



**HSHS**  
**St. John's**  
**SAMIC EMS**

**Prehospital Policies, Guidelines,  
and Procedures**

**July 2019**

## Protocol Introduction

Welcome to the revitalized edition of the SAMIC EMS System protocols. We hope the following changes will allow for easier navigation through the protocols. We now utilize a four digit numbering system to quickly identify protocol type and age group. The tens and ones places XX\_\_ indicate the individual protocol of that section. The hundreds place X\_XX will have a 1 for adult protocols and a 2 for pediatric protocols. The pediatric protocols are mixed though out but colored for quick identification. The thousands place \_XXX indicates the protocol section; see the table of contents for familiarization of the layout.

The process for following the appropriate protocol should begin at the lowest level of care regardless of the level of the provider. Therefore, paramedics should begin with the EMR care and work towards the bottom. If you are directed to a different protocol, you should begin at the EMR level and work to your level of care.

You will notice medications may not always have the routes of administration listed. This was intentional so those medications indicated can be given based on the provider's scope of practice rather than the level of care in the protocol. Appropriate routes are listed in **Drug Administration Routes 9500**.

**Table of Contents**

<b>Introduction</b>	<b>0001</b>
<b>Table of Contents</b>	<b>0002</b>
<b>System Hospitals</b>	<b>0005</b>
<b>Scope of Practice</b>	<b>0010</b>
<b>Scope of EMS Service</b>	<b>0011</b>
<b>EMS Medical Director Responsibilities</b>	<b>0012</b>
<b>Assistant EMS Medical Director Responsibilities</b>	<b>0013</b>
<b>EMS Administrative Director Responsibilities</b>	<b>0014</b>
<b>EMS System Coordinator Responsibilities</b>	<b>0015</b>
<b>Methods of Providing EMS Services</b>	<b>0016</b>
<b>EMS System Manual Distribution</b>	<b>0017</b>
<b>Medication and Equipment Replacement</b>	<b>0018</b>
<b>Minimum Vehicle Staffing</b>	<b>0019</b>
<b>Professional Conduct and Code of Ethics</b>	<b>0020</b>
<b>In-Field Service Level Upgrades</b>	<b>0021</b>
<b>Resource Hospital Override</b>	<b>0022</b>
<b>Infection Control</b>	<b>0023</b>
<b>Problem Resolution</b>	<b>0024</b>
<b>ILS/ALS Assessment of BLS Patient</b>	<b>0025</b>
<b>Physician Direction and Voice Order</b>	<b>0026</b>
<b>ECRN Contacting ER Physician</b>	<b>0027</b>
<b>Continuous Quality Improvement</b>	<b>0028</b>
<b>Discipline and Suspension</b>	<b>0029</b>
<b>Substance Abuse</b>	<b>0030</b>
<b>Criminal Conviction</b>	<b>0031</b>
<b>Hospital Bypass or Diversion</b>	<b>0032</b>
<b>Patient Care Report</b>	<b>0033</b>
<b>Agency Responsibilities</b>	<b>0034</b>

**Table of Contents**

<b>Agency Compliance Waiver</b>	<b>0035</b>
<b>Agency Advertisement</b>	<b>0036</b>
<b>System Certification</b>	<b>0037</b>
<b>Re-Licensure Requirements</b>	<b>0038</b>
<b>Off-Line Medical Control</b>	<b>0039</b>
<b>On-Line Medical Control</b>	<b>0040</b>
<b>Radio Communications</b>	<b>0041</b>
<b>Right to Refuse</b>	<b>0042</b>
<b>Incident Reporting</b>	<b>0043</b>
<b>Patient Confidentiality and Release</b>	<b>0044</b>
<b>Patient Destination</b>	<b>0045</b>
<b>Transfer and Termination of Patient Care</b>	<b>0046</b>
<b>Transition of Care</b>	<b>0047</b>
<b>Intercept</b>	<b>0048</b>
<b>Coroner Notification</b>	<b>0049</b>
<b>Crime Scene Control and Reporting</b>	<b>0050</b>
<b>Medical Professional On Scene</b>	<b>0051</b>
<b>School Bus Incident</b>	<b>0052</b>
<b>Latex Allergy</b>	<b>0053</b>
<b>Critical Incident Stress Management</b>	<b>0054</b>
<b>EMS Equipment and Supplies</b>	<b>0055</b>
<b>Controlled Substances</b>	<b>0056</b>
<b>Medication Shortage</b>	<b>0057</b>
<b>Resuscitation vs Cease Efforts</b>	<b>0058</b>
<b>Do Not Resuscitate</b>	<b>0059</b>
<b>Petitioning an Emotionally Disturbed Patient</b>	<b>0060</b>
<b>Treatment of Minors and Mentally Incompetent</b>	<b>0061</b>
<b>Relinquished Newborn</b>	<b>0062</b>

**Table of Contents**

<b>Mandated Reporting</b>	<b>0063</b>
<b>General Medical</b>	
<b>Routine Patient Care</b>	<b>1105</b>
<b>Syncope and Pre-Syncope</b>	<b>1106</b>
<b>Abdominal Pain</b>	<b>1110</b>
<b>Acute Pain Management</b>	<b>1115</b>
<b>Allergic Reaction and Anaphylaxis</b>	<b>1120</b>
<b>Diabetic Emergencies</b>	<b>1125</b>
<b>Nausea/Vomiting</b>	<b>1135</b>
<b>Poisoning and Overdose</b>	<b>1140</b>
<b>Seizures</b>	<b>1145</b>
<b>Sepsis</b>	<b>1150</b>
<b>Unconscious/Altered Mental Status</b>	<b>1155</b>
<b>Stroke TIA</b>	<b>1160</b>
<b>Routine Patient Care</b>	<b>1205</b>
<b>Altered Mental Status</b>	<b>1210</b>
<b>Syncope and Pre-syncope</b>	<b>1211</b>
<b>Seizure</b>	<b>1215</b>
<b>Allergic Reaction and Anaphylaxis</b>	<b>1220</b>
<b>Acute Pain Management</b>	<b>1225</b>
<b>Apparent Life Threatening Event</b>	<b>1230</b>
<b>Diabetic</b>	<b>1235</b>
<b>Poisoning and Overdose</b>	<b>1240</b>
<b>Cardiac</b>	
<b>Routine Cardiac Care</b>	<b>2105</b>
<b>STEMI</b>	<b>2110</b>
<b>Cardiogenic Shock</b>	<b>2115</b>
<b>Cardiac Arrest</b>	<b>2120</b>

## Table of Contents

<b>Ventricular Fibrillation/Pulseless Ventricular Tachycardia</b>	<b>2125</b>
<b>Pulseless Electrical Activity</b>	<b>2130</b>
<b>Asystole</b>	<b>2135</b>
<b>Return of Spontaneous Circulation</b>	<b>2140</b>
<b>Bradycardia</b>	<b>2145</b>
<b>Narrow Complex Tachycardia – Stable</b>	<b>2150</b>
<b>Narrow Complex Tachycardia – Unstable</b>	<b>2155</b>
<b>Wide Complex Tachycardia – Stable</b>	<b>2160</b>
<b>Wide Complex Tachycardia – Unstable</b>	<b>2165</b>
<b>Implanted Cardiac Defibrillator</b>	<b>2170</b>
<b>Cardiac Arrest</b>	<b>2205</b>
<b>VF/Pulseless VT</b>	<b>2210</b>
<b>PEA/Asystole</b>	<b>2215</b>
<b>Bradycardia</b>	<b>2220</b>
<b>Narrow Complex Tachycardia</b>	<b>2225</b>
<b>Wide Complex Tachycardia</b>	<b>2230</b>
<b>Neonatal Resuscitation</b>	<b>2235</b>
<b>Respiratory</b>	
<b>Airway – Ventilation Management</b>	<b>3105</b>
<b>Asthma/COPD</b>	<b>3110</b>
<b>CHF/Pulmonary Edema</b>	<b>3115</b>
<b>Respiratory Distress</b>	<b>3205</b>
<b>Respiratory Arrest</b>	<b>3210</b>
<b>Respiratory Distress with Tracheostomy</b>	<b>3215</b>
<b>Respiratory Distress with Ventilator</b>	<b>3220</b>
<b>Environmental</b>	
<b>Hypothermia</b>	<b>4110</b>
<b>Heat Related Emergency</b>	<b>4115</b>

**Table of Contents**

<b>Burn</b>	<b>4120</b>
<b>Smoke Inhalation/Cyanide Exposure</b>	<b>4125</b>
<b>Submersion Incident</b>	<b>4130</b>
<b>SCUBA Injury/Accident</b>	<b>4135</b>
<b>Altitude Illness</b>	<b>4140</b>
<b>Bites and Envenomation</b>	<b>4145</b>
<b>Heat Related Emergency</b>	<b>4210</b>
<b>Hypothermia</b>	<b>4215</b>
<b>Near Drowning</b>	<b>4220</b>
<b>Burn</b>	<b>4225</b>
<b>Aberrant Situations</b>	
<b>Domestic and Elder Abuse/Neglect</b>	<b>5105</b>
<b>Behavioral Emergency</b>	<b>5110</b>
<b>Chemical Gas Exposure</b>	<b>5115</b>
<b>Taser Related Injury</b>	<b>5120</b>
<b>Biological Agent Exposure</b>	<b>5125</b>
<b>Suspected Child Maltreatment</b>	<b>5205</b>
<b>Obstetric and Gynecological</b>	
<b>Childbirth</b>	<b>6105</b>
<b>Post-Partum Care</b>	<b>6110</b>
<b>Obstetric Complications</b>	<b>6115</b>
<b>Rape/Sexual Assault</b>	<b>6120</b>
<b>Trauma</b>	
<b>Routine Trauma Care</b>	<b>7105</b>
<b>Shock</b>	<b>7110</b>
<b>Head Trauma</b>	<b>7115</b>
<b>Spinal Trauma</b>	<b>7120</b>
<b>Traumatic Arrest</b>	<b>7125</b>

**Table of Contents**

<b>Extremity Trauma</b>	<b>7130</b>
<b>Thoracic Trauma</b>	<b>7135</b>
<b>Abdominal Trauma</b>	<b>7140</b>
<b>Routine Trauma Care</b>	<b>7205</b>
<b>Shock</b>	<b>7210</b>
<b>Head Injury</b>	<b>7215</b>
<b>Special Situations</b>	
<b>Hazardous Material Exposure</b>	<b>8105</b>
<b>Special Healthcare Needs</b>	<b>8205</b>
<b>Procedures</b>	
<b>Basic Airway Management</b>	<b>9001</b>
<b>Airway Obstruction</b>	<b>9002</b>
<b>Capnography</b>	<b>9003</b>
<b>CPAP</b>	<b>9004</b>
<b>King LTS-D</b>	<b>9005A</b>
<b>i-gel O<sub>2</sub><sup>™</sup> Supraglottic Airway</b>	<b>9005B</b>
<b>Orotracheal Intubation</b>	<b>9006</b>
<b>Endotracheal Introducer</b>	<b>9007</b>
<b>Orogastric Tube Insertion</b>	<b>9008</b>
<b>12 Lead ECG</b>	<b>9009</b>
<b>Manual Defibrillation</b>	<b>9010</b>
<b>Synchronized Cardioversion</b>	<b>9011</b>
<b>Transcutaneous Pacing</b>	<b>9012</b>
<b>Intravenous Cannulation</b>	<b>9013</b>
<b>Intraosseous Cannulation</b>	<b>9014</b>
<b>External Jugular Cannulation</b>	<b>9015</b>
<b>Medication Administration</b>	<b>9016</b>
<b>Central Lines and Fistula Access</b>	<b>9017</b>



**Table of Contents**

<b>Patient Restraint</b>	<b>9018</b>
<b>Spinal Motion Restriction</b>	<b>9019</b>
<b>Tourniquet</b>	<b>9020</b>
<b>Hemostatic Agent</b>	<b>9021</b>
<b>Pelvic Sling</b>	<b>9022</b>
<b>Needle Decompression</b>	<b>9023</b>
<b>Medication Assisted Intubation</b>	<b>9024</b>
<b>Surgical Cricothyrotomy</b>	<b>9025</b>
<b>High Quality CPR</b>	<b>9026</b>
<b>Pediatric AED</b>	<b>9027</b>
<b>Field Triage</b>	<b>9028</b>
<b>Medications</b>	
<b>Adenosine</b>	<b>9501</b>
<b>Albuterol</b>	<b>9502</b>
<b>Amiodarone</b>	<b>9503</b>
<b>Aspirin</b>	<b>9504</b>
<b>Atropine</b>	<b>9505</b>
<b>Brilinta</b>	<b>9506</b>
<b>Dextrose 10%</b>	<b>9507</b>
<b>Diphenhydramine</b>	<b>9508</b>
<b>Dopamine</b>	<b>9509</b>
<b>Epinephrine 1mg/mL</b>	<b>9510</b>
<b>Epinephrine 0.1 mg/mL</b>	<b>9511</b>
<b>Glucagon</b>	<b>9512</b>
<b>Ipratropium Bromide</b>	<b>9513</b>
<b>Lidocaine</b>	<b>9514</b>
<b>Naloxone</b>	<b>9515</b>
<b>Nitroglycerin</b>	<b>9516</b>

**Table of Contents**

<b>Ondansetron</b>	<b>9517</b>
<b>Sodium Bicarbonate</b>	<b>9518</b>
<b>Fentanyl</b>	<b>9519</b>
<b>Morphine</b>	<b>9520</b>
<b>Versed</b>	<b>9521</b>
<b>Tranexamic Acid</b>	<b>9522</b>
<b>Ketamine</b>	<b>9523</b>
<b>Methylprednisolone</b>	<b>9524</b>
<b>Ketorolac</b>	<b>9525</b>
<b>Calcium Chloride</b>	<b>9526</b>
<b>Furosemide</b>	<b>9527</b>
<b>Appendix</b>	
<b>EMS License Renewal Request</b>	<b>A01</b>
<b>Pain Scale</b>	<b>A02</b>
<b>STEMI Destination Determination</b>	<b>A03</b>
<b>Region 3 Stroke Destination Determination</b>	<b>A04</b>
<b>Emergency Childbirth Record</b>	<b>A05</b>
<b>Complaint/Unusual Occurrence Report</b>	<b>A06</b>
<b>School Bus Incident Log</b>	<b>A07</b>
<b>Notice of EMS Response to a Minor</b>	<b>A08</b>

**System Hospitals**

**Resource Hospital**

HSHS St. John's Hospital

EMS Office 217-525-5645

MICU Line 217-753-0016 or 217-753-1089

**Associate Hospitals**

HSHS St. Francis Hospital, Litchfield, IL

HSHS St. Anthony's Memorial Hospital, Effingham, IL

Mason District Hospital, Havana, IL

**Participating Hospital**

Hillsboro Area Hospital, Hillsboro, IL

## Scope of Practice

	EMR	EMT	ILS	ALS
<b>Monitoring</b>				
Blood Glucose Monitor	X	X	X	X
Pulse Oximetry	X	X	X	X
Capnography Monitoring		X	X	X
Blood Chemistry Analysis			X	X
ECG Rhythm and 12 Lead ECG interpretation			X	X
<b>Airway/Ventilatory Management Oxygen Delivery</b>				
Positioning	X	X	X	X
OPA/NPA	X	X	X	X
Obstructed Airway Maneuvers	X	X	X	X
Oral Suctioning	X	X	X	X
Tracheal-bronchial suctioning		X	X	X
Stoma Suctioning		X	X	X
Oxygen Administration NC, NRM, BVM,	X	X	X	X
Blind Insertion Airway Device		X	X	X
Occlusive Dressing to Chest Wall Injury	X	X	X	X
Magill Forceps for Airway Foreign Body Removal			X	X
Intubation - Adult and Pediatric			X	X
CPAP and PEEP		X	X	X
Needle/Surgical Cricothyrotomy				X
Needle Decompression			X	X
Use of Transport Ventilators				CCP
<b>Circulatory/Cardiac Management, Vascular Access</b>				
High Quality CPR	X	X	X	X
Mechanical CPR Device	X	X	X	X
Bleeding Control - Elevation, Pressure, Tourniquet, Hemostatic Agents	X	X	X	X
AED Use	X	X	X	X
Application of ECG Monitor Including 12/15 Lead Acquisition and Transmission		X	X	X
ECG and 12/15 Lead Interpretation			X	X
Spiking IV Bag, Priming Tubing for Access		X	X	X
Manual Defibrillation			X	X
Synchronized Cardioversion			X	X
Transcutaneous Pacing			X	X
IV Access - Adult and Pediatric			X	X
IO Access - Adult and Pediatric			X	X

## Scope of Practice

	EMR	EMT	ILS	ALS
<b>EJ Access - Adult and Pediatric</b>				X
<b>Central Line/Fistula Access</b>				X
<b>Psychomotor Skill</b>				
<b>Backboard Use</b>	X	X	X	X
<b>C-Collar Application</b>	X	X	X	X
<b>Monitoring OG/NG Tube Already Placed</b>		X	X	X
<b>Selective Spinal Precautions</b>		X	X	X
<b>Splinting/Bandaging</b>	X	X	X	X
<b>Vaginal Delivery</b>	X	X	X	X
<b>Limb Restraints</b>	X	X	X	X
<b>Eye Irrigation with Morgan Lens</b>				X
<b>Assess JVD and Pulsations</b>			X	X
<b>Temperature Management in ROSC Patients</b>			X	X
<b>Burn Care</b>	X	X	X	X
<b>Protective Equipment Removal</b>		X	X	X
<b>Monitoring Urinary Catheter Already Placed</b>			X	X
<b>Medication Routes</b>				
<b>Oral</b>	X	X	X	X
<b>Oral Disintegrating Tablet</b>		X	X	X
<b>Sublingual</b>		X	X	X
<b>Inhalation</b>	X	X	X	X
<b>Intranasal</b>	X	X	X	X
<b>Intramuscular</b>	Auto	X	X	X
<b>Intravenous</b>			X	X
<b>Intraosseous</b>			X	X

## Scope of EMS Service

Revised: 10/18

**Policy:**

Provide the basis for the provision of Emergency Medical Services in the Springfield Area Mobile Intensive Care (SAMIC) EMS System.

**Special Instructions:**

- When functioning as a prehospital care provider in the SAMIC EMS System, you are expected to meet particular patient care standards and administrative requirements. These patient care expectations can be simply explained as the “Standard of Care.”
- Realistically, your patient care standards are compared to other prehospital care providers who are expected to conform and perform with a reasonable level of skill, knowledge, and competence.
- The policies, procedures, and standard medical orders are to serve as guidelines for prehospital personnel and are derived from current National Standard Curricula for Emergency Medical Responder, EMT, EMT-Intermediate, Advanced EMT, EMT-Paramedic, and EMS Instructor; national and/or state recognized standards for care (i.e., ACLS, BLS, PALS, BTLS, EMSC, etc.), Illinois EMS System Act, Illinois EMS and Trauma Center Code, and the policies and procedures for HSHS St. John’s Hospital.
- Any deviation from an approved standing medical order, policy, or procedures should be submitted to the EMS Medical Director or designee, in writing, within 24 hours of the occurrence for review.

## EMS Medical Director Responsibilities

Revised: 10/18

**Policy:**

Provide for the overall medical control management of the Springfield Area Mobile intensive Care (SAMIC) EMS System.

**Special Instructions:**

- Fulfill the role of EMS Medical Director as outlined in the EMS Systems Act (210 ILCS 50) and the EMS and Trauma Center Code (77 Ill. Adm. Code 515).
- Ensure the Department access to all records, equipment and vehicles under the authority of the EMSMD during any Department inspection, investigation or site survey.
- Work in cooperation with the EMS Administrative Director and the EMS Facilitator regarding the supervision of all personnel participating within the System, as described in the System Program Plan.
- Work in cooperation with the EMS Facilitator and EMS Educator regarding the educational needs of all system personnel including coordinating didactic and clinical experience.
- Develop written standing orders (treatment protocols, standard operating procedures) to be used in the EMS MD's absence and certify that all involved personnel will be knowledgeable in emergency care and capable of providing treatment and using communications equipment once the program is operational.

**Assistant EMS Medical Director Responsibilities**

Revised: 10/18

**Policy:**

Provide for the overall medical control management of the Springfield Area Mobile Intensive Care (SAMIC) EMS System in the absence of the EMS Medical Director.

**Special Instructions:**

- Fulfill the role of EMS Administrative Director as outlined in the EMS Systems Act (210 ILCS 50) and the EMS and Trauma Center Code (77 Ill. Adm. Code 515).
- Ensure the Department access to all records, equipment and vehicles under the authority of the EMS System during any Department inspection, investigation or site survey.
- Work in cooperation with the EMS Medical Director and the EMS Facilitator regarding the supervision of all personnel participating within the System, as described in the System Program Plan.
- Work in cooperation with the SAMIC EMS System, HSHS St. John's Hospital and the Illinois Department of Public Health regarding EMS issues.



## EMS Administrative Director Responsibilities

Revised: 10/18

**Policy:**

Provide for the overall management of the Springfield Area Mobile Intensive Care (SAMIC) EMS System and its role within HSHS St. John's Hospital.

**Special Instructions:**

- Fulfill the role of EMS Administrative Director as outlined in the EMS Systems Act (210 ILCS 50) and the EMS and Trauma Center Code (77 Ill. Adm. Code 515).
- Ensure the Department access to all records, equipment and vehicles under the authority of the EMS System during any Department inspection, investigation or site survey.
- Work in cooperation with the EMS Medical Director and the EMS Facilitator regarding the supervision of all personnel participating within the System, as described in the System Program Plan.
- Work in cooperation with the SAMIC EMS System, HSHS St. John's Hospital and the Illinois Department of Public Health regarding EMS issues.

## EMS System Coordinator Responsibilities

Revised: 10/18

**Policy:**

Provide for the management and coordination of the Springfield Area Mobile Intensive Care (SAMIC) EMS System.

**Special Instructions:**

- Fulfill the role of EMS System Coordinator as outlined in the EMS Systems Act (210 ILCS 50) and the EMS and Trauma Center Code (77 Ill. Adm. Code 515).
- Perform duties as outlined in the HSHS St. John's Hospital EMS Facilitator job description.
- Ensure the Department access to all records, equipment and vehicles under the authority of the EMS System during any Department inspection, investigation or site survey.
- Work in cooperation with the EMS Administrative Director and the EMS Medical Director regarding the supervision of all personnel participating within the System, as described in the System Program Plan.
- Work in cooperation with the EMS Medical Director and EMS Educator regarding the educational needs of all system personnel including coordinating didactic and clinical experience.

## Methods of Providing EMS Services

Revised: 10/18

**Policy:**

Provide the public with the appropriate prehospital care through the dispatching of the proper response and transport vehicles. Make provisions for mutual aid response when assistance is needed.

**PROCEDURE:**

- Single vehicle response and transport.
  - For all routine transfers and non-emergency BLS calls, an ambulance meeting at least BLS personnel and equipment requirements will be dispatched by the appropriate agency.
    - If a BLS or ILS ambulance finds that ALS care is needed, an ALS unit will be dispatched.
  - If additional assistance is found to be needed by the responding ambulance, they will notify their appropriate dispatcher, who will in turn notify the appropriate agency for assistance.
- Dual vehicle response and transport.
  - For all emergency calls, an ambulance meeting at least BLS personnel and equipment requirements will be dispatched by the appropriate agency.
  - For all emergency calls, the appropriate non-transporting agency will be notified to provide initial response and/or support to the transporting agency.
  - For all emergency calls in which the patient requires an advanced level of care, the appropriate ALS agency shall be notified.
  - Responding agencies should work in cooperation for the benefit of the patient(s) and provide the most appropriate level of care available
- Level of first response vehicle.
  - Any agency responding to a non-emergency or emergency call will provide at least emergency medical responder level of care.
  - For all emergency calls in which the patient requires an advanced level of care, the appropriate ALS agency shall be notified.
  - Responding agencies should work in cooperation for the benefit of the patient(s) and provide the most appropriate level of care available
- Level of transport vehicle.
  - Routine transfer and non-emergency calls will be dispatched to an ambulance functioning at least to the BLS level for treatment and transport.
    - If a BLS or ILS ambulance finds that ALS care is needed, an ALS unit will be dispatched.
  - Emergency calls will be dispatched to an ambulance functioning at least to the highest level of care available.

## Methods of Providing EMS Services

- If a BLS or ILS ambulance finds that ALS care is needed, an ALS unit will be dispatched.
- Responding agencies should work in cooperation for the benefit of the patient(s) and provide the most appropriate level of care available.
- Mutual Aid agreements.
  - Transporting agencies should have a mutual aid agreement(s) or policy provisions for covering their response area when their primary unit is on a call.
  - Non-transporting agencies must have a mutual aid agreement(s) with a transporting agency (ies).
- Caller notification.
  - Callers will be advised of the approximate response times for the first response units and the transporting ambulance if this information is requested by the caller.

## EMS System Manual Distribution and Updates

Revised: 10/18

**Policy:**

Provide a means for the distribution of the SAMIC EMS System Manual, Regional EMS Manual/Procedures, and their subsequent updates.

