in 250 ml bag normal saline or D5W to give 4:1 concentration, mix in 500 ml bag normal saline or D5W to give 2:1 concentration. Titrate 0.01 – 1 mcg /kg / min.
**TAB 5 GUIDELINE 16**

**SUSPECTED ABUSE | NEGLECT**

### HISTORY
- Events leading up to call
- Has child gone to the bathroom, showered
- History of trauma

### SIGNS / SYMPTOMS
- Bruising to extremities
- Vaginal injury
- Withdrawal from caregiver / EMS provider

### DIFFERENTIAL
- Sexual abuse
- Neglect
- Traumatic injuries

#### Universal Patient Care

- Consider Spinal Immobilization

#### Airway Management

- Provide appropriate emergency medical treatment for all injuries found

#### Minimum Systolic BP by Age
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 × age in years)
- ≥ 10 y: 90 mmHg

#### Concern for Physical Abuse
- Make Patient NPO
- Assess for psychological characteristics of abuse
- Assess for physical abuse
- Assess for signs of neglect

#### Concern for Sexual Abuse
- Make Patient NPO
- Discourage patient going to bathroom
- Don’t allow patient to change clothes or wash

#### Document careful physical exam

#### Contact Medical Control
- Transport to appropriate facility, severely injured patients should be transported to trauma center
- Report suspected case of child abuse, neglect or exploitation to Children Services (855-642-4453)
SPECIAL CONSIDERATIONS:

1. Reporting concern of abuse, neglect or exploitation
   a. Per Ohio Revised Codes (ORC) 2151.421 and 5101.61 EMS and Fire personnel are **REQUIRED** to report abuse, neglect or exploitation of adult (elderly) or child (under the age of 18)
   b. Report suspected child abuse, neglect or exploitation to Ohio’s Public Children Service Agencies for your respective county or free hotline at 855-642-4453
   c. Report suspected elderly abuse, neglect or exploitation to Ohio’s Adult Protective Services for your respective county or free hotline at 855-644-6277

2. If possible, have a witness the same gender as the victim present at all times

3. Wrap a plastic sheet around the victim if possible

4. **DO NOT** inspect genitals unless evidence of uncontrolled hemorrhage, trauma, or severe pain is present

5. **DO NOT** allow patient to shower or douche

6. Collect patient’s clothing when possible
   a. Place clothing in plastic sheet or separate plastic/paper bags with ID labels and found location
   b. Leave all sheets placed in plastic/paper bag with patient at facility
   c. Notify all staff of clothing samples
# TAB 5 GUIDELINE 17

## VOMITING AND DIARRHEA

### HISTORY
- Age < 16
- Time of last meal
- Last bowel movement/emesis
- Improvement or worsening with food or activity
- Duration of problem
- Other sick contacts
- Past medical history
- Medications
- Menstrual history (pregnancy)
- Travel history
- Bloody emesis / diarrhea

### SIGNS / SYMPTOMS
- Pain
- Character of pain
- Distention
- Constipation
- Diarrhea
- Anorexia
- Radiation

**Associated symptoms: (Helpful to localize source)**
- Fever, headache, blurred vision, weakness, malaise, cough, headache, dysuria, mental status changes, rash

### DIFFERENTIAL
- CNS
- Myocardial infarction
- Drugs (NSAID’s, antibiotics, narcotics, chemotherapy)
- GI or renal disorders
- Diabetic ketoacidosis
- Gynecologic disease
- Infections (pneumonia, influenza)
- Electrolyte abnormalities
- Food or toxin induced
- Medication or substance abuse
- Pregnancy
- Psychological

### Universal Patient Care
- Make NPO
- IV / IO Access
- Glucose > 250
- Fluid Bolus 20 mL / Kg NS or LR
- Glucose < 60
- Check Blood Glucose

### Symptomatic Hypotension
- Vomiting / Severe Nausea
- Yes
- Zofran 0.1 mg / Kg IV / IO (Maximum 4 mg)
- Monitor and Reassess throughout transport

### No
- Monitor and Reassess throughout transport

### Minimum Systolic BP by Age
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 x age in years)
- ≥ 10 y: 90 mmHg

---

### Universal Patient Care

**Fluid Bolus**
- 20 mL / Kg PRN
- SBP < normal for age

**Consider Hypotension Guidelines**

**LEGEND**
- EMT-P
- Nurse
- MC Order

---

**DESCRIPTION**

- **10% Dextrose**
  - 5 – 10 mL / Kg IV / IO
  - Max 100 mL (10 grams)
  - q 3 – 5 minutes
- **D10 not available then - 25% Dextrose**
  - (> 10 Kg)
  - 2 – 4 mL / Kg IV / IO
- **If no IV / IO access**
  - **Glucagon**
    - (0.5 mg < 25 Kg) IN / IM
    - (1 mg > 25 Kg) IN / IM

**LEGEND**
- EMT-P
- Nurse
- MC Order

**DESCRIPTION**

- **Fluid Bolus**
  - 20 mL / Kg PRN
  - SBP < normal for age

**Consider Hypotension Guidelines**

**Minimum Systolic BP by Age**
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 x age in years)
- ≥ 10 y: 90 mmHg
SPECIAL CONSIDERATIONS:

1. Complete assessment and physical exam including evaluation of mental status, skin, HEENT, neck, heart, lungs, abdomen, back, extremities and neuro.
2. Frequent re-assessments are needed to monitor vascular status.
3. For severe nausea and/or vomiting administer Zofran 0.1mg / Kg not to exceed 4 mg.
4. The following Dextrose concentrations and dosing are recommended:
   a. Pediatrics < 10 kg – Dextrose 10 % give 5 – 10 mL / Kg
   b. Pediatrics > 10 kg – Dextrose 25 % give 2 – 4 mL / Kg
TAB 5 GUIDELINE 18
CHILDREN WITH SPECIAL HEALTHCARE NEEDS

1. EMS providers are encouraged to know which children in a given area have special needs and to keep a logbook for potential problems related to these children.
   - This will allow for easier reference and treatment for the patient.