**Procedure:**

- All participants in the SAMIC EMS System will receive a copy of the Medical-Legal, Operation, and Education policies, and Standing Medical Orders appropriate to the participant's licensed level of care.
- System Manual updates will be distributed to participants in the System as appropriate for the type of update. Minor updates will be included in the *The Run Report*, a monthly newsletter published by the EMS Department.
- In-services will be provided to assist in the distribution of updated information, skills, and Standing Medical Orders, as appropriate.
- Information on Regional issues relevant to the participating agencies and personnel will be distributed through in-services, direct communications, and/or the SAMIC Run Report.

**Medication and Equipment Replacement**

Revised: 10/18

**Policy:**

Provide for the replacement of medications and disposable equipment utilized during the rendering of patient care by participants in the SAMIC EMS System.

**Procedure:**

- The Resource, Affiliate, and Participating hospitals in the SAMIC EMS System agree to exchange medications and equipment with pre-hospital providers participating in this EMS System or other EMS System where ambulances transport to our facility.
- Non-transporting agencies should be able to obtain replacement for standard disposable items from the transporting agency.
- Transporting agencies should be able to obtain replacement for standard disposable items from the receiving facility.

**Medication Replacement:**

- Associate Hospitals in the SAMIC EMS System will replace used or outdated medications according to their current hospital pharmacy department policy on replacement of prehospital medications.
- When a used or outdated medication box is brought to the St. John's Hospital Emergency Department medications will be replaced according to the current policy posted on replacement of EMS medications in the EMS restocking room.

## Minimum Vehicle Staffing

Revised: 10/18

**Policy:**

Provide quality prehospital care through the appropriate staffing of both transport and non-transporting vehicles participating in the SAMIC EMS System.

**Procedure:**

## Transporting agencies

- Each Basic Life Support ambulance shall be staffed by a minimum of one System authorized EMT, A-EMT, EMT-I, Paramedic or PHRN and one other System authorized EMT, A-EMT, EMT-I, Paramedic, PHRN or physician on all responses.
- Each ambulance used as an Intermediate Life Support vehicle shall be staffed by a minimum of one System authorized A-EMT, EMT-I, Paramedic or PHRN and one other System authorized EMT, A-EMT, EMT-I, Paramedic, PHRN or physician on all responses.
- Each ambulance used as an Advanced Life Support vehicle shall be staffed by a minimum of one System authorized Paramedic or PHRN and one other System authorized EMT, A-EMT, EMT-I, Paramedic, PHRN or physician on all responses.

## Non-transporting Agencies

- ALS Non-Transport Vehicles shall have a minimum of either one System authorized Paramedic or one PHRN and one additional System authorized A-EMT, EMT-I, EMT or physician, and shall have all of the required equipment.
- ILS Non-Transport Vehicles shall have a minimum of either one System authorized A-EMT, EMT-I, Paramedic or PHRN and one additional System authorized EMT, A-EMT, EMT-I, Paramedic, PHRN or physician and shall have the required equipment.
- BLS Non-Transport vehicles shall be staffed by one System authorized EMT, A-EMT, EMT-I, Paramedic or physician on all responses and shall have all of the required equipment.

## Professional Conduct / Code of Ethics

Revised: 10/18

**Policy:**

Professional status as an EMT-Basic, EMT-Intermediate, EMT-Paramedic or Prehospital RN is maintained and enriched by the willingness of the individual practitioner to accept and fulfill obligations to society, other medical professionals, and the profession of emergency medical services.

**Procedure:**

- A fundamental responsibility is to conserve life, to alleviate suffering, to promote health, to do no harm, and to encourage the quality and equal availability of emergency medical care.
- Provide services based on human need, with respect for human dignity, unrestricted by consideration of nationality, race, creed, color, or status.
- Do not use professional knowledge and skills in any enterprise detrimental to the public wellbeing.
- Respect and hold in confidence all information of a confidential nature obtained in the course of professional work unless required by law to divulge such information.
- As a citizen, understand and uphold the law and perform the duties of citizenship; as a professional, you have a never ending responsibility to work with concerned citizens and other health professionals in promoting a high standard of emergency medical care to all people.
- Maintain professional competence and demonstrate concern for the competence of other members of the emergency medical services health care team.
- Assume responsibility in defining and upholding standards of professional practice and education.
- Assume responsibility for individual professional actions and judgment, both in dependent and independent emergency functions, and knows and upholds the laws which affect the practice of emergency medical services.
- Has the responsibility to be aware of and participate in matters of legislation affecting emergency medical services.
- Adhere to standards of personal ethics which reflect credit upon the profession.
- If you or your group advertises emergency medical services, do so in conformity with the dignity of the profession.
- Have an obligation to protect the public by not delegating to a person less qualified, any service which requires the professional competence of and EMT-B, EMT-I, EMT-P, or Prehospital RN.
- Work harmoniously with and sustain confidence in emergency medical services personnel, the nursing personnel, the physician, and other members of the emergency medical services health care team.



**Professional Conduct / Code of Ethics**

- Refuse to participate in unethical procedures, and assume the responsibility to expose incompetence or unethical conduct of others to the appropriate authority in a proper and professional manner.

## In-Field Service Level Upgrade

Revised: 10/18

**Policy:**

Optimize patient outcomes by providing the highest level of care available to those patients who warrant such higher level care.

**Procedure:**

- When EMS personnel respond to a medical or traumatically injured patient, the responding personnel should begin thinking that an intercept of a higher level of care may be of benefit to the patient.
- When a patient's condition warrants a higher level of care and an advanced level is available, the more advanced agency shall be called immediately for assistance.
- Patient conditions that are likely to benefit from advanced care include, but are not limited, to:
  - Trauma patients entrapped with extended extrication
  - Patients with compromised or obstructed airway
  - Patients exhibiting signs of hypoxemia (respiratory distress, restlessness, cyanosis, altered mental status, etc.)
  - Cardiac arrest
  - Unstable cardiac rhythms
  - Chest pain unresolved with oxygen or nitroglycerin
  - Patients exhibiting signs of decompensating shock (B/P <100 systolic, diaphoresis, altered mental status, tachypnea, etc.)
  - Unconscious patients
  - Pediatric cases with any of the above
  - Any case deemed by the responding agency or Medical Control as beneficial to patient outcome
- When determining the need for a higher level of care, consideration should be given to the following:
  - Transport time to the receiving hospital
  - Rendezvous site
  - Availability of resources
  - Interventions needed (i.e., defibrillation, airway management, medications, etc.)
- Decisions for or against requesting a higher level of care should be based on the patient's best interests. Better to err on the side of the patient.

**In-Field Service Level Upgrade**

- It is the responsibility of the responding agency to request response of the higher level of care when the patient's condition warrants.
- Additionally, the receiving and/or treating hospital may, based upon the initial provider's assessment, initiate the dispatching of a higher level of care.
- Through coordination via communications with the appropriate dispatching entities, the initial responding agency and the higher level agency will rendezvous at a reasonable and safe location.
- Pertinent patient information should be transmitted to the intercepting agency prior to the rendezvous.
- Transfer of care
  - Safety will be emphasized throughout the intercept and transfer of care.
  - Patient transport should not be unreasonably delayed.
  - If at all possible, the patient should not be transferred from ambulance-to-ambulance except for extenuating circumstances.
  - The higher level personnel with proper equipment shall board the transporting vehicle and oversee patient care with the assistance of the requesting agency's personnel.
  - The transporting ambulance will, at that point, become temporarily, and only during the duration of the transport, a higher level of care vehicle.

## Resource Hospital Override

Revised: 10/18

**Policy:**

Provide a mechanism for protection and a mode of documentation to assure that any suspected infectious disease contamination is properly documented and any required follow-up is completed.

**Procedure:**

- Overrides should only occur when the Resource Hospital may have additional information regarding the patient's care or where the procedure or medication ordered by the managing hospital may potentially harm the patient and there needs to be clarification or modification of those orders.
- Upon detection of a possible situation that might require the override of the managing hospital, immediate communications between the Resource and managing hospitals ER physicians shall be conducted.
- If clarification of the medication or treatment is obtained, the managing hospital ER physician will clarify the questioned situation and continue to manage the patient's prehospital care.
- If there is a disagreement between the managing hospital ER physician and the Resource Hospital ER physician, the Resource Hospital's ER physician opinion and recommendation will prevail.
- If there are prevailing disagreements and ongoing prehospital care issues that are not resolved by the physician-to-physician communication, immediately contact the EMS Medical Director or designee to settle the matter.
- All instances of Resource Hospital overrides or intervention must be reported by the Resource and managing hospitals to the EMS Medical Director within forty-eight hours of the incident.
- Prehospital care personnel are ultimately responsible for following the orders of the Resource Hospital's ER physician.

## Infection Control

Revised: 10/18

**Policy:**

The following procedure has been established in accordance with the Illinois State Statutes, Centers for Disease Control recommendations and OSHA standards. All HSHS St. John's Hospital EMS System agencies should have a specific exposure control program and post exposure plan.

**Procedure:****Protective Measures**

- Utilization of body substance isolation gear during all patient contacts is an effective means of avoiding exposure to body fluids. EMS personnel should don protective gear prior to entering a scene or situation that may increase the risk of exposure to body fluids or other infectious agents.
- Thorough hand washing should be accomplished immediately after each patient contact or handling of potential infectious vectors.
- EMS personnel should consult their agency's exposure control program for specific guidelines in the type of protective gear to be worn.

**Exposure**

- An exposure incident has occurred when, as a result of the performance of an EMS provider's duty, the provider's eyes, mouth, mucous membrane or area of non-intact skin has come in contact with body fluids or other potentially infectious vector. This includes parenteral contact with blood or other potentially infectious materials.
- If EMS personnel treating and/or transporting a patient are directly exposed to a patient's body fluids or infectious vector, the provider(s) should immediately report the incident. This includes notifying the EMS provider's supervisor and following post exposure procedures.

**Post Exposure Management**

After an exposure has occurred:

- Thoroughly cleanse the exposed area with soap and water immediately.

**Infection Control**

- The eyes and/or mouth of the provider should be thoroughly rinsed with water if exposed.
- Immediately seek treatment at the emergency department where the source patient was transported. If the source patient was not transported to an emergency department, treatment should be sought at a local hospital (emergency department).
- Complete applicable *Communicable Disease Incident Form*. The completed form should be left with the emergency department charge nurse. The charge nurse will forward the form to EMS Office within 24 hours. The EMS provider should also provide a copy to his/her supervisor.
- A request should be made for consent to test the source patient's blood for HBV/HCV/HIV infectivity. Testing is not necessary if the source patient is known to be infected with HBV or HIV.
- Results of tests performed on the source patient shall be made available to the exposed EMS provider's private or occupational physician while maintaining confidentiality of all persons involved.
- The EMS provider should follow-up with his/her private or occupational physician and the provider should be advised of available post-exposure counseling.
- All findings or diagnosis shall remain confidential.

Questions concerning exposure control program requirements or post exposure procedures should be directed to the EMS provider's supervisor, training officer or infection control department.

**Notification of EMS Personnel Exposed to Communicable Disease**

- If a patient is suspected to have, or is diagnosed with a reportable communicable disease, a copy of the ambulance patient care report will be forwarded to Infection Control Department as soon as possible by the receiving hospital emergency department supervisor.
- The Infection Control Department will maintain a log and file. If any patients treated and/or transported by EMS providers are diagnosed as having one of the specified diseases, the designated EMS provider(s) will be notified by the Infection Control Department/EMS Office within seventy-two (72) hours after the confirmed diagnosis is known.

## Infection Control

- Specified diseases requiring notification of EMS personnel by the Infection Control Department include:
  - Acquired Immunodeficiency Syndrome (AIDS)\*
  - AIDS-Related Complex (ARC) \*
  - Anthrax
  - Chickenpox
  - Cholera
  - Diphtheria
  - Hepatitis B
  - Hepatitis non-A, non-B
  - Herpes simplex Human Immunodeficiency Virus (HIV) infection\*
  - Measles
  - Meningococcal infections
  - Mumps
  - Plague
  - Polio
  - Rabies (human)
  - Rubella
  - Severe Acute Respiratory Syndrome (SARS)
  - Smallpox
  - Tuberculosis (TB)
  - Typhus

\*For confirmed diagnosis of AIDS or HIV, the letter of notification will not be sent unless emergency personnel indicate that they may have had blood or body substance exposure.

- When a hospital patient with a listed communicable disease is to be transported by ambulance personnel, the hospital staff sending the patient shall inform the ambulance personnel of any precautions to be taken to protect against exposure to disease. If a significant exposure occurs, the ambulance personnel shall immediately report the incident as indicated above.
- The *Hospital Licensing Act* requires any information received in the notification process be handled in accordance with confidentiality policies and procedures.

## Problem Resolution

Revised: 10/18

**Policy:**

Provide a mechanism for the identification, investigation, review, and resolution of occurrences or problems within the SAMIC EMS System.

**Procedure:**

- Situations involving a medication or other treatment affecting the immediate patient care shall be verbally reported to the receiving hospital as soon as identified. A written report on the situation, meeting the below criteria, will be forwarded to the EMS Medical Director or EMS Facilitator within 24 hours of the event.
- Situations involving non-immediate patient care issues or deviation for approved policies and/or procedures shall be reported, in writing, to the EMS Medical Director or EMS Facilitator within 24 hours of the event.
- Other situations which EMS personnel or agencies feel should be brought to the attention of the EMS Director and/or EMS Facilitator shall be reported, in writing, to the EMS Medical Director or EMS Facilitator.
- All situations reported shall be in writing and consist of at least the following:
  - date/time of the event/occurrence
  - location where event occurred
  - personnel and/or agencies involved
  - detailed description of the event
  - any other information that may be pertinent (ePCR number, statements, etc.)
- The EMS Medical Director, EMS Facilitator, or designee will investigate and/or review the situation/event and determine what corrective action(s), if any, is necessary. Information regarding the event, investigation, and/or review is confidential and protected under the Medical Studies Act. Information on the event shall remain on file in the SAMIC EMS Office.



## ILS/ALS Assessment of Patient being Treated by BLS

Revised: 10/18

**Policy:**

Provide a mechanism for the continuity of care between BLS, ILS, and ALS personnel.

**Procedure:**

- Always keep the “best interest of the patient” in mind. The continuity of care must continue without interruption.
- EMS personnel shall maintain professionalism when dealing with multiple agencies and different levels of personnel.
- ILS and ALS personnel should include the assessment and/or treatment rendered by BLS personnel as part of total patient care.
- ILS and ALS personnel should work with the BLS personnel in understanding the patient care situation while avoiding the appearance of conflicts.
- Any conflict between BLS, ILS, and ALS personnel should not be brought to light in front of the patient, family, bystanders, etc., however, should be later addressed between personnel, agencies, or the EMS System. Any specific problems may be brought to the attention of the EMS Medical Director and/or EMS Facilitator utilizing the Problem Resolution policy.

## Physician Direction and Voice Orders

Revised: 10/18

**Policy:**

Provide a mechanism for the direction of patient care in the prehospital setting.

**Procedure:**

- All EMS personnel should remember that they are part of the healthcare team. Prehospital personnel are the eyes, ears, and hands of the ER personnel. Prehospital care may only be rendered under the license of the EMS Medical Director through verbal or written standing medical orders
- All EMS personnel participating in SAMIC may follow the written standing medical orders as included in the approved Program Plan/System Manual (except where contact with the hospital is required prior to a specific treatment) for patients presenting with the appropriate signs and/or symptoms.
  - Associate Hospitals may require prior contact for any prehospital treatment. Such policies should be outlined in hospital directives and distributed to those agencies that routinely transport to that facility.
- In addition to those situations specified in the written standing medical orders where contact with the hospital is required prior to the treatment, EMS personnel may contact the Resource, Affiliate, or Participating Hospital at any time for review of assessment and treatment direction.
- The voice order(s) of the ER physician, either directly or through the ECRN, shall supersede those written standing medical orders.
- Conflicts between verbal orders and standing medical orders may be resolved following the Resource Hospital Override Policy.

## ECRN Contacting ER Physician

Revised: 10/18

**Policy:**

Provide a mechanism for the Emergency Communication Registered Nurse to function under the direction of the ER physician.

**Procedure:**

- All ECRNs should remember that they are part of the healthcare team. Prehospital care may only be rendered under the license of the EMS Medical Director through verbal or written standing medical orders.
- All ECRNs participating in SAMIC may follow the written standing medical orders as included in the approved Program Plan/System Manual for patients presenting with the appropriate signs and/or symptoms.
  - Associate Hospitals may require more direct ER physician involvement in prehospital patient care decisions. Such policies should be outlined in hospital directives and distributed to those ECRNs functioning with that hospital.
- The voice order(s) of the ER physician, ECRN, shall supersede those written standing medical orders. The ECRN may request such orders from the ER physician.
- Conflicts between verbal orders of the ER physician or ECRN and standing medical orders may be resolved following the Problem Resolution policy.

## Continuous Quality Improvement Plan

Revised: 10/18

**Policy:**

Provide a means of quality patient care through monitoring, reviewing, data collection, interaction with EMS personnel, and participation in various regional, state, and national EMS activities.

**Procedure:**

- Continuous quality improvement activities include, but are not be limited to, the following.
  - Review of the Illinois Prehospital Care Report form data and utilization of collected data in overall quality improvement.
  - Announced and/or unannounced visits with participating agencies within the System. Information from these visits will be reviewed for appropriate recommendations.
  - Prehospital care providers may be monitored in the field setting. The EMS System representative conducting the monitoring will complete a written evaluation and discuss it with the prehospital provider. This evaluation will become part of their permanent file in the EMS office. Major concerns will be brought to the attention of the prehospital care provider's agency and the EMS Medical Director.
  - Retrospective audits on selected topics will be done on a periodic basis. These results may be reported to the participating agencies and/or included in case review sessions.
  - Investigation and follow through on any problematic situation or complaint.

**Discipline and Suspension**

Revised: 10/18

**Policy:**

Assure due process is provided to all prehospital and hospital personnel participating in the SAMIC EMS System.

**Procedure:**

- The EMS Medical Director may suspend from participation within the SAMIC EMS System any individual, provider agency, or other participant considered not to be meeting the requirement of the approved program plan.
- Except in situations of immediate suspension, the EMS Medical Director shall provide the individual, provider agency, or other participant with a written explanation of the reason for the suspension; the terms, length, and condition of the suspension; and the date the suspension will commence, unless a hearing is requested. Such notice shall be delivered in person or by certified mail.
- The suspended party may request a hearing by the Local System Review Board within 15 days of the date on the suspension notice. Such requests must be in writing to the EMS Medical Director or EMS Facilitator.
- Failure to request a hearing within 15 days shall constitute a waiver of the right to a Local System Review Board hearing.
- The SAMIC EMS System shall designate the Local System Review Board, consisting of at least three members, one of whom is an emergency Department physician with knowledge of EMS, one of whom is an EMT, and one of whom is of the same professional category as the individual, provider agency, or other participant requesting the hearing.
- The hearing shall commence as soon as possible, but at least within 21 days after receipt of a written request. The EMS Medical Director shall arrange for a certified shorthand reporter to make a stenographic record of that hearing and thereafter prepare a transcript of the proceedings. The transcript, all documents or materials received as evidence during the hearing, and the Local System Review Board's written decision shall be retained in the custody of the EMS System. The System shall implement a decision of the Local System Review Board unless that decision has been appealed to the State EMS Disciplinary Review Board in Accordance with the EMS Systems Act and EMS and Trauma Center Code.
- The Local System Review Board shall state, in writing, its decision to affirm, modify, or reverse the suspension order. Such decision shall be sent via certified mail or personal service to the EMS Medical Director and the individual, provider agency, or other participant who requested the hearing within five business days after the conclusion of the hearing.
- The transcripts, all documents or materials received as evidence during the hearing and the Local System Review Board's written decision shall be retained in the custody of the EMS System.

**Discipline and Suspension**

- The EMS Medical Director shall notify the Department, in writing, within five business days after the Board's decision to uphold, modify, or reverse the EMS Medical Director's suspension of an individual, provider agency, or other participant. The notice shall include a statement detailing the duration and grounds for the suspension.
- If the Local System Review Board affirms or modifies the EMS Medical Director's suspension order, the individual, provider agency, or other participant shall have the opportunity for a review of the Local System Review Board's decision by the State EMS Disciplinary Review Board.
- If the Local System Review Board reverses or modifies the EMS Medical Director's suspension order, the EMS Medical Director shall have the opportunity for a review of the Local System Review Board's decision by the State EMS Disciplinary Review Board.
- Requests for review by the State EMS Disciplinary Review Board shall be submitted, in writing, to the Chief of the Department's Division of EMS and Highway Safety, within 10 days after receiving the Local System Review Board's decision or the EMS Medical Director's suspension order, whichever is applicable. A copy of the Local System Review Board's decision or suspension order shall be included with the request.
- An EMS Medical Director may immediately suspend an individual, provider agency, or other participant if he/she finds that the information in his/her possession indicates that the continuation in practice by an individual, provider agency, or other participant would constitute an imminent danger to the public. The suspended party shall be issued an immediate verbal notification followed by a written suspension order to the party by the EMS Medical Directors which states the length, terms, and basis for suspension.
- Within 24 hours following the commencement of the suspension, the EMS Medical Director shall deliver to the Department, by messenger, in person, or telex, a copy of the suspension order and copies of any written materials which relate to the EMS Medical Director's decision to suspend the individual, provider agency, or other participant.
- Within 24 hours following the commencement of the suspension, the suspended party may deliver to the Department, by messenger, in person, or telex, a written response to the suspension order and copies of any written materials which the party feels relate to that response.
- Within 24 hours following receipt of the EMS Medical Director's suspension order or the suspended party's written response, whichever is later, the Director or designee shall determine whether the suspension should be stayed pending the suspended party's opportunity for hearing or review in accordance with the EMS System Act, or whether the suspension should continue during the course of that hearing or review. The Director or designee shall issue this determination to the EMS Medical Director, who shall immediately notify the suspended individual, provider agency, or other participant. The suspension shall remain in effect during this period of review by the Director or designee.

## Substance Abuse

Revised: 10/18

**Policy:**

The St. John's Hospital EMS System considers substance abuse (drug and/or alcohol dependency) to be a health problem and will assist any System provider who becomes dependent on drugs and/or alcohol. The System, and ultimately our patients, will suffer the adverse effects of having a prehospital care provider whose work performance and attendance are below acceptable standards. Any employee whose substance abuse problems jeopardize the safety of patients, co-workers or bystanders shall be deemed "unfit to work". Any prehospital care provider involved in the St. John's Hospital EMS System who voluntarily requests assistance with a personal substance abuse problem will be referred to the EMS Medical Director for assessment and referral for treatment when necessary.

**Procedure:****Testing for Drugs & Alcohol**

- The St. John's Hospital EMS System does not require employees to submit to blood and/or urine testing for drugs and/or alcohol as a routine part of their employment physical examination. However, individual agencies may require testing as part of the application process.
- Any prehospital care provider may contact the EMS Medical Director (or his/her designee) if he/she has reasonable cause to suspect that a co-worker is under the influence of drugs and/or alcohol while on duty. The EMS Medical Director may choose to require the System provider to submit to a blood alcohol test and/or blood/urine toxicology screening. The cost of this testing procedure may be billed to the provider's agency, or in the case of a student, the requesting agency. Disputes related to billing of drug testing should not delay the procedure(s).
  - If a System provider who is required to submit to testing for drugs and/or alcohol refuses to cooperate, he/she will be subject to disciplinary action for insubordination (up to and including termination from the System).
  - Anyone caught tampering with, or attempting to tamper with his/her test specimen (or the specimen of any other prehospital care provider) will be subject to immediate termination from the System.
  - If any of the test results are positive, the EMS Medical Director will interview the provider. The EMS Medical Director will consult with the provider's agency to determine if referral to an assistance program shall occur.
    - The first occurrence will result in a referral of the prehospital care provider to the appropriate assistance program and the provider will be subject to disciplinary action as determined by the EMS Medical Director in consultation with the provider's agency/employer.
    - The second occurrence will result in disciplinary action as determined by the EMS Medical Director in consultation with the provider's

**Substance Abuse**

agency/employer and may result in suspension of the provider's license and/or System certification.

- The progress of employees with substance abuse problems who have been referred to an assistance program will be closely monitored by their agency/employer and the EMS Medical Director. The provider must successfully complete the entire required rehabilitative program and maintain the preventative course of conduct prescribed by the assistance program. He/she must attend the appropriate after-care program(s) and provide verification of compliance with the program requirements, including additional drug testing as determined by the EMS Medical Director and the agency/employer.
- If the test results are negative, a conference with the EMS Medical Director and the provider's agency/employer will be held to determine what future action, if any, will be taken.
- If the prehospital care provider refuses to correct his/her health problems, he/she shall be subject to disciplinary action that pertains to all System providers who cannot, or are not, performing their job duties and responsibilities at acceptable levels.
- The use, sale, purchase, transfer, theft or possession of an illegal drug is a violation of the law. Illegal drug means any drug which is (a) not legally obtainable or (b) legally obtainable but has not been legally obtained. The term illegal drug includes prescription drugs not legally obtained and prescription drugs legally obtained but not being used for prescribed purposes. Anyone in violation will be referred to law enforcement, licensing and/or credentialing agencies when appropriate.



## Criminal Conviction

Revised: 10/18

**Policy:**

Provide for the safety and wellbeing of the population served by the SAMIC EMS System.

**Procedure:**

- Prehospital personnel who have been convicted of an offense of the Criminal Code, Wrongs to Children Act, Controlled Substances Act, or other felony charges must submit a written statement to the EMS Medical Director containing when the offense occurred, the circumstances surrounding the offense, information regarding sentence and status of sentence, and any other pertinent information.
- The EMS Medical Director will review the information and render a decision as to the personnel's ability to function in or continue to function in the System.

**Hospital Bypass or Diversion**

Revised: 10/18

**Policy:**

Provide for the continuity of patient care when circumstances result in the bypass or diversion from a hospital participating in the SAMIC EMS System.

**Procedure:**

- In the event the Administrative Disaster Team determines the hospital should go on “bypass status” due to a disaster situation or limited resources, the Administrative Disaster Team, or designee shall notify the Director of Emergency & Special Care and the EMS Facilitator, or designee.
- The Administrative Disaster Team, or designee, shall make such notification to outside organizations specific to the situation (e.g., Red Cross, Salvation Army, Blood Bank, etc.).
- The EMS Facilitator, or designee, shall notify
  - Springfield Ambulance Companies
  - Springfield Fire Department
  - Springfield Police Department
  - Participating agencies within our System that may be effected
  - Other EMS Systems that may be effected by such bypass status
- Such notification shall include, but not limited to, the following
  - Notification of “bypass status”
  - Estimated length of bypass
  - Alternate access to facility, if appropriate
  - Alternate methods of communications, if appropriate
  - Other information approved by the Administrative Disaster Team for the situation
- Upon termination of the “bypass status” by the Administrative Disaster Team, the EMS Facilitator, or designee, shall notify all parties previously notified that the “bypass status” has been lifted and to resume normal operations.
  
- Notification shall be made to the Illinois Department of Public Health, Division of Emergency Medical Services, during the next business day following any bypass or resource limitation decision. This notification may be faxed.

**ASSOCIATE AND/OR PARTICIPATING HOSPITALS**

**Hospital Bypass or Diversion**

- In the event the Administrator or designee determines the hospital should go on “bypass status” due to a disaster situation or limited resources, the Administrator or designee shall notify the appropriate parties as stated in their emergency preparedness plan.
- The hospital shall make such notification to outside organizations specific to the situation (e.g., Red Cross, Salvation Army, Blood Bank, etc.).
- The Associate Hospital EMS Coordinator or designee, shall notify
  - Local Ambulance Services
  - Appropriate fire and police departments
  - Other hospital that may be effected by the bypass/diversion of patients,.
  - SAMIC EMS Medical Director or designee
- Such notification shall include, but not limited to, the following
  - Notification of “bypass status”
  - Estimated length of bypass
  - Alternate access to facility, if appropriate
  - Alternate methods of communications, if appropriate
  - Other information approved by the Administrator or designee for the situation
- Upon termination of the “bypass status” by the Administrator or designee, shall notify all parties previously notified that the “bypass status” has been lifted and to resume normal operations.
- Notification shall be made to the Illinois Department of Public Health, Division of Emergency Medical Services and SAMIC EMS System office during the next business day following any bypass or resource limitation decision. This notification may be faxed

## Patient Care Report

Revised: 10/18

**Policy:**

Provide appropriate documentation of patient care to demonstrate the continuity of care and provide information for medical-legal purposes, continuous quality improvement activities, research, and other appropriate uses for the data collected.

**Procedure:****NON-TRANSPORTING AGENCIES**

- All agencies must complete either the SAMIC non-transporting report form or a System-approved form containing at least the same information.
- Completed run forms should be submitted to the SAMIC EMS office as soon as possible after the call.
- Distribution of the copies are as follows:
  - Original - receiving hospital for patient record
  - First copy - agency records
  - Second copy - SAMIC EMS office
- Consistent failure to complete run forms on a repetitive basis by agencies or personnel within the System will be cause for consideration of suspension proceedings by the EMS Medical Director.

**TRANSPORTING AGENCIES**

- An electronic patient care report must be completed for all runs.
- All agencies must complete the designated report form preferably **before leaving the receiving hospital**, but not more than **twenty-four (24) hours** after the call.
- Inability to complete the patient care report within the appropriate times will be investigated to see if sufficient reason exists to delay completion of the forms. If such a reason does not exist, agencies and/or personnel in a delinquent status will be reported to the EMS Medical Director, who will take action as is deemed appropriate to insure the forms are immediately completed and accorded to the EMS office.
- Consistent failure to complete the Illinois Prehospital Care Report form on a repetitive basis by agencies or personnel within the System will cause consideration for initiation of suspension proceedings by the EMS Medical Director.

## Agency Responsibilities

Revised: 10/18

**Policy:**

Provide a summary of the important responsibilities of the provider agencies that are in the HSHS St. John's Hospital EMS System.

**Procedure:****Operational Responsibilities**

- The agency must comply with minimum staffing requirements for the level and type of vehicle. Staffing patterns must be in accordance with the provider's approved system plan and in compliance with Section 515.830(f).
- No agency shall employ or permit any member or employee to perform services for which the provider is not licensed, certified, or otherwise authorized to perform.
- Agencies must comply with **0033 - Patient Care Report Policy**.
- Agencies with controlled substances must abide by all provisions of **0056 - Controlled Substance Policy**.
- Provide updated copies of FCC Licenses and Mutual Aid Agreements upon expiration.

**Notification Requirements**

Any agency participating as an EMS provider in the HSHS St. John's Hospital EMS System must notify the EMS office of the following:

- Any instance when the agency lacks the appropriately licensed and system certified personnel to provide 24 hour coverage. Transporting agencies must apply for an ambulance staffing waiver if the agency is aware a staffing shortage is interfering with the ability to provide such coverage.
- Any personnel changes and updates within ten days. This includes addition of new personnel and resignations of existing personnel. Roster changes must include the following:
  - Name
  - Address
  - Phone Number
  - Date of Birth
  - License Number
  - Expiration date
- Any time an agency is not able to respond to an emergency call due to lack of staffing. The report should also include the name of the agency that was called for mutual aid and responded to the call.
- Any incident or unusual occurrence which could have or did adversely affect the patient or EMS provider in the system within 24 hours via the Incident Report Form.

## Agency Responsibilities

- Any changes in medical equipment or supplies.
- Any changes in vehicles. Vehicles must be inspected by the system and IDPH. The appropriate paperwork must be completed prior to the vehicle being placed into service.
- Any change in the agency's role in providing EMS.
- Any change to the agency's response area.
- Any changes occur in communication capacity or equipment.

### Training and Education Responsibilities

- Twenty-five percent of all EMT continuing education must be obtained through classes taught or sponsored by the Resource Hospital, HSHS St. John's Hospital.
- Appoint a training officer. The EMS training officer ideally should be an IDPH Lead Instructor. The training officer must provide the EMS Office with their contact information.
- Develop a training plan which meets the requirements for re-licensure and System certification as detailed in the **0038 - Re-licensure Requirements Policy**.
- Submit the agency's training plan (along with a current roster) annually to the EMS Office for System and Department (IDPH) approval. The applications are due by October 1, for the following training year.
- Any changes made to an approved training application must be communicated to the EMS Office prior to the training.
- Maintain sign-in rosters for all training conducted and provide participants with certification of attendance.
- Conduct System mandatory training annually as per EMS Office notification.

### Additional Reports and Records Responsibilities

- Comply with HSHS St. John's Hospital EMS System Quality Assurance Plan, including agency self-review, submission of incident reports, submission of patient care reports, maintain controlled substance security logs and usage tracking forms. Logs must be made available upon request of EMS Office personnel.
- Maintain glucometer logs. Testing should be done a minimum of once per week, any time a new bottle of strips is put into service and any time the glucometer is dropped. Glucometer logs should be kept in the ambulance (or other vehicle) and must be made available upon request of EMS Office personnel.
- All agencies and agency personnel are to comply with all of the requirements outlined in HIPAA regulations with regard to protected health information.

## Agency Compliance Waiver

Revised: 10/18

**Policy:**

Provide a layout for agencies with unreasonable hardship to request a waiver from HSHS St. John's Hospital EMS Office and IDPH.

**Procedure:****For Policy and Equipment Issues:**

- A cover letter to include: agency name, IDPH provider number, agency official(s), designated contact person and telephone number, statement of the problem and proposed waiver.
- Explanation of why the waiver is needed.
- Explanation of how the modification will relive problems that would be created by compliance with the rule or policy as written.
- Statement of and justification for the time period of which the modifications will be necessary. This section must also include a chronological plan for meeting total compliance requirements. The maximum time period allowed for modifications is one year.

**For Staffing Waivers:**

- Complete the IDPH EMS Staffing Waiver Application.

All waiver requests should be submitted to the HSHS St. John's Hospital EMS Office for Medical Director review and approval.

## Agency Advertising

Revised: 10/18

**Policy:**

EMS agencies are expected to advertise in a responsible manner and in accordance with applicable legislation to assure the public is protected against misrepresentation.

**Procedure:**

- **No agency** shall advertise or identify their vehicle or agency as an EMS life support provider unless the agency does, in fact, provide service as defined in the EMS Act and has been approved by IDPH.
- **No agency** shall disseminate information leading the public to believe that the agency provides EMS life support services unless the agency does, in fact, provide services as defined in the EMS Act and has been approved by IDPH.
- **Any person** (or persons) who violate the EMS Act, or any rule promulgated pursuant there to, is guilty of a Class C misdemeanor.
- A **licensee** that advertises its service as operating a specific number of vehicles or more than one vehicle shall state in such advertisement the hours of operation for those vehicles, if individual vehicles are not available twenty-four (24) hours a day. Any advertised vehicle for which hours of operation are not stated shall be required to operate twenty-four (24) hours a day.
- It is the responsibility of all HSHS St. John's Hospital EMS System personnel to report such infractions



## System Certification

Revised: 10/18

**Policy:**

It is the responsibility of the Resource Hospital to confirm the credentials of the System's EMS providers. System certification is a privilege granted by the EMS Medical Director in accordance with the rules and regulations of the Illinois Department of Public Health.

**Procedure:**

- A System applicant must hold a State of Illinois license or be eligible for state licensure. EMS providers transferring in from another system or state must have all clinical and internship requirements completed prior to system certification. Transferring into the St. John's Hospital EMS System to complete internship requirements of an EMT training program is prohibited.
- The System applicant must be a member of or in the process of applying for employment with a HSHS St. John's Hospital EMS System provider agency. The System agency must inform the EMS Office of the applicant's potential for hire or membership to their agency.
- A system application must be completed and submitted to the EMS Office.
- The System applicant must also submit copies of all required documents for their level of licensure.
- Upon System review of the system application, EMS Office personnel will determine if the candidate can sit for the system examination.
- The System applicant must pass the appropriate HSHS St. John's Hospital EMS System Protocol Exam with a score of 80% or higher. The applicant may retake the exam with the approval of the EMS Medical Director. A maximum of two (2) retakes are permitted.
- Satisfactory completion of a **90-day** probationary period is required once system certification is granted.
- The EMS Medical Director reserves the right to deny system provider status or to place internship & field skill evaluation requirements on any candidate requesting system certification at any level.

## System Certification

### Maintaining System Certification

In order to maintain active status within the HSHS St. John's Hospital EMS System, providers must maintain the appropriate requirements as noted below.

	ECRN	EMD	EMR	EMT	AEMT	Intermediate	Paramedic	PHRN
Continuing Education Hours	32	48	24	60	80	80	100	100
SAMIC Agency Affiliation		X	X	X	X	X	X	X
System Testing and Skill Evaluation	X	X	X	X	X	X	X	X
CPR Card	X	X	X	X	X	X	X	X
ACLS	X				X	X	X	X
PALS or PEPP	X				X	X	X	X
PHTLS, ITLS, TECC, TCCC, TNCC or TNS	X				X	X	X	X

- Maintaining of current certifications and tracking of expiration dates is ultimately the responsibility of the individual provider. Agency training officers will be assisting with monitoring these certifications and reporting to the EMS Office. However, these individuals are not responsible for any certifications other than their own.
- Failure to maintain current certification may result in **suspension** of the individual in violation, if an extension has not been applied for and granted through the EMS Office. In either case, **the individual will be required to take a full provider course in the lapsed certification and will NOT be allowed to simply take a refresher course for certification.** Suspended individuals will remain on suspension until proof of current certification is presented to the EMS Office.

**System Certification****System Resignation/Termination**

- A System participant may resign from the System by submitting a written resignation to the EMS Medical Director.
- A System participant who resigns from or is terminated by a System provider agency has a 60-day grace period to re-establish membership/active status with another System provider agency. If the participant does not do this within the 60-day time period, then the individual's System certification will be terminated.
- After 60 days, any EMS provider requesting to re-certify in the HSHS St. John's Hospital EMS System will be required to repeat the process for initial certification.

## Re-licensure Requirements

Revised: 10/18

**Policy:**

Provide expectations for providers regarding license renewal.

**Procedure:**

- To be re-licensed as an EMS provider, the licensee shall submit the required documentation for renewal to HSHS St. John's Hospital EMS Office at least 60 days prior to the license expiration date. Failure to complete continuing education requirements and/or failure to submit the appropriate documentation to the EMS Office at least 60 days prior to the license expiration date may result in delay or denial of re-licensure. **The licensee will be responsible for any late fees or class fees incurred as a result.**
- The EMS Office will review the re-licensure applicant's continuing education records. If the individual has met all requirements for re-licensure and approval is given by the EMS Medical Director, the EMS Office will submit a renewal request to IDPH.
- A licensee who has not been recommended for re-licensure by the EMS Medical Director will be instructed to submit a request for independent renewal directly to IDPH. The EMS Office will assist the licensee in securing the appropriate renewal form.
- IDPH requires the licensee to certify on the Renewal Notice (Child Support/Personal History Statement), **under penalty of perjury**, that he or she is not more than 30 days delinquent in complying with a child support order and previous felon status (Section 10-65(c) of the Illinois Administrative Procedure Act [5 ILCS 100/1065(c)]). The provider's social security number must be provided as well.
- The license of an EMS provider shall terminate on the day following the expiration date shown on the license. An EMS provider may NOT function in the St. John's Hospital EMS System until a copy of a current license is on file in the EMS Office.
- An EMS provider whose license has expired may, within 60 days after license expiration, submit all re-licensure material and a fee of \$50.00 in the form of a certified check or money order made payable to IDPH (Note: personal checks, cash or credit cards will NOT be accepted). Do not send payment to HSHS St. John's Hospital EMS Office. If all continuing education and system requirements have been met and there is no disciplinary action pending against the EMS provider, the Department may re-license the EMS provider.

## Re-licensure Requirements

- Any EMS provider whose license has expired for a period of more than 60 days and less than 36 months may be allowed reinstatement which includes retest for their license renewal (written and skills test) after a review of the situation by the Medical Director and IDPH. This only applies to a State of Illinois license for EMT (Section 3.50(d)(5) of the Illinois Administrative Procedure Act [5 ILCS 100/3.5(d)(5)]).
- Failure to re-license at any level does not "automatically" drop a provider to a lower level of certification (e.g. An EMT does not automatically become a First Responder, etc.). Once a provider's license has expired, he or she is no longer an EMS provider at ANY level and cannot provide medical care in the system or the state.
- Requests for extensions or inactive status must be submitted on the proper IDPH form and forwarded to the EMS Office at least 60 days prior to expiration. Extensions are granted only in very limited circumstances and are handled on a case by case basis. **NOTE:** The EMS Medical Director may mandate additional CEU requirements during the extension period.
- At any time **prior to the expiration of the current license**, an Intermediate or Paramedic may revert to EMT status for the remainder of the license period. The provider must make this request in writing to the EMS Medical Director and the Department and must submit their original current license to the Department. To re-license at the EMT-B level, the provider must meet all of the EMT-B requirements for re-licensure.
- At any time **prior to the expiration of the current license**, an EMT -B may revert to the Emergency Medical Responder status for the remainder of the license period. The EMT-B must make this request in writing to the EMS Medical Director & the Department and must submit their original current EMT-B license to the Department. To re-license at the EMR level, the provider must meet all of the EMR requirements for re-licensure.
- The provider must submit a copy of their new IDPH license to their agency(s) and to the EMS Office. Failure to do so will result in ineligibility to function in the System.

### General Continuing Education Requirements

St. John's Hospital EMS System requires:

- Twenty-five percent of the didactic continuing education hours required for re-licensure must be earned through attendance at system-taught courses, system approved courses, courses sponsored by the HSHS St. John's Hospital EMS

**Re-licensure Requirements**

Office or courses taught by a System-approved instructor.

- No more than seventy-five percent of the continuing education hours required for re-licensure will consist of hours obtained from the same site code.
- No more than twenty-five percent of the continuing education hours required for re-licensure will consist of any single subject area.
- EMS providers must attend at least one (1) continuing education program that reviews HSHS St. John's Hospital EMS System Policies, Guidelines, and Procedures as part of the four-year continuing education requirements. Such review will also be required with protocol updates.
- No more than fifty percent of on-line CE will be accepted for re-licensure.
- EMS continuing education credits must have an approved IDPH site code or be approved by the HSHS St. John's Hospital EMS Medical Director.
- Continuing education credits approved for EMS Systems within IDPH EMS Region 3 will be accepted by the HSHS St. John's Hospital EMS System.
- Prior approval must be obtained from the EMS Medical Director for continuing education programs from other IDPH regions or from other states, including national symposiums.

## Re-licensure Requirements

### Summary of Re-licensure Requirements

EMS providers must meet the requirements noted below.

	ECRN	EMD	EMR	EMT	AEMT	Intermediate	Paramedic	PHRN
<b>Continuing Education Hours</b>	<b>32</b>	<b>48</b>	<b>24</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>100</b>	<b>100</b>
<b>SAMIC Agency Affiliation</b>		X	X	X	X	X	X	X
<b>System Testing and Skill Evaluation</b>	X	X	X	X	X	X	X	X
<b>CPR Card</b>	X	X	X	X	X	X	X	X
<b>ACLS</b>	X				X	X	X	X
<b>PALS or PEPP</b>	X				X	X	X	X
<b>PHTLS, ITLS, TECC, TCCC, TNCC or TNS</b>	X				X	X	X	X

- Maintaining of current certifications and tracking of expiration dates is ultimately the responsibility of the individual provider. Agency training officers will be assisting with monitoring these certifications and reporting to the EMS Office. However, these individuals are not responsible for any certifications other than their own.
- Failure to maintain current certification may result in **suspension** of the individual in violation, if an extension has not been applied for and granted through the EMS Office. In either case, **the individual will be required to take a full provider course in the lapsed certification and will NOT be allowed to simply take a refresher course for certification.** Suspended individuals will remain on suspension until proof of current certification is presented to the EMS Office.

**Re-licensure Requirements****System Resignation/Termination**

- A System participant may resign from the System by submitting a written resignation to the EMS Medical Director.
- A System participant who resigns from or is terminated by a System provider agency has a 60-day grace period to re-establish membership/active status with another System provider agency. If the participant does not do this within the 60-day time period, then the individual's System certification will be terminated.
- After 60 days, any EMS provider requesting to re-certify in the HSHS St. John's Hospital EMS System will be required to repeat the process for initial certification.



## Off-Line Medical Control

Revised: 10/18

**Policy:**

Establish the standard of care which is expected of the HSHS St. John's Hospital EMS System Provider.

**Procedure:**

- Standing Medical Orders, Protocols, Policies & Procedures contained in this Prehospital Care Manual are the written, established standard of care to be followed by all members of the HSHS St. John's Hospital EMS System for treatment of the acutely ill or injured patient.
- The EMS provider will initiate patient care under these guidelines and contact Base Station Medical Control in a timely manner for consultation regarding treatment not specifically covered by standing orders, in addition to those protocols that specify online physician's order. Diligent effort must be made to contact Medical Control in a timely manner via cellular telemetry, landline phone or VHF MERCI radio. Delay or failure to contact Medical Control for required on-line orders is a quality assurance indicator.
- These Standing Medical Orders will be utilized as Off-Line Medical Control under the following circumstances:
  - For conditions covered by this protocol manual.
  - In the event communication cannot be established or is disrupted between the Prehospital provider and Medical Control.
  - In the event that establishing communications would cause an inadvisable delay in care that would increase life threat to the patient.
  - In the event the Medical Control physician is not immediately available for communication.
  - In the event of a disaster situation, where an immediate action to preserve and save lives supersedes the need to communicate with hospital-based personnel, or where such communication is not required by the disaster protocol.
- Inability to contact Medical Control should not delay patient transport or the provision of life-saving therapies. Patient destination and transport decisions are set forth in these Standing Medical Orders / Protocols.

## On-Line Medical Control

Revised: 10/18

**Policy:**

On-line Medical Control is designed to provide immediate medical direction and consultation to the Prehospital EMS provider in accordance with established patient treatment guidelines and policies in this manual.

**Procedure:**

On-line Medical Control is utilized to involve the expertise of an Emergency Medical Physician in the treatment plans and decisions involving patient care in the Prehospital setting.

- EMS communications requiring on-line contact with a base station physician shall be conducted using cellular telemetry.
- Incoming telemetry calls will usually be answered by an Emergency Communications Registered Nurse (ECRN). The ECRN may request Medical Control from an ED Physician if orders or consultation are needed.
- Pre-hospital personnel in need of on-line Medical Control shall notify the ECRN the need to speak to an ED Physician at the initiation of the report.
- Use of telemetry is required for patient care requiring interventions beyond the Routine BLS, ILS or ALS standing medical orders. Situations requiring Medical Control contact include, but are not limited to:
  - Any time an order is specifically required for BLS, ILS or ALS medications as outlined in the protocol.
  - Any time orders are needed for certain defined procedures.
  - Any instance an EMS provider desires physician involvement.
  - Any situation that involves bypassing a closer hospital.
  - Anytime an EMS provider feels a deferral is warranted.
  - Anytime a Field Training Instructor (FTI) feels a student needs to further develop communication skills.
  - When a pre-hospital 12-Lead EKG is acquired that shows wide-complex tachycardia or consultation is needed regarding an EKG.
  - Circumstances involving a death on scene or cases involving advanced directives.
  - High risk refusals
  - First Responder low risk refusals.
  - Use of restraints (including handcuffs).
  - Trauma cases or potential trauma cases.

## On-Line Medical Control

- "Telemetry" calls include all medical complaints requiring Medical Control contact, refusals, traumas and consultations.
- MERCI calls are made via MERCI radio and called directly to the receiving hospital (or in cases where telemetry communication is not possible and consult with a physician is necessary). MERCI communication is adequate for patient care that does not require interventions beyond Routine BLS, ILS or ALS Care. Specifically, patients that have received only oxygen, monitor, IV and/or medications without the need for additional orders or in cases where Medical Control contact is not required.
  - If MERCI traffic prevents contact with the receiving hospital, HSHS St. John's Hospital may be contacted for assistance in proper routing of communications.
  - If the receiving hospital deems that further care is necessary or requests additional interventions be performed, the EMS provider should contact Medical Control. Only Medical Control (ED Physician or ECRN) at HSHS St. John's Hospital may give orders.
  - If the receiving hospital requests discontinuation of treatment established by the prehospital provider, Medical Control contact should be established.
- High Risk Refusals require Medical Control consultation prior to securing and accepting the refusal and terminating patient contact. High risk refusals involve cases where the patient's condition may warrant delivery of care in accordance with implied consent of the Emergency Doctrine or other statutory provision. High risk refusals include, but are not limited to:
  - Head injury (based on mechanism or signs & symptoms)
  - Presence of alcohol and/or drugs
  - Anytime medications are given and patient refuses transport
  - Significant mechanism of injury (e.g. rollover MVA)
  - Altered level of consciousness or impaired judgment
  - Minors (17 years old or younger, regardless of injury or illness)
  - Situations that involve bypassing a closer hospital
  - Paramedic initiated refusals (patient wants to be transported but the paramedic feels it is unnecessary).
- Low Risk Refusals do not require Medical Control consultation (for BLS, ILS & ALS levels) if the prehospital provider determines that the patient meets the Low Risk Criteria and there is no doubt that the patient understands the risk of refusal. The patient cannot be impaired and must be able to consent to the refusal. Medical Control should be contacted if there are any concerns about the patient's ability to refuse. Low risk refusals may include:

## On-Line Medical Control

- Slow speed auto accidents with no intrusion into patient compartment, low mechanism of injury, and no patient injury beyond minor scrapes and bruises.
  - Fall from standing without other medical conditions and no extreme of age.
  - Isolated injuries not related to an auto accident or other significant mechanism of injury
  - False calls or "third party" calls where no illness, injury or mechanism of injury is apparent.
  - Lifting assistance or "public assist" calls (for which EMS is called for assistance in moving a patient from chair to bed, floor to bed, car to home, etc.). This assumes the EMS agency is routinely called to assist this patient, the patient is assessed to ensure there is no complaint or injury and there has been no significant change in the patient's condition. EMS crews must complete a patient care report indicating all assessment findings and assistance rendered.
- 
- First Responders may handle low risk refusals only (as defined above). Under no circumstance should a First Responder take a high risk refusal.
- 
- If the EMS provider has not been able to contact Medical Control via cellular telemetry, telephone or MERCI radio, the EMS provider will initiate the appropriate protocol(s). Upon arrival at the receiving hospital, an incident report must be completed and forwarded to the EMS Office within 24 hours of the occurrence. This report should document all aspects of the run with specific details of the radio/communications failure and initiation of the St. John's Hospital EMS System Standing Medical Orders and Standard Operating Procedures.