2. Parents and caretakers are usually trained in emergency management and can be of assistance to EMS personnel. Listen carefully to the caregiver and follow his / her guidance regarding the child’s treatment.

3. Treat the ABC’s first. Treat the child, not the equipment. If the emergency is due to an equipment malfunction, manage the child appropriately using your own equipment.

4. Children formerly cared for in hospitals or chronic care facilities are often cared for in homes by parents or other caretakers. These children may have self-limiting or chronic diseases.
   - There are multitudes of underlying medical conditions that may categorize children as having special needs.
   - Many are often unstable and may frequently involve the EMS system for evaluation, stabilization, and transport.
   - Special needs children include technology-assisted children such as those with tracheostomy tubes with or without assisted ventilation, children with gastrostomy tubes, and children with indwelling central lines. The most serious complications are related to tracheostomy problems.

5. Children with Special Healthcare Needs (CSHCN) have many allergies.
   - Children with spina bifida are often allergic to latex. Before treating a patient, ask the caregivers if the children are allergic to latex or have any other allergies. Stock latex-free equipment. (Some regularly used equipment that contains latex includes gloves, oxygen masks, IV tubing BVM, blood pressure cuff, IV catheters, etc.)

6. Children with chronic illnesses often have different physical development from well children.
   - Their baseline vital signs may differ from normal standards. Ask the caregiver if the child normally has abnormal vital signs. (i.e. a fast heart rate or a low pulse oximeter reading)
   - The size and developmental level may be different from age-based norms and length based tapes used to calculate drug dosages.

7. Some CSHCN may have sensory deficits (i.e. they may be hearing impaired or blind) yet may have age-appropriate cognitive abilities. Follow the caregivers’ lead in talking to and comforting a child during treatment and transport. Do not assume that a CSHCN is developmentally delayed.
8. When moving a special needs child, a slow careful transfer with two or more people is preferable. Do not try to straighten or unnecessarily manipulate contracted extremities as it may cause injury or pain to the child. Certain medical conditions will require special care. Again, consult the child’s caregiver.

9. Caregivers of CSHCN often carry “go bags” or diaper bags that contain supplies to use with the child’s medical technologies and additional equipment such as extra tracheostomy tubes, adapters for feeding tubes, suction catheters, etc. Before leaving the scene, ask the caregivers if they have a “go bag” and carry it with you.

10. Caregivers may also carry a brief medical information form or card. The child may be enrolled in a medical alert program whereby emergency personnel can get quick access to the child’s medical history. Ask the caregivers if they have an emergency information form or some other form of medical information for their child.

11. Caregivers of CSHCN often prefer that their child be transported to the hospital where the child is regularly followed or the “home” hospital. When making the decision as to where to transport a CSHCN, take into account: local protocols, the child’s condition, capabilities of the local hospital, caregivers’ request, ability to transport to certain locations.
TAB 5 GUIDELINE 19
PEDIATRIC PAIN CONTROL GUIDELINE

HISTORY
- < 16 years of age
- Location
- Duration
- Severity (1-10)
- Past medical history
- Medications
- Drug allergies

SIGNS / SYMPTOMS
- Severity (pain scale)
- Quality (sharp, dull, etc)
- Radiation
- Relation to movement, respiration
- Increased with palpation of area

DIFFERENTIAL
- Per specific protocol
- Musculoskeletal
- Visceral (abdominal)
- Cardiac
- Pleural / Respiratory
- Neurogenic
- Renal (colic)

LEGEND
Nurse
MC Order
EMT-P

Minimum Systolic BP by Age
- < 1 mo: 60 mmHg
- 1 mo to 10 y: 70 + (2 × age in years)
- ≥ 10 y: 90 mmHg
SPECIAL CONSIDERATIONS:

1. This guideline will be utilized without MEDICAL CONTROL orders for pediatric patients under the age of 16 years for treatment of pain from isolated extremity fractures, dislocations, burns and treatment of cancer related pain. Appropriate documentation and signed releases are required for treat and release situations. PO medications with minimal oral fluids only if surgical / sedation procedures should be necessary for definitive care.

2. Guideline for safe use of analgesics:
   a. Be aware of the effects of combining drugs: Adding one CNS depressant or hemodynamic depressant to another can create unpredictable changes.
   b. Don’t forget about medication allergies: Adding IV analgesics on top of recently taken oral sedatives, analgesics or muscle relaxants may cause unpredictable additive effects as well.
   c. Know your pain management goal: Your goal may actually be different for different types of patients (Reduction of pain vs. removal of pain).
   d. Give a complete report to ED staff: Drugs given, time, results, and adverse effects.

3. Pain scores can be quantified with the Wong-Baker Faces Pain Scale (designed for children aged 3 years and older):

4. Pain medications:
   a. Fentanyl 1 mcg / kg IV / IM (Max 50 mcg on first dose), may repeat 0.5 mcg / kg IV times one (1) additional dose after ten (10) minutes.
   b. Fentanyl 2 mcg / kg (Max 50 mcg on first dose) split between each nostril via Nasal-Mucosal Atomizer Device. May repeat in ten (10) minutes. If vitals are stable
   c. If fentanyl is not available:
      i. Morphine 0.1 mg / kg IV q 15 minutes prn pain. (Maximum 10 mg)
      ii. Hydromorphone (Dilaudid) 0.015 mg / kg IV / IM may repeat in ten (10) minutes
         PRN. (Maximum 1 mg)