## Radio Communications

Revised: 10/18

**Policy:**

Radio communications is a vital component of prehospital care. Information reported should be concise and provide an accurate description of the patient's condition as well as treatment rendered. Therefore, a complete patient assessment and set of vital signs should be completed prior to contacting Medical Control or the receiving hospital.

**Procedure:**

- Regardless of the destination, early and timely notification of Medical Control or the receiving hospital is essential for prompt care to be delivered by all involved.
- Components of the Patient Report
  - Unit identification
  - **Special Alert (STEMI, Stroke, Trauma, Cardiac Arrest, or Sepsis)**
  - Destination & ETA
  - **Age/sex**
  - **Chief complaint**
  - **Assessment (General appearance, degree of distress & level of consciousness)**
  - **Vital signs:**
    - Blood pressure
    - Pulse (rate, quality, regularity)
    - Respirations (rate, pattern, depth)
    - Pulse oximetry, if indicated
    - Pupils (size & reactivity)
    - Skin (color, temperature, moisture)
    - Pertinent physical examination findings
    - SAMPLE History
    - Treatment rendered and patient response to treatment
- Bold items should be transmitted without delay.
- If Medical Control contact is necessary to obtain physician orders (where indicated by protocol), diligent attempts must be made to establish base station contact via:
  - Cellular telemetry to 217-753-0016 or 217-753-1089
  - Telephone landline direct to 217-525-5610
  - MERCI radio
- If unable to establish contact, then initiate protocol. If Medical Control contact is not necessary, contact the receiving hospital via MERCI

**Patient Right to Refuse**

Revised: 10/18

**Policy:**

A patient may refuse medical help and/or transportation. Once the patient has received treatment, he/she may refuse to be transported if he/she does not appear to be a threat to themselves or others, Any person refusing treatment must be informed of the risks of not receiving emergency medical care and/or transportation. NOTE: Family members cannot refuse transportation of a patient to a hospital unless they can produce a copy of a durable power of attorney for healthcare.

**Procedure:**

- Assure an accurate patient assessment has been conducted to include the patient's chief complaint, history, objective findings and the patient's ability to make sound decisions.
- Explain to the patient the risk associated with his/her decision to refuse treatment and transportation.
- Secure Medical Control approval of high risk refusals (low risk refusals for First Responders) in accordance with the Online Medical Control Policy.
- Complete the Against Medical Advice/Refusal Form and have the patient sign the form. If the patient is a minor, this form should be signed by a legal guardian or Durable Power of Attorney for Healthcare. NOTE: Parental refusals may be accepted by voice contact with the parent (i.e. by telephone) if the EMS provider has made reasonable effort to confirm the identity of the parent and the form may be signed by an adult witness on scene. This should be clearly documented on the refusal form and in the patient care report.
- If available, it is preferable to have a police officer at the scene act as the witness. If a police officer is not present, any other bystander may act as a witness. However, his/her name, address & telephone number should be obtained and documented.
- If the patient refuses medical help and/or transportation after having been informed of the risks of not receiving emergency medical care and refuses to sign the release, clearly document the patient's refusal to sign the report. Also, have the entire crew witness the statement and have an additional witness sign your statement, preferably a police officer. Include the officer's badge number and contact Medical Control.
- The top (white) original of the AMA/Refusal Form is maintained by the agency securing the refusal. The copy is forwarded to the EMS Office with the

**Patient Right to Refuse**

appropriate copies of the patient care report. The patient is provided with the copy of the AMA/Refusal Form.

## Incident Reporting

Revised: 10/18

**Policy:**

Prehospital care providers shall complete a HSHS St. John's Hospital EMS System Incident Report Form whenever a System related issue occurs.

**Procedure:**

- In order to properly assess the situation and determine a solution to the issue, the following information needs to be provided on the form:
  - Date of occurrence
  - Time the incident occurred
  - Location of the incident
  - Description of the events
  - Personnel involved
  - Agency and/or institution involved
  - Copy of the patient care record and/or any other related documents

**Incident Report Process**

- All incident report forms shall be given to the EMS provider's immediate supervisor, training officer, or quality assurance coordinator who will assess the incident and will forward the report to the St. John's Hospital EMS System Coordinator.
- The EMS Coordinator will review the incident and notify the EMS Medical Director and the appropriate course of action will be determined.
- The EMS provider originating the report will be notified of the resolution.

**Incident Report Indicators**

- Situations requiring EMS Office notification include:
  - Any situation which is not consistent with routine operations, System procedures or routine care of a particular patient. It may be any situation, condition or event that could adversely affect the patient, co-worker or the System.
  - Any deviation from HSHS St. John's Hospital EMS System policies, procedures or protocols.
  - Medication errors
  - Treatment errors
  - Delays in patient care or scene response



**Incident Reporting**

- Operating on protocol when Medical Control contact was indicated but unavailable
- Violence toward EMS providers that results in injury or prevents the provider from delivering appropriate patient care
- Equipment failure (e.g. cardiac monitor, glucometer)
- Inappropriate Medical Control orders
- Repeated concerns/conflicts between agencies, provider/physician or provider/hospital conflicts
- Patterns of job performance that indicate skill decay or knowledge deficiencies affecting patient care

Situations subject to review and resolution at the agency level include:

- Conflicts between employees
- Conflicts between agencies (that do not impact patient care)
- Operational errors (that do not impact patient care)
- Behavioral issues (that do not impact patient care)

**Patient Confidentiality and Release of Information**

Revised: 10/18

**Policy:**

All St. John's Hospital EMS System personnel are exposed to or engaged in the collection, handling, documentation or distribution of patient information. Therefore, all EMS personnel are responsible for the protection of this information.

**Procedure:**

- Confidentiality is governed by the "need to know" concept.
- Only St. John's Hospital EMS System personnel and hospital medical staff directly involved in a patient's care or personnel involved in the quality assurance process are allowed access to the patient's medical records and reports. Authorized medical records and billing personnel are allowed access to the patient's medical records and reports in accordance with hospital and EMS provider policies.
- Requests for release of patient care related information (from third party payers, law enforcement personnel, the coroner, fire department or other agencies) should be directed to the EMS agency's medical records department.
- St. John's Hospital EMS System personnel are not to discuss specific patients in public areas.
- EMS providers should not discuss any confidential information regarding patient care with friends and relatives or friends and relatives of the patient. This includes hospitalization of a patient and/or the patient's condition. Information gained from chart or case reviews for the purpose of education, research, quality improvement or quality assurance is considered confidential.
- No patient name will be mentioned in the process of prehospital radio transmissions utilizing MERCI radio.
- Customarily, when calling in a direct admit the patient's initials can be included in the radio report. This is necessary for identification and is acceptable to transmit.
- Sensitive patient information regarding diagnosis or prognosis should not be discussed during radio transmissions.
- Every effort should be made to maintain the patient's auditory and visual privacy during treatment at the scene and en route.
- EMS personnel should limit bystanders at the scene of an emergency. Law enforcement personnel may be called upon to assist in maintaining bystanders at a reasonable distance.

## Patient Destination

Revised: 10/18

**Policy:**

Patients should be transported to the closest appropriate hospital. A patient or designee does have the right to make an informed decision to be transported to a hospital of choice. This decision should be respected unless the risk of transporting to a more distant hospital outweighs the medical benefits of transporting to the closest hospital.

**Procedure:**

A trauma patient may benefit from transport directly to the closest appropriate Trauma Center rather than the closest geographically located hospital.

A STEMI patient may benefit from transport directly to a hospital with a cardiac catheterization lab.

A Stroke patient may benefit from transport to a Comprehensive Stroke Center or a Primary Stroke Center with Endovascular Capabilities.

**Patient Hospital Preference Guidelines**

- Bypassing the nearest hospital to respect the patient's hospital choice is a decision based on medical benefits and associated risks and should be made in accordance with:
  - Urgency of care and risk factors based on:
    - Mechanism of injury (physiologic factors)
    - Perfusion status and assessment findings (anatomical factors)
    - Transport distance and time (environmental factors)
  - Medical Control consultation
  - Capacity of the nearest facility or facility of choice
  - Available resources of the transporting agency
  - Traffic and weather conditions
- The patient's hospital preference may be honored if:
  - There are no identifiable risk factors.
  - The patient has a secure airway.
  - The patient is hemodynamically stable.
  - The patient has been advised of the closer hospital.
  - Medical Control approves
- The EMS provider will explain the benefits versus the risks of transport to a more distant hospital and contact Medical Control for approval. The patient

## Patient Destination

(or representative) must sign a St. John's Hospital EMS System *AMA/Refusal Form* documenting that the patient understands the risks.

- No transporting service shall bypass a hospital in order to meet an ALS intercept unless approved by Medical Control.
- Patients may be transported to the hospital of choice within 15 miles without contacting Medical Control for approval.

### Trauma Patient Guidelines

All trauma patients fall under the American College of Surgeons Field Triage Decision Scheme. Any trauma patient who meets the ACS Field Triage Guidelines shall be transported to the Level 1 Trauma Center unless otherwise directed by Medical Control.

- If a patient is unconscious and meets ACS Field Triage guidelines for trauma, the patient will be taken to the highest level trauma center available.
- If a patient has an altered level of consciousness and meets ACS Field Triage guidelines for trauma, the patient will be taken to the highest level trauma center available.
- If a patient is alert and oriented to person, place & time with stable vital signs, and does not meet potential trauma criteria based on mechanism of injury the patient may be taken to the hospital of his/her choice in accordance with Patient Hospital Preference Guidelines.
- If a family member or any other person is at the Scene of an emergency and can readily prove Durable Power of Attorney for Healthcare, he/she can request that the patient be transported to a specific hospital in accordance with Patient Hospital Preference Guidelines.
- If a parent requests that a child (less than 18 years of age) who meets ACS Field Triage guidelines be taken to a specific hospital, Medical Control must be contacted for the final decision.

**Transfer and Termination of Patient Care**

Revised: 10/18

**Policy:**

Patient abandonment occurs when there is termination of the caregiver/patient relationship without consent of the patient and without allowing sufficient time and resources for the patient to find equivalent care. This is assuming, and unless proven otherwise, there exists a need for continuing medical care and the patient is accepting the treatment.

**Procedure:**

- EMS personnel must not leave or terminate care of a patient if a need exists for continuing medical care that must be provided by a knowledgeable, skilled and licensed EMS provider unless one or more of the following conditions exist:
  - Appropriate receiving hospital personnel assume medical care and responsibility for the patient.
  - The patient or legal guardian refuses EMS care and transportation (In this instance, follow the procedure as outlined in the Patient Right of Refusal Policy).
  - EMS personnel are physically unable to continue care of the patient due to exhaustion or injury.
  - When law enforcement personnel, fire officials or the EMS crew determine the scene to be unsafe and immediate threat to life or injury hazards exist.
  - The patient has been determined to be dead and all policies and procedures related to death cases have been followed.
  - If Medical Control concurs with a DNR order.
  - Whenever specifically requested to leave the scene due to an overbearing need (e.g. disasters, triage prioritization).
  - Medical care and responsibility for the patient is assumed by comparably trained, certified and licensed personnel in accordance with applicable policies.
- If EMS personnel arrive on scene, establish contact and evaluate a patient who then refuses care, the EMS crew shall conduct termination of the patient contact in accordance with the Patient Right of Refusal Policy and On-Line Medical Control Policy.
- EMS personnel may leave the scene of an illness or injury incident, where initial care has been provided to the patient and the only responsibility remaining for the EMS crew is transportation of the patient or securing a signed refusal, if the following conditions exist:
  - Delay in transportation of another patient (i.e. trauma patient) from the

**Transfer and Termination of Patient Care**

- same incident would threaten life or limb.
- An occurrence of a more serious nature elsewhere necessitates life-saving intervention that could be provided by the EMS crew (and without consequence to the original patient).
  - More appropriate or prudent transportation is available.
  - Definitive arrangement for the transfer of care and transportation of the initial patient to other appropriate EMS personnel must be made prior to the departure of the EMS crew. The alternate arrangements should, in no way, jeopardize the well-being of the initial patient.
  - During the transport of a patient by ambulance, should the EMS crew come across a separate emergency or incident requiring ambulance assistance; the local EMS system will be activated. Crews involved in the treatment and transportation of an emergency patient are not to stop and render care. The priority is to the patient onboard the ambulance.
  - In the event you are transporting the patient with more than two (2) appropriately trained prehospital personnel, you may elect to leave one medical attendant at the scene to render care and the other personnel will continue to transport the patient to the receiving facility.
  - In the event there is not a patient onboard the ambulance and an emergency situation is encountered requiring ambulance assistance; the crew may stop and render care. However, the local EMS agency should be activated and their jurisdiction respected.

## Transition of Care

Revised: 10/18

**Policy:**

A smooth transition of care between EMS providers is essential for optimum patient care. First Responder and BLS non-transport crews routinely transfer care to transporting EMS providers. The transfer of advanced procedures presents unique concerns for both the EMS provider relinquishing patient care as well as the EMS provider assuming patient care. A smooth transition between providers is essential for good patient care. Cooperation between all EMS personnel is encouraged and expected.

**Procedure:**

- EMS providers arriving at the scene of a call shall initiate care in accordance with the guidelines provided in this manual. The EMS provider must maintain a constant awareness as to what would be the best course of action for optimum and compassionate patient care. Focus should be placed on conducting a thorough patient assessment and providing adequate BLS care. The benefit of remaining on scene to establish specific treatments versus prompt transport to a definitive care facility should be a consideration of each patient contact.
- Once on scene, the EMS transporting agency shall, in conjunction with Medical Control, be the on-scene authority having jurisdiction in the determination of the patient care plan. The rank or seniority of a non-transport provider shall not supersede the authority vested in the transporting EMS provider by the EMS Medical Director.
- Upon the arrival of the transporting agency, the non-transport provider should provide a detailed verbal report to the transporting provider and then immediately transfer care to the transporting provider. The non-transport provider may continue the establishment of BLS/ILS/ALS procedures with the concurrence of the transporting provider.
- The transport provider should obtain report from the non-transport provider and conduct a thorough patient assessment. Treatment initiated by the non-transport provider should be taken into consideration in determining subsequent patient care steps.
- If the provider has initiated advanced procedures, then the transport provider should verify the integrity of the procedure prior to utilizing it for further treatment (e.g. verify patency of peripheral IVs and ETTs should be checked for proper placement). Transporting crews shall not arbitrarily avoid the use of (or discontinue) an advanced procedure established by non-transport personnel. Rationale for discontinuing an established procedure should be documented on the patient care report.
- Properly licensed and System-certified providers may be utilized to establish ILS/ALS procedures with the concurrence of the transporting provider. EMS

**Transition of Care**

personnel are encouraged to use all responders for efficiency in coordinating patient care.



## Intercept

Revised: 10/18

**Policy:**

To improve access to Advanced Life Support in the more rural communities the EMS System Intercept Protocol should service as a guide to pre-establish procedures and work to minimize the amount of possible variables when a Basic Life Support ambulance needs assistance from an Advanced Life Support Ambulance from another geographic area. The goal should always be to provide ALS care to the patient who need ALS care in the most expeditious manner.

**Procedure:****Dispatch Initiated Intercept**

- At the point of 911 EMD all calls prioritized as Charlie, Delta, and Echo will have ALS automatically requested from the 911 center taking the call. This dispatch should come secondary to dispatching the local unit, but in the most time efficient manner possible.
  - As areas needing ALS assistance are situated geographically between two or more hospitals, the 911 dispatcher is to ask patient what destination city they want to be transported to. The 911 center taking the call should then contact the 911 center in the destination location to request an intercept. The request should also include identifying the call sign of both ambulances involved in the intercept, radio frequency that will be used, and patient chief complaint. Updates may need to be provided.
  - If patient destination is not known, the closest 911 dispatch center with ALS ambulances services should be contacted. This should be predetermined.
    - ALS unit origin does not dictate patient destination. Transport units must be informed as to 24/7 capabilities of all area hospitals.
- The BLS and ALS units must communicate via radio frequency regarding patient status and rendezvous location as soon as possible.
  - Radio frequency should be predetermined.
- Rendezvous location should be off main roadways and, if at all possible, a parking lot or secondary road.
  - EMS providers functioning on roadways are required to meet the CFR655 (F) requirements by wearing high visibility, breakaway safety vests.
- Patient transport/transfer
  - Patient care should be of the upmost priority in making decisions about which vehicle will provide transport of the patient.
    - The ALS ambulance, in cooperation with Medical Control, will have the ultimate authority regarding patient care decisions.
  - In order to address as many potential agencies as possible, intercept agreements should be pre-established between all possible agencies in the geographic area.

**Intercept**

- The decision as to whether the BLS rig can return to service should be a team decision based upon each patient situation. If needed, both rigs can be taken out of service to provide enough providers for patient care.
- Should the BLS unit be returned to service, every reasonable attempt to resupply the BLS unit should be made by the ALS unit.

**BLS/ILS Request for Intercept**

At any time ALS can be requested based on BLS assessment or change in patient condition. In order to request that intercept

- The BLS unit should contact their dispatching 911 center (or the center in their destination city if unable to reach their own dispatch 911 center).
  - Reason for request
  - Patient requested destination
  - Route of travel
  - 911 dispatch centers should proceed with request in the same manner as if requesting based on 911 call information.
- Both agencies should work to achieve radio communication as soon as possible.
  - Communication between the BLS and the ALS unit should occur prior to ALS unit arrival.
- Patient intercept should follow the process outlined for EMD initiated dispatch.
- Any time a BLS unit is transporting a patient with lights and siren it must be to intercept with an ALS unit.

**ALS Transfer of Care to ILS/BLS**

- Should ALS arrive on scene and feel that the patient may be appropriate for (ILS) BLS care
  - Patient assessment must be completed and communicated to Medical Control by the senior most ALS provider of the transport unit.
  - ALS, ILS/BLS and Medical Control must agree that the lower level of care meets all of the patient's needs.
  - Situations that cannot be transported by a lower level of care include
    - Any suspected cardiac complaint
    - Respiratory distress not relieved by a single nebulizer
    - Patients meeting trauma declaration criteria
    - Patients with uncontrolled pain
    - Post-ictal seizure patients
    - Imminent childbirth
    - Any situation where medications were given that are not in BLS/ILS protocol
  - Both agencies should complete all appropriate patient documentation.

## Intercept

**Discrepancies**

Should initial units arrive and find a situation different than that which they were dispatched for, the update should be communicated to the dispatching agency and highest level of providers so to make the best use of available resources. Unless in a situation where the patient(s) are signing refusals, once initiated, the ALS unit must assess the patient. At no time should units not on scene be making decisions that supersede the decisions made by Emergency Medical Dispatch. Disagreements regarding response should be handled at an administrative level. Agencies that represent specific geographic areas must identify if they will or will not provide intercept services.

## Coroner Notification

Revised: 10/18

**Policy:****Procedure:**

In accordance with Section 10.6, Chapter 31 of the Illinois Revised Statutes -  
Coroners:

- Every law enforcement official, funeral director, ambulance attendant, hospital director of administration or person having custody of the body of a deceased person, where the death is one subjected to investigation under Section 10 of this Act, and any physician in attendance upon such a decedent at the time of his death, shall notify the coroner promptly. Any such person failing to notify the coroner promptly shall be guilty of a Class A misdemeanor, unless such person has reasonable cause to believe that the coroner had already been notified.
- Deaths that are subject to coroner investigation include:
  - Accidental deaths of any type or cause
  - Homicidal deaths
  - Suicidal deaths
  - Abortions - criminal or self-induced maternal or fetal deaths
  - Sudden deaths -when in apparent good health or in any suspicious or unusual manner including sudden death on the street, at home, in a public place, at a place of employment, or any deaths under unknown circumstances may ultimately be the subject of investigation.
- The coroner (or his/her designee) should be provided the following information:
  - Your name
  - Your EMS service
  - Location of the body or death
  - Phone number and/or radio frequency you are available on
  - Brief explanation of the situation
- Once this information has been provided, wait for the coroner (or his/her designee) to arrive for further instructions. EMS crews may clear the scene if law enforcement is on the scene and no other emergency exists.
- Law enforcement personnel are responsible for death scenes once the determination of death is established with Medical Control and the coroner has been notified.
- If a patient is determined to be dead during transport, note the time & location and record this information on the patient care report. Immediately contact the coroner to discuss death jurisdiction. Do not cross county lines with a patient

Coroner Notification

that has been determined to be dead.

## Crime Scene Control and Reporting

Revised: 10/18

**Policy:**

EMS providers should be aware of law enforcement's concern for preserving, collecting and using evidence. Anything at the scene may provide clues and evidence for the police.

**Procedure:**

- Immediately notify law enforcement of any suspected crime scene (this does not necessarily include petty crimes or traffic violations).
- If the victim is obviously dead, then he or she should remain undisturbed if at all possible.
- Do not touch, move or relocate any item at the scene unless absolutely necessary to provide treatment to an injured, viable victim. Mark the location of any item that must be moved so the police can determine its original position.
- Restrict access to the scene of onlookers or other unauthorized personnel on the premises of the crime.
- Observe and note anything unusual (*e.g.* smoke, odors, or weapons), especially if the evidence may not be present when law enforcement arrives.
- Give immediate care to the patient. The fact that the patient is a probable crime victim should not delay prompt care to the patient. Remember that your role is to provide emergency care, not law enforcement.
- Keep detailed records of the incident, including your observations of the victim and the scene of the crime. Lack of records about the case can be professionally embarrassing if called to testify.

## Medical Professional on Scene

Revised: 10/18

**Policy:**

Only personnel licensed to perform care in the prehospital setting and certified in the HSHS St. John's Hospital EMS System are allowed to provide advanced patient care (e.g. intubation, IV access, medication administration, pacing, etc.) at the scene unless approved by Medical Control.

**Procedure:**

- An on-scene physician (or other medical professional) does not automatically supersede the EMS provider's authority. Patient care shall not be relinquished to another person or provider unless approved by the EMS Medical Director or Medical Control.
- If a professed, duly licensed medical professional (e.g. physician, nurse, or dentist) wishes to participate in and/or direct patient care on scene, the EMS provider should contact Medical Control and inform the base station physician of the situation.
- If the medical professional on scene (including the patient's primary care physician) has properly identified himself/herself and wishes to direct patient care, approval must be granted by the Medical Control Physician prior to EMS personnel carrying out the on-scene medical professional's requests or orders. If care is relinquished to the professional on scene, he/she must accompany the patient to the hospital. This procedure should be explained to the provider prior to contacting Medical Control.
- If an on-scene physician orders procedures or treatments that the EMS provider believes to be unreasonable, medically inaccurate, and/or outside the EMS provider's standard of care, the EMT should refuse to follow such orders and re-establish contact with Medical Control. In all circumstances, the EMS provider shall avoid any order or procedure that would be harmful to the patient.
- If an on-scene medical professional (or any person claiming to be a healthcare provider) is obstructing EMS efforts or is substantially compromising patient care, the EMS provider should redirect the interfering person, request law enforcement assistance and communicate the situation to Medical Control.
- If EMS personnel or nursing staff from another system or jurisdiction (other than a requested intercept or mutual aid) are at the scene and request to provide or assist with patient care, excuse them from the scene if their assistance is not needed. If assistance is needed, these personnel may provide assistance with the supervision of the agency having jurisdiction of the scene. HSHS St. John's

**Medical Professional on Scene**

Hospital EMS System policies, procedures and protocols must be followed regardless of the assisting EMS personnel's authorized level of care.



## School Bus Incident

Revised: 10/18

**Policy:**

This policy governs the handling of school bus accidents/incidents involving the presence of minors. It is meant to be implemented by EMS personnel in conjunction with System's policies including mass casualties. The goal of this policy is to eliminate the transport of uninjured children/students to the hospital and to reduce EMS scene time and utilization of resources.

Each ambulance service provider within the System is required to design and implement a procedure for discharging uninjured children/students to their parents/legal guardians or to local school officials. Such procedures will facilitate transferring custody of uninjured children/students to the parents/legal guardians or school officials consistent with System and Regional policies. It is recommended that these policies be developed in coordination with school officials and provider's legal counsel.

**Procedure:**

- Determine the category of the accident/incident
  - **Category I** bus accident/incident - significant injuries present in one or more children/students or there is a documented mechanism of injury that could reasonably be expected to cause significant injuries.
  - **Category II** bus accident/ incident - minor injuries only, present in one or more children/students and no documented mechanism of injury that could reasonably be expected to cause significant injuries. Uninjured children/students also present.
  - **Category III** bus accident/ incident - no injuries present in any children/students and no significant mechanism of injury present.
- Category II or III bus accident/ incident. **Do not implement this policy if the accident/incident is a Category I bus accident/incident** - follow multiple victim and disaster preparedness policies for all Category I bus accident/incidents, and transport all children/students to the hospital.
  - Contact medical control, advise of the existence of a Category II or III bus accident/ incident and determine if a scene discharge of uninjured children/students by the emergency department physician in charge of the call is appropriate.
  - Injured children/ students by exam and/or complaint are treated and transported as deemed necessary and appropriate by EMS personnel or at the request of the child/student.
  - Implement provider procedures for contacting school officials or parents/legal guardians to receive custody of the uninjured children/students consistent with Region III policy. Procedure may include option of

## School Bus Incident

ambulance service provider escorting bus, if operable, back to school of origin or other appropriate destination.

- Medical Control, after consulting with scene personnel, will discharge the uninjured children/students to the custody of the ambulance service provider who then will transfer the custody of the children/students, consistent with appropriate department and regional policies and procedures, to parents/ legal guardians or school officials.
- Authorized school representatives will sign the log sheet indicating acceptance of responsibility for the children/students after medical clearance by the EMS personnel finding NO evidence of injury. The school representative will then follow their own policies to include informing the parents/ legal guardians as regards the accident/ incident.
- Any child/student having reached the age of 18 or older and any adult non-student present on the bus will initial the log sheet adjacent to their name and address when in agreement that they have suffered no injury and are not requesting medical care and/or transport to the hospital.
- Complete one Prehospital Care Report Form in addition to the School Bus Incident Form.
- This policy addresses discharge disposition of uninjured children/students only. Thus, no release/AMA signatures are necessary. An isolated abrasion/ superficial wound can be regarded as uninjured should the EMS personnel, medical control, and the child/student all concur.
- This policy is also applicable for school/student incidents not involving a bus if deemed appropriate by the responding EMS Agency and evaluated and executed in a like manner.

## Latex Allergy

Revised: 10/18

**Policy:****Procedure:**

A latex allergy is recognized as a significant problem for specific patients and healthcare workers. There are two types:

- **Systemic** -Immediate reaction (within 15 minutes). Symptoms include generalized rash, wheezing, dyspnea, laryngeal edema, bronchospasm, tachycardia, angioedema, hypotension and cardiac arrest.
- **Delayed** -Delayed reaction (6 to 48 hours). Symptoms include contact dermatitis such as local itching, edema, erythema (redness), blisters, drying patches, crushing & thickening of the skin, and dermatitis that spreads beyond the skin initially exposed to the latex.

Persons at risk include patients with spina bifida, patients with urogenital abnormalities, workers with industrial exposures to latex, healthcare workers, persons with multiple surgeries, persons with frequent urinary procedures and persons with a history of predisposition to allergies.

**Suspected Latex Allergy**

- Assess for suspected latex sensitivity by asking the following: "Do you react to rubber bands or balloons? Describe."
- Initiate interventions for Known Latex Sensitivity if the latex sensitivity screen response suggests a latex hypersensitivity.
- Notify the receiving hospital of suspected latex hypersensitivity.
- Follow orders as per the Allergic/Anaphylactic Reaction Protocol.

**Known Latex Allergy**

- Obtain a patient history and ask the patient to describe their symptoms of latex hypersensitivity.
- Monitor the following signs and symptoms:

## Latex Allergy

- Itching eyes
  - Feeling of faintness
  - Hypotension
  - Bronchospasm/Wheezing
  - Nausea/Vomiting
  - Abdominal cramping
  - Facial edema
  - Flushing
  - Urticaria
  - Shortness of breath
  - Generalized itching
  - Tachycardia
  - Feeling of impending doom
- Notify the receiving hospital of known latex sensitivity.
  - Follow orders as per the Allergic/Anaphylactic Reaction Protocol.
  - Remove all loose latex items (e.g. gloves, tourniquets, etc.) and place in a closed compartment or exterior storage panel.
  - Utilize available latex-free supplies when preparing to care for or transport the latex-sensitive patient. The latex-free supplies must be on the ambulance (or other apparatus) and readily available.
  - Cover the mattress of the cot with a sheet so that no areas of the mattress are exposed.
  - DO NOT administer any medications through latex IV ports.
  - Wrap all tubing containing latex in kling before coming into contact with the patient (e.g. stethoscope tubing, BP cuff tubing, etc.).

**Critical Incident Stress Management**

Revised: 10/18

**Policy:**

There are certain emergencies that may have a lasting emotional effect on EMS personnel. These include emergencies involving children, co-workers, familiar or particularly close persons, multiple death situations and disaster incidents. The Critical Incident Stress Management Team is an important resource in assisting EMS personnel in coping with stressful experiences.

**Procedure:**

- EMS providers of the HSHS St. John's Hospital EMS System involved in an unusually stressful incident can contact the Critical Incident Stress Management Team.
- The CISM Team members have specialized training in providing pre-incident education, on scene support services, defusing, demobilization, formal debriefings, one-on-one debriefings, follow-up services and specialty briefings.
- Debriefings and stress management services are most effective when conducted around 72 hours of the incident.
- The CISM Team Coordinator may be reached by contacting the Central Illinois Team at 217-333-8911.

## EMS Equipment and Supplies

Revised: 10/18

**Policy:**

HSHS St. John's Hospital EMS System providers must maintain response vehicles in a manner that will limit mechanical breakdown, provide a clean environment and be engineered for compliance with OSHA standards. Providers must also have minimum equipment and supplies specified by IDPH and the EMS Medical Director.

**Procedure:**

- EMS providers shall notify the EMS Office and IDPH of any new or replacement vehicles (including temporary loaner vehicles).
- Initial response vehicles (First Responder and BLS Non-transport units) shall be equipped and stocked in accordance with the IDPH Non-Transport Vehicle Inspection Form.
- Ambulance (transporting) vehicles must meet general standards as specified on the IDPH Ambulance Inspection Form and be in compliance with DOT Standard KKK-A-1822D.
- BLS transporting vehicles shall be equipped and supplied in accordance with the IDPH Ambulance Inspection Form and in accordance with Section 515.830 of IDPH Rules and Regulations. Additional requirements have been set forth by the EMS Medical Director as well. Refer to the HSHS St. John's Hospital EMS System Agency Supply List.
- ILS providers shall be equipped and supplied in accordance with the IDPH Ambulance Inspection Form and in accordance with Section 515.830 of IDPH Rules and Regulations. Additional requirements have been set forth by the EMS Medical Director as well. Refer to the HSHS St. John's Hospital EMS System Agency Supply List and Additional ILS Equipment List.
- ALS providers shall be equipped and supplied in accordance with the IDPH Ambulance Inspection Form and in accordance with Section 515.830 of IDPH Rules and Regulations. Additional requirements have been set forth by the EMS Medical Director as well. Refer to the HSHS St. John's Hospital EMS System Agency Supply List and Additional ALS Equipment List.
- The addition of new equipment not listed on a specific EMS provider level checklist requires approval by the EMS Medical Director. In addition, the EMS Medical Director must be notified of and approve any change in AEDs or cardiac monitoring equipment as well as any changes in communications equipment that may affect Base Station communications.

## Controlled Substance Policy

Revised: 10/18

**Policy:**

The HSHS St. John's Hospital EMS System recognizes the importance of medications carried on the ambulances in relationship to patient care. It is also important to understand the risks involving the potential abuse and addiction of controlled substances and to have tracking mechanisms in place.

**Procedure:**

- All controlled substances will be kept inside each ambulance/apparatus within the drug box (preferably) or designated cabinet.
- At the beginning of a shift, the on-coming paramedic (or intermediate at the ILS level) will verify that the controlled substance tag is secure and the tag number is to be verified with the log.
- After assuring the tag is intact and the number corresponds with the log, the paramedic must sign the controlled substance shift log.
- If the tag is not intact or the number is not verifiable, a complete inventory should be taken immediately, a supervisor shall be notified and an incident report will be completed and forwarded to the St. John's Hospital EMS Office.
- Controlled substances shall be available for inspection by IDPH, St. John's Hospital EMS office, or any other authorized individual.
- Each usage of a controlled substance must be documented on the proper Controlled Substance Usage Form. All of the following information is to be completed:
  - Date of administration
  - Time of administration
  - Old tag number
  - New tag number
  - FIN & Destination
  - Drug & dose given
  - Drug amount wasted
  - Total amount of drug
  - Paramedic signature (or intermediate signature at the ILS level)
  - Witness signature (RN or MD at the receiving hospital)
- The controlled substances shall be inspected once a month. This inspection will be documented with the old and new tag number. Any discrepancies (e.g. missing medication, broken seals, etc.) should be reported to a supervisor immediately. If no problems are found, the log will be signed and witnessed.
- Any controlled substance that has not been administered must be properly disposed of. The amount wasted must be noted on the log and witnessed by a nurse or physician at the receiving hospital.
- Controlled substances (e.g. Fentanyl, Morphine, Versed) should be restocked at

**Controlled Substance Policy**

the receiving hospital if possible. The EMS agency may be billed for restocked controlled substances.

- At the end of each shift, the paramedic (or intermediate at the ILS level) will verify that the controlled substance tag is secure and the tag number matches the log. Any new tag number must be documented on the log.
- The controlled substance shift log form will be changed at the end of each month. Thus, a new log will be started on the 1<sup>st</sup> day of each month.



## Medication Shortage

Revised: 10/18

**Procedure:**

- Due to the demand, expirations and other limiting factors, drug shortages seem to be a reality of the medical world in which we function. While seeking other supply options should always be explored there are times when shortages of desired medications cannot be alleviated and alternatives must be used. It would be impossible to plan for all possible shortages within this protocol manual. Instead providers must be ever aware that this issue exists and be attentive that attempts to address such shortages may be more or less obvious to providers. Therefore, providers must always be alert when pulling medications and verify the six rights before administering any medication. The following steps shall be followed:
  - In the event of a known or anticipated shortage the pharmacy will contact the EMS Office with the drug affected by the shortage and anticipated time frame of the shortage. A staff pharmacist and the EMS Medical Director will discuss the situation and develop a plan for responding to the shortage. This plan could include:
    - Changing the concentration of a drug that is already used by EMS. (i.e. EMS carries Morphine 4mg/4mL but instead will be given 10mg/10mL.)
    - Using a different concentration such that the drug will be given differently. (i.e. Dextrose 50% is not available but D10W will be given to be infused over 15 minutes.)
    - Using an alternative drug that can be reconstituted to make the unavailable drug. (i.e. Giving Epi 1:1,000 and 10 mL of Normal Saline with directions for making Epi 1: 10,000)
    - Giving a replacement drug. (i.e. Lidocaine is not available but Amiodarone is. Amiodarone is provided with training given to all affected agencies.)
    - Not replacing a drug that is affected by shortage. (i.e. Narcan is affected by shortage; but no suitable replacement is available. Treatment would need to proceed to next step in protocol sequence.)
  - This plan will be communicated to all affected agencies and include any necessary training information.
  - This plan will be communicated to all affiliated hospital pharmacies.
  - Notice will be posted at the Pyxis where EMS providers obtain their medications.
  - When the shortage is over notice will be given to all affected agencies and previously posted, notices will be removed from the refill areas.

## Resuscitation vs. Cease Efforts

Revised: 10/18

**Withholding Resuscitation:**

- EMS providers are responsible to make every effort to preserve life. In the absence of an advanced directive, resuscitative measures shall be attempted if there is any chance that life exists.
- When EMS providers arrive on scene and discover the patient is pulseless and apneic and CPR is not in progress; chest compressions at minimum must be initiated unless one or more of the following conditions exist:
  - Obvious sign of biological death:
    - i. Decapitation
    - ii. Rigor mortis without hypothermia
    - iii. Liver mortis, dependent lividity
    - iv. Obvious mortal wounds with no signs of life
    - v. Decomposition
    - vi. Incineration
    - vii. Frozen state
    - viii. Trauma where CPR is impossible
  - Death has been declared by patient's physician or the coroner.
- EMS provider should notify the coroner and law enforcement.
- If none of the above conditions are met. EMS must begin CPR and follow the appropriate protocol.
- If a valid DNR order is present follow **Policy 0059 – Do Not Resuscitate**.

**Termination of Resuscitation:**

- Provide care based on appropriate protocol.
- Contact **Medical Control** and explain events. Report treatment and response.
- Consider:
  - Adult is normothermic and experienced an arrest unwitnessed by bystanders or EMS;
  - No bystander CPR was provided;
  - The patient has remained in continuous monitored asystole or cardiac arrest with a non-shockable rhythm with no ROSC after full ALS resuscitation in the field for at least 30 minutes;
  - No AED or defibrillator shocks have been delivered for at least 30 minutes;
  - Capnography has remained  $\leq 10$  after 20 minutes.
  - There are no reversible causes of cardiac arrest identified.
- The physician may give the order to discontinue medical treatment if determined to be appropriate.
- Document time the resuscitation was terminated.

## Do Not Resuscitate

Revised: 10/18

**Procedure:**

- Any EMS provider who is actively participating in SAMIC EMS System may honor, follow, and respect a valid DNR. **Medical Control** must be contacted in all cases involving a DNR.
- EMS personnel must make every effort to correctly identify the patient and correct documentation.
- Once EMS providers arrive on scene and identify a patient in cardiac arrest and no efforts have been started and a valid DNR is present, EMS must contact **Medical Control** while performing CPR until an order for cease efforts is given.
- Once EMS providers arrive on scene and identify a patient in cardiac arrest with efforts ongoing, the EMS provider should:
  - Determine if patient has a pulse and respirations. If no respirations and no pulse are present. Contact **Medical Control** for cease efforts.
  - If patient has a pulse and/or respirations, treat per the appropriate protocol.
  - EMS providers may encounter State of Illinois DO-NOT-RESUSCITATE (DNR)/PRACTITIONER ORDERS FOR LIFE-SUSTAINING TREATMENT (POLST) FORM. EMS providers may have specific medical interventions they can and cannot perform as noted on the form.
- Any other advanced directives of living will cannot be honored, followed, and respected by pre-hospital care providers. EMS providers must contact **Medical Control** for direction regarding any other type of advanced directive. Resuscitation should not be withheld during the process of contacting or discussing the situation with the on-line **Medical Control** physician.
- A Durable Power of Attorney for Healthcare is an agent who has been delegated by the patient to make any healthcare decisions (including the withholding or withdrawal of life-sustaining treatment) which the patient is unable to make. When a patient's surrogate decision-maker is present or has been contacted by prehospital personnel and they direct that resuscitative efforts not be instituted:
  - As the Durable Power of Attorney for Healthcare agent to provide positive identification, to see the document, and ask the agent to point out the language that confirms that the patient's medical or mental condition complies with the document designating the Durable Power of Attorney for Healthcare.
  - The Durable Power of Attorney for Healthcare agent or a surrogate decision-maker can provide consent to a DNR order, but the order itself must be written by a physician.

## Do Not Resuscitate

- An EMS provider cannot honor a verbal or written DNR request/order made directly by a Durable Power of Attorney for Healthcare agent, surrogate decision-maker or any person other than a physician. If such situation is encountered, contact **Medical Control** for direction.
- Revocation of a written DNR order is accomplished when the DNR order is physically destroyed or verbally rescinded by the physician who signed the order and/or the person who gave consent to the order.
- Prehospital care providers have a duty to act and provide care in the best interest of the patient. This requires the provision of full medical and resuscitative interventions when medically indicated and not contraindicated by the wishes of the patient.
- When managing a patient that is apparently non-viable, but desired and/or approved medical measures appear unclear (i.e. upset family members, disagreement regarding DNR order, etc.), EMS personnel should provide assessment, initiate resuscitative measures and contact **Medical Control** for further direction.
- If EMS personnel encounter a patient with a valid DNR from a long-term care facility, hospice, during an inter-hospital transfer or when transporting to or from home and the patient arrests en route, do not initiate resuscitative measures and contact **Medical Control** for orders.
- If EMS personnel arrive at the scene and the family states that the patient is a hospice patient with a valid DNR order, do not initiate resuscitative measures and contact **Medical Control** for orders.
- On occasion, EMS personnel may encounter an out-of-town patient with a valid DNR order visiting in the HSHS St. John's Hospital EMS System area. If the DNR order appears to be valid (signed by the patient and physician), contact **Medical Control** for orders.
- The coroner will be notified of any patient or family wishes that there is to be tissue donation in cases where the patient is not transported to the hospital.
- The **Medical Control** physician's responsibility is to make reasonable effort to confirm the DNR order is valid and order resuscitative measures within the directives of the DNR order.
- Appropriate patient care reports will be completed on all patients who are not resuscitated in the prehospital setting. A copy of the DNR form should be retained and attached as supporting documentation to the prehospital care report form.

Do Not Resuscitate

- All HSHS St. John's Hospital EMS System personnel are to submit an incident report to the EMS Coordinator and the EMS Medical Director regarding any difficulties experienced with DNR situations. These cases will be evaluated on an individual basis.
- Ask the patient's family to produce an actual copy of the DNR/Advanced Directives. Family members will often identify themselves as Power of Attorney when in fact; they are solely Power of Attorney for Finance.
- Power of Attorney for Finance does not convey authority for healthcare decisions. Only a valid Durable Power of Attorney for Healthcare conveys authority for healthcare decisions.

## Petitioning an Emotionally Disturbed Patient

Revised: 10/18

### Procedure:

- EMS providers should consider the mental health needs of a patient who appears emotionally or mentally incapacitated. This involves cases that the EMS provider has reasonable cause or evidence to suspect a patient may intentionally or unintentionally physically injure himself/herself or others, is unable to care for his/her own physical needs, or is in need of mental health treatment against his/her will.
- This does not include a person whose mental processes have merely been weakened or impaired by reason of advanced years and the patient is under the supervision of family or another healthcare provider, unless the family or healthcare provider has activated EMS for a specific behavioral emergency.
- Attempt to persuade the patient that there is a need for evaluation and compel him/her to be transported to the hospital.
- If persuasion is unsuccessful, contact Medical Control and relay the history of the event. Clearly indicate your suspicions and/or evidence and have the base station physician discuss the patient's needs with the parties involved in the situation.
- The EMS crew will then follow the direction of the base station physician in determining the disposition of the patient or termination of patient contact. Another agency's or party's opinion should not influence the EMS provider's assistance to a mental health need.
- Under no circumstances does transport of the patient, whether voluntarily or against his/her will, commit the patient to a hospital admission. It simply enables the EMS providers to transport a person suspected to be in need of mental health treatment.
- If a patient is combative or may harm self or others, call law enforcement for assistance and follow the **Procedure 9018 - Patient Restraint**.

**Treatment of Minors and Mentally Incompetent**

Revised: 10/18

**Policy:**

- Determine the authority for providing medical care to patients who are minors or medically incompetent.

**Definitions:**

- **Medically Incompetent** – a medically incompetent person is one who is not competent to give informed consent because of age, immaturity, mental impairment or medical condition. Medical incompetence renders one incompetent to consent to or to refuse medical care. However, a patient will not be deemed medically incompetent simply because he or she refuses treatment.
- **Minor** – a minor is a person who is under the age of 18 years. Generally, a minor is presumed to be medically incompetent. However, a minor may be medically competent where he or she possesses sufficient maturity to understand and appreciate the nature of the condition, the proposed treatment plan, and the alternatives thereto and the risks inherent therein.
- **Emancipated Minor** – an emancipated minor is a minor who is deemed an adult, for informed consent purposes, because of pregnancy, parenthood, marriage, judicial determination, or for certain types of treatment. The rules respecting informed consent applicable to adults are applicable to emancipated minors. An emancipated minor can consent to his/her own treatment as well as to the treatment of his/her children.

**Procedure:**

- **When consent is necessary:** Consent is obtained for invasive treatment and/or procedures. In emergency situations, consent will be implied if express consent cannot be obtained.
- **Emergency Situations** – In emergency situations, treatment should commence while attempts are made to obtain consent. Whenever there is any doubt as to the patient's medical competence and consent is refused, treatment should commence. In emergency situations, consent of the un-emancipated minor's parents or legal guardian need not be obtained if, in the sole opinion of the EMS provider or hospital, the obtaining of consent is not reasonably feasible under the circumstances without adversely affecting the condition of the minor's health.

## Treatment of Minors and Mentally Incompetent

- **Non-Emergency Situations** – In a non-emergency situation, a competent adult or emancipated minor may consent or refuse to consent to the performance of any and all diagnostic or therapeutic procedures. This consent or refusal is valid regardless of the consequences of the decision.
- **Patients who are medically incompetent** may not give a valid consent. The EMS provider should attempt to ascertain whether the patient has a representative such as a guardian, agent under the Health Care Powers of Attorney Act, or surrogate under the Health Care Surrogate Act. If such a person is found, consent should be obtained.
- If there is no authorized representative or if the authorized representative refuses to consent to treatment, Medical Control should be contacted.
- An un-emancipated minor is generally not considered capable of providing consent. Consent of either one of the parents or the authorized representative of the minor is sufficient to render care.
- **Persons authorized to give consent:**
  - **Medically Competent Patients** – a medically competent patient may consent or refuse to consent to treatment. The consent or refusal is valid regardless of the consequences.
  - **Patients who are medically incompetent** may not give a valid consent. The hospital should ascertain whether a representative such as a guardian, agent under the Health Care Powers of Attorney Act, or surrogate under the Health Care Surrogate Act has been appointed. If there is one, consent should be obtained from the authorized representative.
  - **Emancipated Minors** – Minors who are married, pregnant or are a parent and who are not otherwise medically incompetent, by reason of medical or mental condition, may give valid consent or refusal to consent to treatment.
- **Mature minors who are not legally emancipated:**
  - A minor who possesses sufficient maturity to understand and appreciate his/her medical condition, the nature of the proposed treatment, the alternatives to treatment and the risks inherent in the treatment may be medically competent for consent purposes. This should be discussed with medical control.
  - Always attempt to reach parents to obtain consent. If parents cannot be reached, each situation should be evaluated on an individual basis.
- **Children of minors:** Consent from a minor parent is valid for treatment of the minor's child.



**Treatment of Minors and Mentally Incompetent**

- **Minors with Divorced or Separated Parents:** Consent for treatment of minors when the parents are divorced either parent may consent to the performance upon his/her child of a medical or surgical procedure, unless otherwise authorized in a custody agreement or in a divorce decree. It is not the responsibility of the EMS Provider to determine who is the custodial parent, nor is it the hospital's duty to enforce a custody agreement or divorce decree. If a non-custodial parent brings the child in for treatment, you should proceed with treatment as requested by the parent. The issue as to which parent pays for the minor's health insurance is not significant.
- If there are any questions regarding consent, Contact Medical Control and consider treatment and transport to the hospital under implied consent.

## Relinquished Newborn

Revised: 10/18

**Definitions:**

- **Neonate:** means a child who a licensed physician reasonably believes is 30 days old or less at the time the child is initially relinquished to a hospital, police station, fire station, emergency medical facility, and who is not an abused or neglected child.
- **Relinquish:** means to bring a neonate, who a licensed physician reasonably believes is 30 days old or less to a hospital, police station, fire station, emergency medical facility, and to leave the infant with personnel of the facility, if the person leaving the infant does not express an intent to return for the infant or states that he or she will not return for the infant.
- **Emergency Medical Professional:** includes licensed physicians, and any EMT, EMT-I, Paramedic, TNS, and PHRN as defined in the EMS Systems Act.

**Procedure:**

- The relinquishing person is presumed to be the infant's biological parent.
- Assess the infant. Look particularly for any signs of abuse or neglect.
- Ask the relinquishing parent for the infant's name and date of birth.
- If the child is presumed to be more than 30 days old, or has been abused or neglected, EMS providers should proceed as if the child is abused or neglected. Follow **5205 – Suspected Child Maltreatment** and file a report with DCFS. While this is all that is required under the Act, refusing to take an infant presumed to be older than 30 days or one who is abused or neglected from a parent who wishes to relinquish him or her could possibly result in harm to the infant. It is in the best interest of the child to accept them and proceed as below.
- Initiate emergency treatment that is necessary per protocol under implied consent and contact the nearest hospital.
- Ensure that the infant is kept warm and transport to the nearest System hospital with the infant secured appropriately in an infant car seat or pediatric restraining device.
- Complete a patient care report on the infant. List the infant's name as "Baby Girl/Boy Doe" if it is unknown.
- The System will honor the intent of the Act to allow for the anonymity of the relinquishing parent. However, nothing in the Act precludes a relinquishing person from providing his or her identify. If the infant is presumed to be 30 days of age or younger and there is no evidence of abuse or neglect:

## Relinquished Newborn

- Identify the infant as relinquished in the comments section of the patient care report but omit any descriptive information regarding the relinquishing individual;
- The parent has the right to remain anonymous and to leave the fire station at any time and not be pursued or followed. If abuse or neglect is later suspected, the hospital will report it. The parent will not be prosecuted for relinquishment unless the infant was abused or neglected
- Normal patient confidentiality will surround this process.

### Procedure: Communication with the Parent

- EMS personnel must offer the relinquishing parent the packet of information specified in the Act (see below), and if possible, verbally inform the parent that:
  - His or her acceptance of the information is completely voluntary;
  - Completion of the Illinois Adoption Registration form and Medical Information Exchange form is voluntary;
  - A Denial of Information Exchange form may be completed which would allow the relinquishing parent to remain anonymous to the infant and other parties involved in the infant's subsequent adoption;
  - The parent may provide medical information only and remain anonymous; and
  - By relinquishing the infant anonymously, he or she will have to petition the court in order to prevent the termination of parental rights and regain custody of the child. This information will be printed and included in the packet.
  - If the parent returns within 72 hours to reclaim the infant, they should be told the name and location of the hospital to which the infant was transported.
- Information to give to relinquishing parent (325 ILCS 2/35) Hospitals, fire stations, police stations, and emergency medical facilities must offer a packet of information to the relinquishing parent that contains the following:
  - Illinois Adoption Registry - Explanation
  - Illinois Adoption Registry Application
  - Illinois Adoption Registry Application Section C (2 pages)
  - Birth Parent Registration Identification
  - Medical Information Exchange authorization form
  - Denial of Information Exchange
  - Illinois Adoption Registry Medical Questionnaire (2 pages)
  - Illinois Adoption Registry website address and toll free phone number

**Relinquished Newborn**

- Written notice of the following:
  - No sooner than 60 days following the date of the initial relinquishment, the child-placing agency or IDPH will commence proceedings for the termination of parental rights and placement of the infant for adoption.
  - Failure of the parent of the infant to contact the Department of Public Health and petition for the return of custody of the infant before termination of parental rights bars any future action asserting legal rights with respect to the infant.
- A resource list of providers of counseling services, including grief counseling, pregnancy counseling, and counseling regarding adoption and other available options for placement of the infant.
- The parent may be unwilling to wait for discussion. Document on the infant's patient care report that the required information was offered to the parent and whether or not it was received. Note: These packets should be available in every fire station.
- Inform the parent that the fee for filing the application is waived if the medical questionnaire is completed.

**IMMUNITY (Section 27):** A hospital, fire station, or emergency medical facility, and any personnel of a hospital, fire station, or emergency medical facility, are immune from criminal or civil liability for acting in good faith in accordance with the Act. Nothing in the Act limits liability for negligence for care and medical treatment.

**EVALUATION (Section 65)**

- IDPH shall collect and analyze information regarding the relinquishment of newborn infants and placement of children under the Act. Fire stations, emergency medical facilities, and medical professionals accepting and providing services to a newborn infant under the Act shall report to the Department data necessary for the Department to evaluate and determine the effect of this Act in the prevention of injury or death of newborn infants. Child-placing agencies shall report to the Department data necessary to evaluate and determine the effectiveness of these agencies in providing child protective and child welfare services to newborn infants relinquished under the Act.
- The information collected from Fire stations shall include, but need not be limited to: the number of newborn infants relinquished and the services provided to relinquished newborns.
- IDPH has not yet specified the format and manner in which the required data is to be submitted.

## Relinquished Newborn

## RESOURCES

- The complete text of the Abandoned Newborn Infant Protection Act is available online.
- To obtain the application forms for the Illinois Adoption Registry and Medical Information Exchange:
  - Call the Department of Public Health at 217-557-5169
  - Print them from the Illinois Adoption Registry website.

## Mandated Reporting

Revised: 10/18

**Procedure:**

- Illinois law establishes requirements that any person licensed, certified or otherwise authorized to provide healthcare shall offer immediate and adequate information regarding services available to abuse and neglect victims. EMS personnel should not rely on another mandated reporter to file a report on the victim's behalf.
- For elder abuse: mandatory reporting requirements only apply when the reporter believes that the adult is not capable of reporting the abuse, neglect, or financial exploitation themselves.
- When reporting abuse, the caller should have the following information
  - Alleged Victim(s)
    - Name(s) of victim(s)
    - Birthdate(s) or approximate age of victim(s)
    - Address
  - Alleged Perpetrator(s)
    - Name(s)
    - Birthdate(s) or age(s) or some approximation so role of DCFS can be determined
    - Relationship to victim(s)
    - Address
  - Harms to Victim(s)
    - Physical Abuse
    - Sexual Abuse
    - Risk of Harm
    - Neglect
    - Death
  - Description of Incident(s)
    - As much detail as you have about the actual incident
    - Indication of intention
    - Description of the time and place of the incident
    - Information, if any, about possible witnesses to the abuse.
    - Evidence of abuse
- Child Abuse Hotline 1-800-252-2873
- Elder Abuse Hotline 1-866-800-1409

## Routine Patient Care

E M R	<ul style="list-style-type: none"> <li>• <b>Initial Assessment</b> <ul style="list-style-type: none"> <li>• Airway, breathing, and circulation. Maintain open airway.</li> <li>• Level of consciousness</li> <li>• SAMPLE history</li> <li>• Place patient in position of comfort unless contraindicated</li> <li>• Reassure/Calm patient.</li> <li>• Call for ALS/Helicopter, if indicated</li> <li>• Obtain room air SpO<sub>2</sub>, if equipment available.</li> <li>• Obtain blood glucose, if equipment available. If BGL &lt; 60, go to <b>Diabetic Emergencies Protocol 1125.</b></li> </ul> </li> <li>• Administer <b>Oxygen</b>, titrate SpO<sub>2</sub> to 94%-99%.</li> <li>• <b>Oxygen</b> via non-rebreather mask if moderate to severe respiratory distress.</li> <li>• Ventilate via bag valve mask if indicated at a rate of 10 - 12 breaths per minute.</li> <li>• Update transporting unit of patient status.</li> <li>• <b>Physical Exam</b> <ul style="list-style-type: none"> <li>• Vital signs - pulse, blood pressure, respiratory rate, SpO<sub>2</sub>, and temperature. The first set of vital signs will be taken manually and minimum of two sets of vitals are required on all patients. (One set with initial patient contact and one prior to transferring care.) Refusals are an exception to this rule.</li> <li>• Reassess every 15 minutes in a stable patient and every 5 in an unstable patient.</li> </ul> </li> <li>• <b>Treat according to appropriate protocol.</b></li> <li>• <b>Provide report when transferring care.</b></li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR Care.</li> <li>• Obtain ETCO<sub>2</sub> reading, if available.</li> <li>• Attach cardiac monitor and obtain 12 lead ECG, if indicated. Print rhythm strip for documentation. Transmit 12 lead ECG to receiving facility as early as possible. (Interpretation of 12 lead ECG and cardiac rhythm is beyond the scope of practice for EMT level providers.)</li> <li>• Reassess vital signs. The first set of vital signs will be taken manually and the above rules apply.</li> <li>• Assess lung sounds.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

**Routine Patient Care**

I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Reassess vital signs. The first set must be taken manually and the above rules apply.</li><li>• Initiate vascular access. Document total amount of fluid administered.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Initiate transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>



## Syncope and Pre-Syncope

E M R	<ul style="list-style-type: none"><li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li><li>• Document changes in neurologic exam and/or GCS.</li></ul>
E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Obtain 12 lead ECG and transmit to receiving facility.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Anticipate underlying etiologies and treat according to appropriate protocol.<ul style="list-style-type: none"><li>• Metabolic</li><li>• Cardiac</li><li>• Hypovolemic</li><li>• CNS Disorder</li><li>• Vasovagal</li></ul></li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>

## Abdominal Pain

E M R	<ul style="list-style-type: none"><li>• Perform <b>Routine Patient Care Protocol 1105</b></li></ul>
E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• For nausea / vomiting, refer to <b>Nausea/Vomiting Protocol 1135</b>.</li><li>• Obtain 12 lead ECG and transmit to receiving facility.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate IV access and administer 500 mL fluid bolus until systolic is <math>\geq 100</math> mmHg.</li><li>• For pain management, refer to <b>Acute Pain Management Protocol 1115</b>.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>

## Abdominal Pain

## Critical Thinking Elements

- Assess for thoracic or aortic aneurysm rupture/leakage or trauma in addition to GI etiologies.
  - Common signs and symptoms:
    - History of unrepaired AAA
    - Abdominal distention
    - Pulsating mass
    - Lower extremity mottling
    - Diaphoresis
    - Anxiety / restlessness
    - Sharp “tearing” pain between the shoulder blades or in lower back
- In female patients of childbearing years, ectopic pregnancy should be considered unless proven otherwise.
- Rule out cardiac etiologies with a 12 lead ECG.
- Consider possible etiologies and obtain a detailed history and physical exam
  - Inflammation - slow onset of discomfort, malaise, anorexia, fever, and chills.
  - Hemorrhage - steady pain, pain radiating to the shoulders, signs & symptoms of hypovolemia.
  - Perforation - acute onset of severe symptoms and steady pain with fever.
  - Obstruction - cramping pain, nausea, vomiting, decreased bowel activity, and upper quadrant pain.
  - Ischemia - acute onset of steady pain (usually no fever noted).
- Signs and symptoms of renal calculi (kidney stones)
  - Acute and severe flank pain that starts in back and radiates to groin
  - Extreme restlessness
  - Hematuria
  - Previous history of kidney stones.

## Acute Pain Management

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105.</b></li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• For nausea / vomiting, refer to <b>Nausea/Vomiting Protocol 1135.</b></li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• For mild to moderate pain:             <ul style="list-style-type: none"> <li>• Administer <b>Ketorolac.</b> <ul style="list-style-type: none"> <li>• <math>\leq 65</math> years old and/or <math>\geq 50</math> kg - <b>30 mg IV/IM.</b></li> <li>• <math>\geq 66</math> years old and/or <math>\leq 49</math> kg - <b>15 mg IV or 30 mg IM.</b></li> </ul> </li> </ul> </li> <li>• For cases with isolated extremity fracture, chest pain, burns, or discomfort from IO infusion the following may be given:             <ul style="list-style-type: none"> <li>• <b>Fentanyl.</b> <ul style="list-style-type: none"> <li>• <b>50 mcg IV/IM/IN,</b> reduce dose by 50% for patients with renal impairment. May repeat in 5 minutes.</li> </ul> </li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• For cases with isolated extremity fracture, chest pain, burns, or discomfort from IO infusion the following may be given:             <ul style="list-style-type: none"> <li>• <b>Morphine;</b> or,                 <ul style="list-style-type: none"> <li>• <b>2-5 mg IV</b> every 5 minutes or <b>2-5 mg IM</b> every 15 minutes.</li> </ul> </li> <li>• <b>Fentanyl.</b> <ul style="list-style-type: none"> <li>• <b>50 mcg IV/IM/IN,</b> reduce dose by 50% for patients with renal impairment. May repeat in 5 minutes to total dose of 100 mcg.</li> </ul> </li> </ul> </li> <li>• All other cases require consult with <b>Medical Control.</b></li> <li>• If pain is not relieved via <b>Morphine</b> and <b>Fentanyl,</b> consult with <b>Medical Control</b> for orders for <b>Ketamine</b> <ul style="list-style-type: none"> <li>• <b>0.3mg/kg IV</b> over 10 minutes as a drip or <b>2 mg/kg IM.</b></li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Acute Pain Management

## Critical Thinking Elements

- Monitor the patient for respiratory depression when administering narcotics.
- Blood pressure should be monitored closely - check 5 minutes after narcotic administration and prior to administering repeat doses.
- Patients with a head injury, altered level of consciousness, or unstable vital signs should not receive pain medication.
- Patient's receiving pain medications should be monitored continuously via ETCO<sub>2</sub>, ECG, and SpO<sub>2</sub>.
- Patients should also be receiving supplemental oxygen regardless of SpO<sub>2</sub>.
- Prophylactic antiemetic should be administered.
- In adults pretreatment of **Midazolam 0.03 mg/kg**, may be beneficial to reduce risk of recovery agitation after ketamine administration.

## Allergic Reaction/Anaphylaxis

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• Administer <b>Epinephrine Auto Injector</b>, if the patient has a history of allergic reactions and/or is suffering from hives, wheezing, hoarseness, hypotension, altered level of consciousness, or indicates a history of anaphylaxis. The patient must have in their possession a prescribed Epinephrine Auto Injector. Contact <b>MEDICAL CONTROL</b> for orders to administer.</li> <li>• Administer <b>Albuterol</b>.             <ul style="list-style-type: none"> <li>• <b>2.5mg/3 mL</b>, May repeat every 20 minutes as needed.</li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Administer <b>Epinephrine 1 mg/mL</b> <ul style="list-style-type: none"> <li>• <b>0.3mg IM</b>, if the patient has a history of allergic reactions and/or is suffering from hives, wheezing, hoarseness, hypotension, altered level of consciousness, or indicates a history of anaphylaxis.</li> </ul> </li> <li>• Administer <b>Diphenhydramine</b>.             <ul style="list-style-type: none"> <li>• <b>50 mg PO</b>.</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Administer IV fluid bolus if the patient is hypotensive to achieve a systolic BP of at least 100 mmHg.</li> <li>• Administer <b>Diphenhydramine</b>.             <ul style="list-style-type: none"> <li>• <b>50mg IV or IM</b>, for severe itching and/or hives.</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Methylprednisolone</b>.             <ul style="list-style-type: none"> <li>• <b>125 mg IV</b>.</li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact the receiving hospital as soon as possible.</li> </ul>

## Diabetic

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• If blood glucose is less than 60 and patient has the ability to maintain airway and swallow, administer <b>Oral Glucose</b>.             <ul style="list-style-type: none"> <li>• <b>15g PO</b>.</li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• If blood glucose is less than 60 mg/dL and patient cannot maintain airway or swallow, administer <b>Glucagon</b>.             <ul style="list-style-type: none"> <li>• <b>1mg IM/IN</b>. Evaluate blood glucose after 15 minutes.</li> </ul> </li> <li>• If blood glucose is greater than 250 mg/dL, provide supportive care, if tachypnic do not attempt to coach breathing, request ALS intercept.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care</li> <li>• If blood glucose is less than 60 and patient is incapable of swallowing, establish IV and administer <b>Dextrose 10%</b>. If unable to establish and IV administer <b>Glucagon</b>.             <ul style="list-style-type: none"> <li>• <b>1mg IM/IN</b>.</li> </ul> </li> <li>• If blood glucose is greater than 250 mg/dL, administer 1 L of fluid unless contraindicated. Assess lung sounds frequently.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Nausea / Vomiting

E M R	<ul style="list-style-type: none"><li>• Perform Routine Patient Care Protocol 1105.</li></ul>
E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Administer <b>Ondansetron</b>.<ul style="list-style-type: none"><li>• 4 mg ODT.</li></ul></li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care</li><li>• Administer <b>Ondansetron</b>.<ul style="list-style-type: none"><li>• 4 mg IV/IM/ODT over two minutes may repeat as needed every 10 mins.</li></ul></li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>



## Poisoning and Overdose

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• Administer <b>Narcan 2mg</b>, if suspected narcotic overdose and patient exhibits decreased respiratory effort and unresponsive. May repeat every 5 minutes as needed.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Administer IV fluid bolus if the patient is hypotensive to achieve a systolic BP of at least 100 mmHg.</li> <li>• <b>Stimulant poisoning</b> - treat arrhythmias and seizures per the appropriate protocol, if indicated.</li> <li>• <b>Depressant poisoning</b> - monitor airway closely, support respirations.</li> <li>• <b>Hallucinogenic poisoning</b> - verbally reassure the patient, provide quiet environment, attempt to keep patient calm.</li> <li>• <b>Beta Blocker Poisoning</b> - IV fluid bolus for hypotension, contact <b>Medical Control</b> to consider Glucagon administration.</li> <li>• <b>Calcium Channel Blocker Poisoning</b> - IV fluid bolus for hypotension, contact <b>Medical Control</b> to consider Glucagon or Epinephrine administration.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Sodium Bicarbonate 50mEq</b>, if known tricyclic antidepressant or aspirin overdose.</li> <li>• <b>Calcium Channel Blocker or Beta Blocker overdose</b> consult medical control for consideration to administer <b>Calcium Chloride</b>.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Seizure

E M R	<ul style="list-style-type: none"><li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li></ul>
E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Perform blood glucose analysis; if abnormal perform <b>Diabetic Emergency Protocol 1125</b>.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• For patients with status epilepticus administer <b>Midazolam 10mg IM</b>. Do not delay administration for IV access. Do not repeat and do not use other routes. Attempt IV access after administration.</li><li>• Patients unresponsive to <b>Midazolam</b> requires consultation with <b>Medical Control</b>.</li><li>• For patients with seizures and not status epilepticus support ABCs, evaluate glucose, establish IV access, and time seizure duration.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact the receiving hospital as soon as possible.</li></ul>

## Sepsis

E M R	<ul style="list-style-type: none"><li>• Perform Routine Patient Care Protocol 1105</li><li>• Assess for sepsis.</li></ul>
E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Assess ETCO<sub>2</sub>, if capable.</li><li>• Initiate ALS intercept.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate IV access and administer 500 mL fluid boluses. Repeat to total bolus of 2L. Assess for signs of fluid overload between each bolus.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>

## Sepsis

### Critical Thinking Elements

#### Sepsis Screening

Obvious or suspected infection and ANY of these SIRS criteria:

SBP < 90 mmHg

Heart rate > 90/min

Respiratory Rate > 20

GCS < 15

Temperature  $\geq 100.4^{\circ}\text{F}$  or  $\leq 96.0^{\circ}\text{F}$

#### Optional Screening Method - Miami Sepsis Score

Points	Criteria
1	Body Temperature $\geq 38^{\circ}\text{C}/100.4^{\circ}\text{F}$ or $\leq 35.5^{\circ}\text{C}/96.0^{\circ}\text{F}$
1	Respiratory Rate $\geq 22$ breaths per minute
2	Shock Index $\geq 0.7$ (Heart Rate/ Systolic Blood Pressure)
	Total Score (3 or greater declare Sepsis Alert)

If patient meets criteria on either screening tool declare Sepsis Alert on radio report and perform protocol. If patient does not meet criteria, follow appropriate protocol.

- Early recognition of Sepsis allows for attentive care and early administration of antibiotics.
- Aggressive IV fluid therapy is the most important prehospital treatment for sepsis. Suspected septic patients should receive repeated fluid boluses (max 2 liters) while being checked frequently for signs of pulmonary edema, especially patients with known history of CHF or end stage renal dysfunction on dialysis. Halt fluid administration in the setting of pulmonary edema.
- Elevated serum lactate levels are a useful marker of Hypoperfusion in sepsis and often become elevated prior to the onset of hypotension.  $\text{ETCO}_2$  levels are correlated with lactate levels. If measure  $\text{ETCO}_2$ ; if  $\leq 26$  mmHg ensure that information is included with alert.
- If CPAP is utilized, airway pressure should be limited to 5  $\text{cmH}_2\text{O}$

## Unconscious / Altered Mental Status (Non - Trauma)

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1101</b></li> <li>• Assess for spine injury. If suspected, go to <b>Spinal Trauma Protocol 7102</b></li> <li>• Assess for stroke. If suspected, go to <b>Stroke Protocol 1160</b>.</li> <li>• If narcotic overdose suspected, administer <b>Naloxone</b>.             <ul style="list-style-type: none"> <li>• <b>2 mg</b>, repeat as needed to improve respiratory status.</li> </ul> </li> <li>• Evaluate blood glucose level.</li> <li>• If blood glucose is <math>\leq 60</math> mg/dL <b>OR</b> <math>\geq 300</math> mg/dL, go to <b>Diabetic Emergencies Protocol 1106</b></li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Apply cardiac monitor and obtain 12-lead ECG and transmit to receiving facility, if equipped.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Obtain 12 lead ECG and transmit to receiving facility.</li> <li>• Initiate IV and administer 1 - 2 L bolus of Normal Saline or Lactated Ringers</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

### Consider possible causes:

A – Acidosis, alcohol  
 E – Epilepsy  
 I – Infection  
 O – Overdose  
 U – Uremia (kidney failure)  
 T – Trauma, tumor  
 I – Insulin  
 P – Psychosis  
 S – Stroke

## Stroke/TIA

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b></li> <li>• Assess Cincinnati Stroke Scale and LAMS.</li> <li>• Determine last known normal.</li> <li>• Evaluate blood glucose level.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Transport immediately.</li> <li>• Notify receiving facility as soon as possible with Stroke Alert.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV access, large bore needles bilaterally if possible.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

### Critical Thinking Elements

#### Cincinnati Prehospital Stroke Scale

##### Facial Droop - Ask the patient to smile.

Normal	Both sides of the face move equally
Abnormal	One side of the face does not move as well

##### Arm Drift - Ask patient to close eyes and extend both arms straight out for 10 seconds

Normal	Both arms move the same or not at all
Abnormal	One arm does not move or drifts down

##### Speech - Ask patient to say "You can't teach an old dog new tricks."

Normal	Patient says correct words without slurring
Abnormal	Patient slurs words, says wrong words, or is unable to speak

If any 1 of these 3 signs is abnormal, the probability of a stroke is 72%

#### Los Angeles Motor Score

LAMS	Score	Description
Facial Droop	0 Absent	No facial asymmetry. Normal.
	1 Present	Partial or complete lower facial droop.
Arm Drift	0 Absent	No drift. Normal.
	1 Drifts Down	Drifts down but does not hit the bed within 10 sec.
	2 Falls Rapidly	Arm cannot be held up against gravity and falls to the bed within 10 sec.
Grip Strength	0 Normal	Normal.
	1 Weak Grip	Weak but some movement.
	2 No Grip	No movement. Muscle contraction can be seen but without movement.
Total:		A score of $\geq 4$ is highly predicted of large artery occlusion

## Routine Patient Care

E M R	<ul style="list-style-type: none"> <li>• Initial Assessment             <ul style="list-style-type: none"> <li>• Airway, breathing, and circulation. Maintain open airway.</li> <li>• Level of consciousness</li> <li>• SAMPLE history</li> <li>• Place patient in position of comfort unless contraindicated</li> <li>• Reassure/Calm patient.</li> <li>• Call for ALS/Helicopter, if indicated</li> <li>• Obtain room air SpO<sub>2</sub>.</li> <li>• Obtain blood glucose.</li> </ul> </li> <li>• Administer <b>Oxygen</b>, titrate SpO<sub>2</sub> to 94%-99%.</li> <li>• <b>Oxygen</b> via non-rebreather mask if moderate to severe respiratory distress.</li> <li>• Ventilate via bag valve mask if indicated.</li> <li>• Update transporting unit of patient status.</li> <li>• Physical Exam             <ul style="list-style-type: none"> <li>• Vital signs - pulse, blood pressure, respiratory rate, SpO<sub>2</sub>, and temperature. The first set of vital signs will be taken manually and minimum of two sets of vitals are required on all patients. (One set with initial patient contact and one prior to transferring care.) Refusals are an exception to this rule.</li> <li>• Reassess every 15 minutes in a stable patient and every 5 in an unstable patient.</li> </ul> </li> <li>• <b>Treat according to appropriate protocol.</b></li> <li>• Provide report when transferring care.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR Care.</li> <li>• Obtain ETCO<sub>2</sub> reading, if available.</li> <li>• Attach cardiac monitor and obtain 12 lead ECG, if indicated. Print rhythm strip for documentation. Transmit 12 lead ECG to receiving facility as early as possible. (Interpretation of 12 lead ECG and cardiac rhythm is beyond the scope of practice for EMT level providers.)</li> <li>• Reassess vital signs. The first set of vital signs will be taken manually and the above rules apply.</li> <li>• Assess lung sounds.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV and administer fluid bolus 20 mL/kg. May repeat one time, total bolus &gt; 40 mL/kg requires <b>Medical Control</b> order.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> </ul>



**Routine Patient Care**

- Contact receiving facility as soon as possible.

**P**

- Continue ILS care.
- Transport as soon as possible.
- Contact receiving facility as soon as possible.

## Altered Mental Status

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1205</b></li> <li>• Assess for spine injury. If suspected, go to <b>Spinal Trauma Protocol 7102</b></li> <li>• Evaluate blood glucose level.</li> <li>• If blood glucose is <math>\leq 60</math> mg/dL <b>OR</b> <math>\geq 300</math> mg/dL, go to <b>Diabetic Emergencies Protocol 1235</b>.</li> <li>• If narcotic overdose suspected, administer <b>naloxone</b> <ul style="list-style-type: none"> <li>• <b>0.1 mg/KG.</b></li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR Care.</li> <li>• Apply cardiac monitor as indicated.</li> <li>• Reassess during transport.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV and administer fluid bolus 20 mL/kg. May repeat one time, total bolus <math>&gt; 40</math> mL/kg requires <b>Medical Control</b> order.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

### Consider possible causes:

**A - Acidosis, alcohol**  
**E - Epilepsy**  
**I - Infection**  
**O - Overdose**  
**U - Uremia (kidney failure)**  
**T - Trauma, tumor**  
**I - Insulin**  
**P - Psychosis**  
**S - Stroke**

## Syncope and Pre-Syncope

EMR	<ul style="list-style-type: none"><li>• Perform <b>Routine Patient Care Protocol 1205</b>.</li><li>• Document changes in neurologic exam and/or GCS.</li></ul>
EMT	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Anticipate underlying etiologies and treat according to appropriate protocol.<ul style="list-style-type: none"><li>• Metabolic</li><li>• Cardiac</li><li>• Hypovolemic</li><li>• CNS Disorder</li><li>• Vasovagal</li></ul></li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>

## Seizure

EMR	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1205</b></li> <li>• Assess for spine injury. If suspected, go to <b>Spinal Trauma Protocol 7102</b></li> <li>• Evaluate blood glucose level.</li> <li>• If blood glucose is <math>\leq 60</math> mg/dL <b>OR</b> <math>\geq 300</math> mg/dL, go to <b>Diabetic Emergencies Protocol 1106</b>.</li> <li>• If narcotic overdose suspected, administer <b>naloxone</b> <ul style="list-style-type: none"> <li>• <b>0.1 mg/kg.</b></li> </ul> </li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR Care.</li> <li>• Apply cardiac monitor as indicated.</li> <li>• Reassess during transport.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• For patients with status epilepticus administer <b>Midazolam 0.2mg/kg IM</b>. Do not delay administration for IV access. Do not repeat and do not use other routes. Attempt IV access after administration.</li> <li>• For patients with seizures and not status epilepticus support ABCs, evaluate glucose, establish IV access, and time seizure duration.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Allergic Reaction/Anaphylaxis

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1205</b></li> <li>• Administer <b>Albuterol</b> <ul style="list-style-type: none"> <li>• <b>2.5mg/3mL</b> for wheezing; may repeat every 20 minutes.</li> </ul> </li> <li>• If patient has prescribed epinephrine auto injector in their possession, assist the patient with administering their own auto injector. Contact <b>Medical Control</b> for orders to administer.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR Care.</li> <li>• Apply cardiac monitor as indicated.</li> <li>• Reassess during transport.</li> <li>• Administer <b>Diphenhydramine</b> <ul style="list-style-type: none"> <li>• <b>1 mg/kg PO.</b></li> </ul> </li> <li>• Administer <b>Epinephrine 1 mg/mL</b> <ul style="list-style-type: none"> <li>• <b>0.01 mg/kg IM</b>, max single dose 0.3mg.</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Administer <b>Diphenhydramine</b> <ul style="list-style-type: none"> <li>• <b>1 mg/kg IV</b>, max single dose 50mg.</li> </ul> </li> <li>• If the patient is hypotensive administer a fluid bolus 20mL/kg. May repeat once. Any bolus over a total of 40 mL/kg requires <b>Medical Control</b> order.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>



## Acute Pain Management

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1205</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR Care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Transport as soon as possible.</li> <li>• For cases with isolated extremity fracture, chest pain, burns, or discomfort from IO infusion the following may be given:             <ul style="list-style-type: none"> <li>• <b>Fentanyl 1mcg/kg</b>, max single dose 50 mcg IV over 2 minutes Q5 minutes or IM Q15 minutes.</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• For cases with isolated extremity fracture, chest pain, burns, or discomfort from IO infusion the following may be given:             <ul style="list-style-type: none"> <li>• <b>Morphine 0.1mg/kg</b>, max single dose 2 mg. IV Q5 minutes or IM Q15 minutes.</li> <li>• <b>Fentanyl 1mcg/kg</b>, max single dose 50 mcg. IV over 2 minutes Q5 minutes or IM Q15 minutes.</li> </ul> </li> <li>• All other cases require consult with <b>Medical Control</b>.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Apparent Life Threatening Event

E M R	<ul style="list-style-type: none"> <li>• Patient less than 2 years of age.</li> <li>• History of any of the following:             <ul style="list-style-type: none"> <li>• Apnea</li> <li>• Loss of consciousness</li> <li>• Color change</li> <li>• Loss in muscle tone</li> <li>• Episode of choking or gagging</li> <li>• Parental/caregiver actions at the time of the event</li> <li>• What resuscitative measures were taken</li> </ul> </li> <li>• Perform <b>Routine Patient Care Protocol 1205</b>.</li> <li>• <b>All ALTE patients should be transported for medical evaluation, even the well appearing child.</b></li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR Care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>



## Diabetic

EMR	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• If blood glucose is less than 60 and patient has the ability to maintain airway and swallow, administer <b>Oral Glucose</b>.             <ul style="list-style-type: none"> <li>• <b>15g PO</b>.</li> </ul> </li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• If blood glucose is less than 60 and patient cannot maintain airway or swallow, administer <b>Glucagon</b>.             <ul style="list-style-type: none"> <li>• &lt;6 years old - <b>0.5 mg IM/IN</b></li> <li>• ≥6 years old - <b>1mg IM/IN</b>.</li> <li>• Evaluate blood glucose after 15 minutes.</li> </ul> </li> <li>• If blood glucose is greater than 250, provide supportive care, if tachypnic do not attempt to coach breathing, request ALS intercept.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care</li> <li>• If blood glucose is less than 60 and patient is incapable of swallowing, establish IV and administer <b>Dextrose 10%</b>. If unable to establish and IV administer <b>Glucagon</b>.             <ul style="list-style-type: none"> <li>• &lt;6 years old - <b>0.5 mg IM/IN</b></li> <li>• ≥6 years old - <b>1 mg IM/IN</b>.</li> <li>• Evaluate blood glucose after 15 minutes.</li> </ul> </li> <li>• If blood glucose is greater than 250, administer fluid bolus of 20 mL/kg of fluid unless contraindicated. Assess lung sounds frequently.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Poisoning/Overdose

EMR	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Perform detailed history:             <ul style="list-style-type: none"> <li>• What was substance?</li> <li>• When was the exposure?</li> <li>• How much?</li> <li>• Any other drugs or alcohol present?</li> <li>• Has the patient vomited, if so how many times?</li> <li>• Was it intentional or accidental?</li> <li>• Bring container if possible.</li> </ul> </li> <li>• Administer <b>Narcan</b>, for suspected opioid overdose.             <ul style="list-style-type: none"> <li>• <b>0.1 mg/kg IN</b></li> </ul> </li> <li>• Administer <b>Albuterol 2.5mg/3mL</b>, if the patient has been exposed to irritant gas. May repeat every 20 minutes as needed.</li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Administer <b>Albuterol 2.5 mg/3 mL</b> mixed with <b>Ipratropium 0.5mg/3 mL</b>, if the patient has been exposed to irritant gas. May repeat every 20 minutes as needed.</li> <li>• Initiate ALS intercept and transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible to alert them of hazardous material exposure.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li> <li>• Administer <b>versed</b> <ul style="list-style-type: none"> <li>• <b>0.1 mg/kg</b> for stimulant overdose.</li> </ul> </li> <li>• For calcium channel blockers and beta blockers consult <b>Medical Control</b> for orders to administer <b>Glucagon</b>. For patients less than 25 kg administer 0.5mg IV, for patients 25kg - 40kg administer 1 mg IV, refer to adult dose for patients over 40 kg.</li> <li>• Administer <b>Atropine</b> <ul style="list-style-type: none"> <li>• <b>0.2 mg/kg</b>, if suspected organophosphate poisoning/nerve agent and patient is symptomatic. May repeat every 5 minutes with <b>Medical Control</b> order.</li> </ul> </li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• For calcium channel blocker and beta blocker consult <b>Medical Control</b> for orders to administer <b>Calcium Chloride</b>.</li> <li>• Administer <b>Sodium Bicarbonate</b> <ul style="list-style-type: none"> <li>• <b>1mEq/kg</b>, for suspected tricyclic antidepressant or aspirin overdose.</li> </ul> </li> </ul>

- Cocaine is also a sodium channel blocker. On rare occasions, it may produce a wide QRS complex. If this is noted administer **Sodium Bicarbonate**
  - **1mEq/kg.**
- For anti-psychotics when the patient is exhibiting dystonic reactions administer **Diphenhydramine**
  - **1-2mg/kg IV.**
- Initiate ALS intercept, if indicated.
- Transport as soon as possible.
- Contact receiving facility as soon as possible.

## Routine Cardiac Care

E M R	<ul style="list-style-type: none"> <li>• Determine level of consciousness.</li> <li>• Evaluate airway and confirm patency</li> <li>• Assess breathing and circulation</li> <li>• Evaluate SpO<sub>2</sub></li> <li>• Oxygen titrate O<sub>2</sub> to maintain SpO<sub>2</sub> ≥ 94%</li> <li>• Administer <b>Aspirin</b> <ul style="list-style-type: none"> <li>• <b>324 mg PO.</b> If the patient has taken an aspirin tablet in the last four hours, subtract that dose to administer a total dose of 324 mg.</li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Apply cardiac monitor and obtain 12-lead ECG and transmit to receiving facility, if equipped.</li> <li>• Administer <b>Nitroglycerin</b> <ul style="list-style-type: none"> <li>• <b>0.4 mg SL</b> (If SBP &gt; 100 mmHg, and patient continues to have chest pain may repeat x3 every 5 minutes).</li> </ul> </li> <li>• For nausea/vomiting, refer to <b>Nausea/Vomiting Protocol 1135.</b></li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Perform 12-lead ECG and transmit to receiving facility.</li> <li>• If STEMI identified go to <b>STEMI Protocol 2110.</b></li> <li>• Initiate IV/IO normal saline or lactated ringer TKO or saline lock.</li> <li>• <b>Nitroglycerin 0.4 mg SL</b> may be administered if SBP &gt; 90 mmHg and IV established.</li> <li>• If patient continues to have pain, refer to <b>Acute Pain Management Protocol 1115.</b></li> <li>• Consider ALS intercept should the situation warrant additional medications.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>

## Critical Thinking Elements

- Cardiac Related Signs and Symptoms
  - Substernal Chest pain
  - Heaviness, tightness, or discomfort in the chest
  - Radiation and/or discomfort to the neck or jaw
  - Pain, discomfort, or weakness in the shoulders/arms
  - Nausea and/or vomiting
  - Diaphoresis
  - Dyspnea
- If the patient's chest pain is not eliminated with oxygen or nitroglycerin, initiate an ALS intercept.
- Consider cardiogenic shock if the patient presents with:
  - Dyspnea
  - Diaphoresis
  - SBP < 100 mmHg
  - Signs of congestive heart failure
- A 12/15 lead ECG should be obtained as soon as possible, preferably within 5 minutes of first medical contact and immediately transmitted to medical control if possible.
- Limb leads should be placed on the patient's limbs.
- Medications should not be administered IM to patients suspected of having an AMI.

## ST Elevation Myocardial Infarction

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Cardiac Care Protocol 2105</b></li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Once STEMI confirmed by <b>Medical Control:</b> <ul style="list-style-type: none"> <li>• Establish second IV</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Once STEMI confirmed by <b>Medical Control:</b> <ul style="list-style-type: none"> <li>• Establish second IV</li> <li>• Administer <b>Morphine</b> <ul style="list-style-type: none"> <li>• <b>2 mg IV Q10 min</b> for continued pain</li> </ul> </li> <li>• Administer <b>Ticagrelor (Brilinta)</b> <ul style="list-style-type: none"> <li>• <b>180 mg PO</b></li> </ul> </li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Cardiogenic Shock

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Cardiac Care Protocol 2105</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Establish an IV and administer fluid bolus to maintain a systolic blood pressure of 90 mmHg. Be cautious of pulmonary edema.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Treat dysrhythmias according to appropriate protocol.</li> <li>• If patient remains hypotensive:             <ul style="list-style-type: none"> <li>○ Administer <b>Dopamine</b> <ul style="list-style-type: none"> <li>▪ <b>2 - 20 mcg/kg/min</b></li> </ul> </li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Cardiac Arrest

E M R	<ul style="list-style-type: none"> <li>• Initiate CPR in accordance to AHA guidelines</li> <li>• Follow <b>High Quality CPR Procedure 9026.</b></li> <li>• Apply AED and follow prompts</li> <li>• Ensure transporting ALS unit has been dispatched.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR Care.</li> <li>• Place BIAD and ventilate at a rate of 10 - 12 breaths per minute.</li> <li>• Initiate ALS intercept.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Treat according to ACLS guidelines.</li> <li>• Transition to cardiac monitor. Defibrillate as indicated according to monitor guidelines.</li> <li>• Initiate vascular access. Give <b>Epinephrine 0.1mg/mL</b> <ul style="list-style-type: none"> <li>• <b>1 mg IV/IO. Repeat every 3 - 5 minutes.</b></li> </ul> </li> <li>• Secure airway with ETT or BIAD, if not already done.</li> <li>• Consider underlying etiology.</li> <li>• Continue to work the patient until ROSC occurs or a cease efforts order is given.</li> <li>• Contact receiving facility as soon as possible.</li> <li>• Follow appropriate protocol regarding patient's rhythm.</li> <li>• If ROSC achieved, follow <b>ROSC Protocol 2125.</b></li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Place OG tube if time permits.</li> <li>• Administer <b>Sodium Bicarbonate.</b> <ul style="list-style-type: none"> <li>• <b>50 - 100 mEq IV</b> for suspected TCA or ASA overdose.</li> </ul> </li> <li>• Administer <b>Calcium Chloride</b> <ul style="list-style-type: none"> <li>• <b>0.5 - 1g over 2 to 5 minutes</b> for cardiac arrest in dialysis patients or suspected hyperkalemia, hypocalcemia, or hypermagnesemia.</li> </ul> </li> <li>• Contact receiving facility as soon as possible.</li> </ul>



### Critical Thinking Elements

- Pregnancy and cardiac arrest.
  - Continuous manual Left Uterine Displacement should be performed on all pregnant women who are in cardiac arrest in which the uterus is palpated at or above the umbilicus to relieve aortocaval compression during resuscitation.
  - If the uterus is difficult to assess (eg, in the morbidly obese), attempts should be made to perform manual LUD if technically feasible.

>20 weeks gestational size or uterus is palpable or visible



Left Uterine Displacement  
One handed Technique



Left uterine Displacement  
- 2 Handed Technique



Figure 4. Patient in a 30° left-lateral tilt using a firm wedge to support pelvis and thorax.

## Ventricular Fibrillation / Pulseless Ventricular Tachycardia

E  
M  
R

- Follow **Cardiac Arrest Protocol 2120**.

E  
M  
T

- Follow **Cardiac Arrest Protocol 2120**.

I

- Continue EMT care.
- Treat according to ACLS guidelines.
- Perform two minutes of CPR. Evaluate rhythm. If VF or pulseless VT defibrillate per manufactures recommendation for biphasic monitors or 360 J for monophasic defibrillator.
- Immediately resume compressions after defibrillation.
- Initiate IV/IO access. Administer fluid bolus. Be cautious with dialysis patients.
- Administer **Epinephrine 0.1mg/mL**
  - **1 mg IV/IO. Repeat every 3 - 5 minutes.**
- Repeat CPR in two minute cycles. Evaluate rhythm. If VF or pulseless VT defibrillate per manufactures recommendation for biphasic monitors or 360 J for monophasic defibrillator. If rhythm converts, refer to appropriate protocol.
- After three cycles and patient remains in VF / pulseless VT, administer **Amiodarone**.
  - **300 mg IV. Second dose of Amiodarone 150 mg IV** if initial dose does not convert arrhythmia.
- Intubate if able to perform without interrupting chest compressions. If unable to intubate place BIAD.
- Monitor ETCO<sub>2</sub>.
- Consider possible causes and treat appropriately.
- Initiate ALS intercept if indicated.
- Contact receiving facility as soon as possible.

P

- Continue ILS care.
- Administer **Sodium Bicarbonate**
  - **1 mEq / kg** for tricyclic antidepressant overdose, aspirin overdose, or known chronic renal failure patient.
- Contact the receiving hospital as soon as possible.

## Pulseless Electrical Activity

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Cardiac Arrest Protocol 2120</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Follow <b>Cardiac Arrest Protocol 2120</b>.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Treat according to ACLS guidelines.</li> <li>• Perform two minutes of CPR. Evaluate rhythm.</li> <li>• Initiate IV/IO access. Administer fluid bolus. Be cautious with dialysis patients.</li> <li>• Administer <b>Epinephrine 0.1 mg/mL</b>.             <ul style="list-style-type: none"> <li>• <b>1mg IV/IO. Repeat every 3 - 5 minutes.</b></li> </ul> </li> <li>• Repeat CPR in two minute cycles. Evaluate rhythm. If rhythm converts, refer to appropriate protocol.</li> <li>• Intubate if able to perform without interrupting chest compressions. If unable to intubate place BIAD.</li> <li>• Monitor ETCO<sub>2</sub>.</li> <li>• Consider possible causes and treat appropriately.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Sodium Bicarbonate</b> <ul style="list-style-type: none"> <li>• <b>1 mEq / kg</b> for tricyclic antidepressant overdose, aspirin overdose, or known chronic renal failure patient.</li> </ul> </li> <li>• Contact the receiving hospital as soon as possible.</li> </ul>

## Asystole

E M R	<ul style="list-style-type: none"><li>• Follow <b>Cardiac Arrest Protocol 2120</b>.</li></ul>
E M T	<ul style="list-style-type: none"><li>• Follow <b>Cardiac Arrest Protocol 2120</b>.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Confirm Asystole in 2 leads.</li><li>• Go to <b>Cardiac Arrest Protocol 2120</b>. If resuscitation efforts are indicated.</li><li>• Consider cease efforts order, see <b>Resuscitation vs Cease Efforts Policy 0058</b>.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li></ul>

## Return of Spontaneous Circulation

EMR	<ul style="list-style-type: none"> <li>• Open and/or maintain an open airway.</li> <li>• Continue ventilations (1 breath every 6 seconds).</li> <li>• If patient is breathing, titrate O<sub>2</sub> to 94 - 99% SpO<sub>2</sub>.</li> <li>• Monitor vitals for any acute changes.</li> <li>•</li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Insert BIAD if applicable. Monitor ETCO<sub>2</sub>, target range 35 - 45 mmHg if applicable.</li> <li>• Obtain and transmit a 12 lead ECG, if applicable.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Attempt to intubate if the patient is not regaining consciousness. Monitor ETCO<sub>2</sub>, target range 35 - 45 mmHg.</li> <li>• Establish IV/IO access and infuse 1 - 2 L of normal saline or lactated ringers as a bolus.</li> <li>• Patients on dialysis and/or history of CHF, be cautious of fluid overload.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Apply ice packs to arm pits, behind neck, and groin area. If patient regains consciousness, do not continue cooling process. Treat symptoms as appropriate.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Return of Spontaneous Circulation

## Critical Thinking Elements

- Indications for therapeutic hypothermia:
    - Return of spontaneous circulation post cardiac arrest of medical origin, near drowning or strangulation (hanging).
    - Age greater than 18 years of age.
    - Persistent coma with no eye opening to pain or GCS < 9
    - Initial temperature > 34°C (93.2°F)
    - Advanced airway in place (King LTS-D, ETT)
  - Contraindications for therapeutic hypothermia:
    - Traumatic arrest due to penetrating or blunt trauma.
    - Inability to place advanced airway.
    - Presence of DNR or other advanced directive
    - Known patient pregnancy.
  - If patient regains consciousness, discontinue cooling process.
- 
- It's imperative to obtain a 12 lead ECG and complete set of vitals following return of spontaneous circulation.

## Unstable Bradycardia

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Cardiac Care Protocol 2105</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Obtain and transmit 12 lead ECG if possible.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Establish IV/IO and administer 500 mL fluid bolus.</li> <li>• Administer <b>Atropine</b> <ul style="list-style-type: none"> <li>• <b>0.5 mg IV/IO Medical Control Order Required.</b> May repeat every 5 minutes with <b>Medical Control Order to a max dose of 3 mg.</b></li> </ul> </li> <li>• Begin transcutaneous pacing if the patient is in a 3<sup>rd</sup> degree AV block or 2<sup>nd</sup> degree type II block. <ul style="list-style-type: none"> <li>• Rate should be 70 bpm.</li> <li>• Start current low and increase until mechanical and electrical capture is obtained.</li> </ul> </li> <li>• Consider sedation <ul style="list-style-type: none"> <li>• <b>Versed 2 mg IV</b>, if time permits</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Begin transcutaneous pacing if the patient is in a 3<sup>rd</sup> degree AV block or 2<sup>nd</sup> degree type II block. <ul style="list-style-type: none"> <li>• Rate should be 70 bpm.</li> <li>• Start current low and increase until mechanical and electrical capture is obtained.</li> </ul> </li> <li>• Consider sedation <ul style="list-style-type: none"> <li>• <b>Ketamine 4 mg/kg IM or 2 mg/kg IV.</b></li> </ul> </li> <li>• Administer <b>Dopamine</b> <ul style="list-style-type: none"> <li>• <b>2-20 mcg/kg/min.</b></li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact the receiving hospital as soon as possible.</li> </ul>

## Unstable Bradycardia

## Critical Thinking Elements

- Bradycardia does not necessarily mean that a patient is unstable or requires interventions.
  - Patients are considered stable if they are asymptomatic (i.e. alert, oriented, normal skin, and SBP > 100 mmHg).
  - The patient is unstable if he/she presents with:
    - Altered level of consciousness
    - Diaphoresis
    - Dizziness
    - Chest pain or discomfort
    - Ventricular ectopy
    - Hypotension (SBP < 100 mmHg)
- 
- Treat underlying etiologies according to appropriate protocol.
  - Atropine is contraindicated in patients with normal or elevated blood pressure.
  - Consider other factors when assessing bradycardic patients such as:
    - Health and physical condition (Athlete)
    - Current medications (Beta blockers)
    - Head trauma or injury (Cushing's triad)



## Unstable Bradycardia

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Cardiac Care Protocol 2105</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Obtain and transmit 12 lead ECG if possible.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Establish IV/IO and administer 500 mL fluid bolus.</li> <li>• Administer <b>Atropine</b> <ul style="list-style-type: none"> <li>• <b>0.5 mg IV/IO Medical Control Order Required.</b> May repeat every 5 minutes with <b>Medical Control Order to a max dose of 3 mg.</b></li> </ul> </li> <li>• Begin transcutaneous pacing if the patient is in a 3<sup>rd</sup> degree AV block or 2<sup>nd</sup> degree type II block. <ul style="list-style-type: none"> <li>• Rate should be 70 bpm.</li> <li>• Start current low and increase until mechanical and electrical capture is obtained.</li> </ul> </li> <li>• Consider sedation <ul style="list-style-type: none"> <li>• <b>Versed 2 mg IV</b>, if time permits</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Begin transcutaneous pacing if the patient is in a 3<sup>rd</sup> degree AV block or 2<sup>nd</sup> degree type II block. <ul style="list-style-type: none"> <li>• Rate should be 70 bpm.</li> <li>• Start current low and increase until mechanical and electrical capture is obtained.</li> </ul> </li> <li>• Consider sedation <ul style="list-style-type: none"> <li>• <b>Ketamine 4 mg/kg IM or 2 mg/kg IV.</b></li> </ul> </li> <li>• Administer <b>Dopamine</b> <ul style="list-style-type: none"> <li>• <b>2-20 mcg/kg/min.</b></li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact the receiving hospital as soon as possible.</li> </ul>

## Unstable Bradycardia

## Critical Thinking Elements

- Bradycardia does not necessarily mean that a patient is unstable or requires interventions.
  - Patients are considered stable if they are asymptomatic (i.e. alert, oriented, normal skin, and SBP > 100 mmHg).
  - The patient is unstable if he/she presents with:
    - Altered level of consciousness
    - Diaphoresis
    - Dizziness
    - Chest pain or discomfort
    - Ventricular ectopy
    - Hypotension (SBP < 100 mmHg)
- 
- Treat underlying etiologies according to appropriate protocol.
  - Atropine is contraindicated in patients with normal or elevated blood pressure.
  - Consider other factors when assessing bradycardic patients such as:
    - Health and physical condition (Athlete)
    - Current medications (Beta blockers)
    - Head trauma or injury (Cushing's triad)

## Narrow Complex Tachycardia (>150 BPM) - Stable

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Cardiac Care Protocol 2105</b></li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Apply 12 lead ECG. Obtain a 12 lead ECG and transmit, if available.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible. If patient becomes unstable, refer to <b>2155 Narrow Complex Tachycardia - Unstable.</b></li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Establish IV access.</li> <li>• Administer a 500 cc IV fluid bolus.</li> <li>• If the patient is stable and pulse is greater than 150 beats per minute. Administer <b>Adenosine</b>. <ul style="list-style-type: none"> <li>• <b>6 mg IVP.</b></li> </ul> </li> <li>• If no response after 2 minutes. Administer <b>Adenosine</b>. <ul style="list-style-type: none"> <li>• <b>12 mg IVP.</b></li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• If the patient is stable and pulse is greater than 150 beats per minute. Administer <b>Adenosine</b> <ul style="list-style-type: none"> <li>• <b>6 mg IVP.</b></li> </ul> </li> <li>• If no response after 2 minutes. Administer <b>Adenosine</b>. <ul style="list-style-type: none"> <li>• <b>12 mg IVP.</b></li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact the receiving hospital as soon as possible.</li> </ul>

## Narrow Complex Tachycardia (&gt;150 BPM) - Stable

## Critical Thinking Elements

- Tachycardia does not necessarily mean that a patient is unstable or requires interventions.
  - Patients are considered stable if they are asymptomatic (i.e. alert, oriented, normal skin, and SBP > 100 mmHg).
  - The patient is unstable if he/she presents with:
    - Altered level of consciousness
    - Diaphoresis
    - Dizziness
    - Chest pain or discomfort
    - Ventricular ectopy
    - Hypotension (SBP < 100 mmHg)
- 
- Treat underlying etiologies according to appropriate protocol.

## Narrow Complex Tachycardia (>150 BPM) – Unstable

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Cardiac Care Protocol 2105</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Apply 12 lead ECG. Obtain a 12 lead ECG and transmit, if available.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Establish IV access.</li> <li>• Administer 500 cc IV fluid bolus.</li> <li>• Consider sedation             <ul style="list-style-type: none"> <li>• <b>Versed 2 mg IV</b> if time permits</li> </ul> </li> <li>• <b>Synchronize Cardioversion</b> – Apply defibrillator pads and limb leads. Ensure synchronize mode is selected.             <ul style="list-style-type: none"> <li>• For narrow and regular rhythm, administer 50 – 100 J.</li> <li>• For narrow and irregular rhythm, administer 100 – 120 J.</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Consider sedation             <ul style="list-style-type: none"> <li>• <b>Ketamine 4 mg/kg IM or 2 mg/kg IV</b>.</li> </ul> </li> <li>• <b>Synchronize Cardioversion</b> – Apply defibrillator pads and limb leads. Ensure synchronize mode is selected.             <ul style="list-style-type: none"> <li>• For narrow and regular rhythm, administer 50 – 100 J.</li> <li>• For narrow and irregular rhythm, administer 100 – 120 J.</li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Narrow Complex Tachycardia (>150 BPM) – Unstable

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Cardiac Care Protocol 2105</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Apply 12 lead ECG. Obtain a 12 lead ECG and transmit, if available.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Establish IV access.</li> <li>• Administer 500 cc IV fluid bolus.</li> <li>• Consider sedation             <ul style="list-style-type: none"> <li>• <b>Versed 2 mg IV</b> if time permits</li> </ul> </li> <li>• <b>Synchronize Cardioversion</b> – Apply defibrillator pads and limb leads. Ensure synchronize mode is selected.             <ul style="list-style-type: none"> <li>• For narrow and regular rhythm, administer 50 – 100 J.</li> <li>• For narrow and irregular rhythm, administer 100 – 120 J.</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Consider sedation             <ul style="list-style-type: none"> <li>• <b>Ketamine 4 mg/kg IM or 2 mg/kg IV</b>.</li> </ul> </li> <li>• <b>Synchronize Cardioversion</b> – Apply defibrillator pads and limb leads. Ensure synchronize mode is selected.             <ul style="list-style-type: none"> <li>• For narrow and regular rhythm, administer 50 – 100 J.</li> <li>• For narrow and irregular rhythm, administer 100 – 120 J.</li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Wide Complex Tachycardia (QRS $\geq$ 0.12)- Stable

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Cardiac Care Protocol 2105</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Apply cardiac monitor and obtain 12-lead ECG and transmit to receiving facility, if equipped.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Place defibrillation patches as soon as possible in the event that the patient becomes unstable.</li> <li>• Perform 12-lead ECG and transmit to receiving facility.</li> <li>• Initiate IV/IO normal saline or lactated ringer TKO or saline lock.</li> <li>• Consult <b>Medical Control</b>. Medical control may order <b>Amiodarone</b> <ul style="list-style-type: none"> <li>○ <b>150 mg IV</b> over 10 minutes.</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Wide Complex Tachycardia (QRS $\geq$ 0.12)- Unstable

EMR	<ul style="list-style-type: none"> <li>• Perform Routine Cardiac Care Protocol 2105.</li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Apply cardiac monitor and obtain 12-lead ECG and transmit to receiving facility, if equipped.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Place defibrillation patches.</li> <li>• Perform 12-lead ECG and transmit to receiving facility.</li> <li>• Initiate IV/IO normal saline or lactated ringer TKO or saline lock.</li> <li>• Consider sedation             <ul style="list-style-type: none"> <li>• <b>Versed 2 mg IV</b>, if time permits;</li> </ul> </li> <li>• If wide complex and regular, perform synchronized cardioversion at 100J.</li> <li>• If wide complex and irregular, defibrillate.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Consider sedation             <ul style="list-style-type: none"> <li>• <b>Ketamine 4 mg/kg IM or 2 mg/kg IV.</b></li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>



## Implanted Cardiac Defibrillator

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Cardiac Care Protocol 2105.</b></li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Apply cardiac monitor and obtain 12-lead ECG and transmit to receiving facility, if equipped.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Treat arrhythmias according to appropriate protocol.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Consider sedation</li> <li>• <b>Versed 2 mg IV</b>, if time permits</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Consider sedation             <ul style="list-style-type: none"> <li>• <b>Ketamine 4 mg/kg IM or 2 mg/kg IV.</b></li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Cardiac Arrest

E M R	<ul style="list-style-type: none"> <li>• Initiate CPR in accordance to AHA guidelines</li> <li>• Follow <b>High Quality CPR Procedure 9095.</b></li> <li>• Apply AED and follow prompts</li> <li>• Ensure transporting ALS unit has been dispatched.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR Care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Treat according to PALS guidelines.</li> <li>• Transition to cardiac monitor. Defibrillate as indicated according to monitor guidelines.</li> <li>• Initiate vascular access. Give <b>Epinephrine 0.1mg/mL</b> <ul style="list-style-type: none"> <li>• <b>1 mg IV/IO. Repeat every 3 - 5 minutes.</b></li> </ul> </li> <li>• Secure airway with ETT or King Airway.</li> <li>• Consider underlying etiology.</li> <li>• Continue to work the patient until ROSC occurs or a cease efforts order is given.</li> <li>• Contact receiving facility as soon as possible.</li> <li>• Follow appropriate protocol regarding patient's rhythm.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Place OG tube if time permits.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Ventricular Fibrillation / Pulseless Ventricular Tachycardia

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Cardiac Arrest Protocol 2205</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Follow <b>Cardiac Arrest Protocol 2205</b>.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Treat according to PALS guidelines.</li> <li>• Perform two minutes of CPR. Evaluate rhythm. If VF or pulseless VT defibrillate at 2 j/kg, subsequent defibrillations should increase by 2 j/kg each time with a max dose of 10j/kg.</li> <li>• Immediately resume compressions after defibrillation.</li> <li>• Initiate IV/IO access. Administer fluid bolus. Be cautious with dialysis patients.</li> <li>• Administer <b>Epinephrine 0.1mg/mL</b> <ul style="list-style-type: none"> <li>• <b>0.01 mg/kg IV/IO. Repeat every 3 - 5 minutes.</b></li> </ul> </li> <li>• Repeat CPR in two minute cycles. Evaluate rhythm. If VF or pulseless VT defibrillate.</li> <li>• After three cycles and patient remains in VF / pulseless VT, administer <b>Amiodarone</b> <ul style="list-style-type: none"> <li>• <b>5mg/kg IV</b> may repeat twice if initial dose does not convert arrhythmia.</li> </ul> </li> <li>• Intubate in able to perform without interrupting chest compressions. If unable to intubate place BIAD.</li> <li>• Monitor ETCO<sub>2</sub>.</li> <li>• Consider possible causes and treat appropriately.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Place OG tube if time permits.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Pulseless Electrical Activity and Asystole

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Cardiac Arrest Protocol 2205</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Follow <b>Cardiac Arrest Protocol 2205</b>.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Treat according to PALS guidelines.</li> <li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li> <li>• Administer <b>Epinephrine 0.1 mg/mL</b> <ul style="list-style-type: none"> <li>• <b>0.01 mg/kg IV/IO. Repeat every 3 - 5 minutes.</b></li> </ul> </li> <li>• Intubate in able to perform without interrupting chest compressions. If unable to intubate place King Airway.</li> <li>• Monitor ETCO<sub>2</sub>.</li> <li>• Consider possible causes and treat appropriately.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Place OG tube if time permits.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Bradycardia

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Identify state of Hypoperfusion             <ul style="list-style-type: none"> <li>• Respiratory Difficulty</li> <li>• Cyanosis</li> <li>• Cool Skin</li> <li>• Hypotension</li> <li>• Decreased Level of Consciousness</li> </ul> </li> <li>• Support respirations, if indicated.</li> <li>• If the child is less than 12 months old and despite oxygen and ventilation the child continues to be hypo-perfused and has pulse less than 60 beats per minute, initiate chest compressions.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li> <li>• Administer <b>Epinephrine 0.1 mg/mL</b> <ul style="list-style-type: none"> <li>• <b>0.01 mg/kg IV/IO. Medical Control</b> order required. Repeat every 3-5 minutes as necessary.</li> </ul> </li> <li>• Administer <b>Atropine</b> <ul style="list-style-type: none"> <li>• <b>0.02 mg/kg IV/IO. Medical Control</b> order required.</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• If patient continues to be bradycardic with hypo-perfusion, initiate transcutaneous pacing. Contact <b>Medical Control</b> for rate. May administer <b>Midazolam</b> for sedation.             <ul style="list-style-type: none"> <li>• <b>0.1 mg/kg IV.</b></li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Narrow Complex Tachycardia

E M R	<ul style="list-style-type: none"><li>• Follow <b>Routine Patient Care 1205</b>.</li></ul>
E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Attempt vagal maneuver.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li><li>• Administer <b>Adenosine</b><ul style="list-style-type: none"><li>• <b>0.1 mg/kg IV. Medical Control</b> order required. Repeat at <b>0.2 mg/kg IV with Medical Control</b> order.</li></ul></li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• If patient continues to be tachycardic with hypo-perfusion, initiate synchronized cardioversion, begin with 1 J/kg and then increase to 2 J/kg if needed. May administer <b>Midazolam</b> for sedation.<ul style="list-style-type: none"><li>• <b>0.1 mg/kg IV.</b></li></ul></li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>

## Wide Complex Tachycardia

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Attempt vagal maneuver.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li> <li>• Administer <b>Lidocaine</b> <ul style="list-style-type: none"> <li>• <b>1 mg/kg IV over 2 minutes. Medical Control order required.</b> Repeat every 5 minutes at <b>0.5 mg/kg IV with Medical Control order.</b> Max dose administered is 3 mg/kg.</li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• If patient continues to be tachycardic with hypo-perfusion, initiate synchronized cardioversion, begin with 1 J/kg and then increase to 2 J/kg if needed. May administer <b>Midazolam</b> for sedation. <ul style="list-style-type: none"> <li>• <b>0.1 mg/kg IV.</b></li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Neonatal Resuscitation

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Warm and maintain normal temperature, position airway, clear secretions if needed, dry and, stimulate.</li> <li>• After stimulation:             <ul style="list-style-type: none"> <li>• If the baby develops labored breathing or persistent cyanosis: position and clear airway, monitor SpO<sub>2</sub>, administer supplemental O<sub>2</sub>.</li> <li>• If the baby continues to be apneic, is gasping, or heart rate is below 100 bpm: administer positive pressure ventilations and monitor SpO<sub>2</sub>.</li> </ul> </li> <li>• If the baby's heart rate stays below 100 bpm: check chest movement, and ventilate.</li> <li>• If the heart rate is below 60 bpm: begin chest compressions, coordinate with positive pressure ventilations with 100% oxygen.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li> <li>• Administer <b>Epinephrine 0.1 mg/mL</b> <ul style="list-style-type: none"> <li>• <b>0.01 mg/kg IV.</b></li> </ul> </li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>



## Airway/Ventilation Management

E M R	<ul style="list-style-type: none"> <li>• Assure an open airway.</li> <li>• Utilize head tilt/chin lift or if suspected cervical spine injury perform modified jaw thrust.</li> <li>• Expose chest and visualize for chest rise and movement.</li> <li>• If the chest is not rising and air exchange cannot be heard or felt:             <ul style="list-style-type: none"> <li>• Deliver two positive pressure ventilations. If resistance continues follow AHA guidelines for obstructed airway rescue.</li> <li>• If spontaneous respirations return; administer oxygen via non-rebreather mask at 15 LPM or assist ventilations via bag valve mask with supplemental oxygen at 15 LPM and a rate of 12 breaths per minute.</li> <li>• If no spontaneous respirations return, but the patient has a pulse; ventilate patient at rate of 12 breaths per minute with supplemental oxygen at 15 LPM.</li> </ul> </li> <li>• If patient remains breathless and a pulse is not present; initiate <b>Cardiac Arrest Protocol 2120</b>.</li> <li>• Continue airway management according to <b>Basic Airway Procedure 9001</b>.</li> <li>• Provide report when transferring care.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Continue airway management and perform advanced airway procedures, if indicated.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Asthma/COPD

E M R	<ul style="list-style-type: none"> <li>• Perform protocol <b>Routine Patient Care 1105</b>.</li> <li>• Administer <b>Albuterol</b> if patient's lung sounds are diminished or wheezing. May repeat every 20 minutes as needed.             <ul style="list-style-type: none"> <li>• <b>2.5mg/3mL</b></li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.             <ul style="list-style-type: none"> <li>• Administer <b>Albuterol 2.5 mg/3 mL</b> mixed with <b>Ipratropium 0.5 mg/3 mL</b>. Repeat as necessary every 20 minutes.</li> </ul> </li> <li>• If the patient is suffering from status asthmaticus and does not improve with albuterol, administer <b>Epinephrine 1 mg/mL 0.3 mg IM</b>.             <ul style="list-style-type: none"> <li>• If the patient is &gt;40 years old, has an irregular heart rate, has a heart rate &gt; 150 bpm, history of heart disease, or has hypertension; consult <b>MEDICAL CONTROL</b>.</li> </ul> </li> <li>• For moderate to severe respiratory distress initiate CPAP; adjust PEEP to 5-10 cmH<sub>2</sub>O. If SBP is &lt; 90 mmHg adjust to PEEP of 5 and discontinue if hypotension persists.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Continue airway management and perform advanced airway procedures, if indicated.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Midazolam 1-2 mg slow IV or IM</b> for anxious patients unable to tolerate CPAP.</li> <li>• Administer <b>Methylprednisolone</b> <ul style="list-style-type: none"> <li>• <b>125 mg IV</b>.</li> <li>• If patient is still deteriorating, contact <b>Medical Control</b> for consideration of <b>Ketamine</b>.</li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Asthma/COPD

E M R	<ul style="list-style-type: none"> <li>• Perform protocol <b>Routine Patient Care 1105</b>.</li> <li>• Administer <b>Albuterol</b> if patient's lung sounds are diminished or wheezing. May repeat every 20 minutes as needed.             <ul style="list-style-type: none"> <li>• <b>2.5mg/3mL</b></li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.             <ul style="list-style-type: none"> <li>• Administer <b>Albuterol 2.5 mg/3 mL</b> mixed with <b>Ipratropium 0.5 mg/3 mL</b>. Repeat as necessary every 20 minutes.</li> </ul> </li> <li>• If the patient is suffering from status asthmaticus and does not improve with albuterol, administer <b>Epinephrine 1 mg/mL 0.3 mg IM</b>.             <ul style="list-style-type: none"> <li>• If the patient is &gt;40 years old, has an irregular heart rate, has a heart rate &gt; 150 bpm, history of heart disease, or has hypertension; consult <b>MEDICAL CONTROL</b>.</li> </ul> </li> <li>• For moderate to severe respiratory distress initiate CPAP; adjust PEEP to 5-10 cmH<sub>2</sub>O. If SBP is &lt; 90 mmHg adjust to PEEP of 5 and discontinue if hypotension persists.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Continue airway management and perform advanced airway procedures, if indicated.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Midazolam 1-2 mg slow IV or IM</b> for anxious patients unable to tolerate CPAP.</li> <li>• Administer <b>Methylprednisolone</b> <ul style="list-style-type: none"> <li>• <b>125 mg IV</b>.</li> <li>• If patient is still deteriorating, contact <b>Medical Control</b> for consideration of <b>Ketamine</b>.</li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## CHF/Pulmonary Edema

E M R	<ul style="list-style-type: none"> <li>• Perform protocol <b>Routine Patient Care 1105.</b></li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Administer <b>Nitroglycerin</b> <ul style="list-style-type: none"> <li>• <b>0.4mg SL.</b> May repeat every 3-5 minutes to a max dose of 3 tablets. Ensure SBP &gt; 100 mmHg prior to administration.</li> </ul> </li> <li>• For moderate to severe respiratory distress initiate CPAP; adjust PEEP to 5-10 cmH<sub>2</sub>O. If SBP is &lt; 90 mmHg adjust to PEEP of 5 and discontinue if hypotension persists.</li> <li>• Be prepared to support ventilations with BVM.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Administer <b>Furosemide</b> <ul style="list-style-type: none"> <li>• <b>40 mg IV or double daily patient dose, Max dose 80 mg.</b></li> </ul> </li> <li>• Continue airway management and perform advanced airway procedures, if indicated.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Midazolam 1-2 mg slow IV or IM</b> for anxious patients unable to tolerate CPAP.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## CHF/Pulmonary Edema

E M R	<ul style="list-style-type: none"> <li>• Perform protocol <b>Routine Patient Care 1105.</b></li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Administer <b>Nitroglycerin</b> <ul style="list-style-type: none"> <li>• <b>0.4mg SL.</b> May repeat every 3-5 minutes to a max dose of 3 tablets. Ensure SBP &gt; 100 mmHg prior to administration.</li> </ul> </li> <li>• For moderate to severe respiratory distress initiate CPAP; adjust PEEP to 5-10 cmH<sub>2</sub>O. If SBP is &lt; 90 mmHg adjust to PEEP of 5 and discontinue if hypotension persists.</li> <li>• Be prepared to support ventilations with BVM.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Administer <b>Furosemide</b> <ul style="list-style-type: none"> <li>• <b>40 mg IV or double daily patient dose, Max dose 80 mg.</b></li> </ul> </li> <li>• Continue airway management and perform advanced airway procedures, if indicated.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Midazolam 1-2 mg slow IV or IM</b> for anxious patients unable to tolerate CPAP.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

# PEDIATRIC RESPIRATORY

# 3205

## Respiratory Distress

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Administer <b>Albuterol</b> for wheezing or diminished breath sounds. May repeat every 20 minutes as needed.             <ul style="list-style-type: none"> <li>• <b>2.5mg/3mL</b></li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Administer <b>Albuterol 2.5 mg/3mL</b> mixed with <b>Ipratropium 0.5 mg/3 mL</b> for wheezing or diminished breath sounds. May repeat every 20 minutes as needed.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Epinephrine 0.1 mg/mL</b> <ul style="list-style-type: none"> <li>• <b>0.01 mg/kg IM</b> if the patient is suffering from status asthmatics and does not improve with nebulizer treatment. May repeat every 20 minutes.</li> </ul> </li> <li>• Administer <b>Methylprednisolone</b> <ul style="list-style-type: none"> <li>• <b>1-2 mg/kg IV</b>.</li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

### Critical Thinking Elements

- Signs and Symptoms of epiglottitis:
  - Altered level of consciousness
  - Fever
  - Hoarseness
  - Brassy cough
  - Inspiratory stridor
  - Drooling
  - Tripod positioning
- If epiglottitis is suspected:
  - Keep patient calm
  - Administer supplemental oxygen
  - Transport sitting up.

## Respiratory Arrest

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Open Airway</li> <li>• Suction as needed.</li> <li>• Insert an oropharyngeal or nasopharyngeal airway</li> <li>• Ventilate with 100% oxygen.</li> <li>• If chest rise is inadequate:             <ul style="list-style-type: none"> <li>• Relieve upper airway obstruction</li> <li>• Reposition airway</li> <li>• Follow airway management procedures.</li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>



### Critical Thinking Elements

- Gastric distention is very common in pediatric patients and may cause poor compliance. Ventilating too fast or giving too much tidal volume are the top two reasons for distention. Ensure proper ventilation techniques and an appropriately sized BVM for the pediatric patient.

## Respiratory Distress with Tracheostomy Tube

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Administer <b>Oxygen 15 LPM</b> via tracheostomy mask.</li> <li>• Assess work of breathing</li> <li>• Assess abnormal airway sounds.</li> <li>• Place patient in position of comfort.</li> <li>• Suction secretions.</li> <li>• Have caregiver change tracheostomy tube if suctioning is not effective.</li> <li>• If airway continues to be obstructed or if ventilator effort is inadequate, ventilate via BVM connected to tracheostomy tube.</li> <li>• If ventilations are still not sufficient, ventilate mask to mouth while covering stoma, the trach balloon must be deflated as well.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Respiratory Distress with Ventilator

EMR	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Open airway</li> <li>• Remove patient from ventilator and support respirations with BVM.</li> <li>• If unable to ventilate, suction.</li> <li>• If still unable to ventilate, follow <b>3215 Respiratory Distress with Tracheostomy Tube</b>.</li> <li>• If able to ventilate, support ABCs and monitor vitals.</li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Respiratory Distress with Ventilator

### Critical Thinking Elements

- Utilize caregivers as medical resources during treatment and transport.
- Consider to allow caregiver to accompany patient during transport.
- Bring ventilator to the hospital or have caregivers bring the ventilator to the hospital.

## Hypothermia

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• Handle the patient as gently as possible</li> <li>• Create a warm environment for the patient. Remove wet or frozen clothing and cover the patient with warm blankets. Prevent further exposure to cold. Warm packs may be utilized for the posterior neck, armpits, groin, and along the thorax.</li> <li>• Do not rub frostbitten or frozen body parts. Protect injured parts with light, sterile dressings and avoid pressure to the area.</li> <li>• Ensure patient's clothing has been removed and patient has decontaminated prior to transport.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Administer 500 mL bolus of warmed IV fluids.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Hypothermia

## Critical Thinking Elements

- Injury and illness from environmental exposure varies depending on the manner of exposure and the amount of exposure. Cold weather emergencies range from localized frostbite to severe hypothermia with unresponsiveness and unconsciousness.
- The patient's health and predisposing factors may increase the likelihood of environmental illness and injury. Patients suffering from trauma, shock, hypoglycemia, and stroke are at greater risk of developing hypothermia. Newborns, infants, drug and alcohol abuse patients, and the elderly have increased predisposition to hypothermia.
- The primary goal in the treatment of the patient at risk for hypothermia is to insulate the patient and prevent further heat loss.

**Heat Related Emergencies**

E M R	<ul style="list-style-type: none"><li>• <b>Perform Routine Patient Care Protocol 1105.</b></li><li>• Move the patient to a cool environment. Remove clothing as necessary to make the patient comfortable. Cold packs may be utilized for the posterior neck, armpits, groin, and along the thorax. Do not cool the patient to a temperature that causes shivering.</li></ul>
E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Administer 500 mL bolus of IV fluids to achieve a systolic BP of 100mmHg.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>

## Heat Related Emergencies

## Critical Thinking Elements

- Injury and illness from heat exposure varies depending on the manner of exposure and the amount of exposure. Heat exposure emergencies range from localized cramping to severe hyperthermia (heat stroke) with unresponsiveness and unconsciousness.
- The patient's health, predisposing factors and medications may increase the likelihood of heat-related illness.
- The primary goal in the treatment of the patient at risk for hyperthermia is to cool the patient and restore body fluids.



## Burn Management

E  
M  
R

- **Perform Routine Patient Care Protocol 1105.**
- **Thermal Burn Treatment**
  - If burn occurred within the last 20 minutes, reverse the burning process and cool the area by flushing with 1L of sterile saline or sterile water. The goal is to extinguish the burning process. Do not systemically cool the patient. Discontinue cooling if the patient begins to shiver.
  - Remove jewelry and clothing. Do not pull away clothing that is stuck to the burn.
  - Cover the wound with dry sterile dressings.
  - Wrap the patient with burn sheets and then blankets to conserve body heat.
- **Electrical Burn / Lightning Strike Treatment**
  - Ensure power service has been cut off and removed from patient by trained personnel.
  - Assess for entry and exit wounds. No cooling or flushing is necessary for this type of burn.
  - Cover burn with dry, sterile dressings.
  - Closely monitor the patient.
- **Chemical Burn Treatment**
  - Consider possible scene and patient contamination and follow agency safety procedures.
  - Note which chemical agent caused the burn and obtain SDS for the chemical (if possible).
  - Patient's clothing should be removed completely prior to being placed in ambulance for transport.
  - Dry chemical powder should be brushed off prior to applying water.
  - Flush skin for at least 1-2 minutes.
  - Irrigate burns to the eye with at least 1 Liter of Normal saline for at least 5 minutes.
- **Radiation Burn Treatment**
  - Ensure appropriately trained providers with proper protective equipment respond and decontaminate patient.
  - All contaminated items should be left at the scene. Notify receiving facility as early as possible.
  - Treat signs and symptoms per appropriate protocol. Burns should be addressed as noted above with thermal burn treatment.
- **Inhalation Burns**
  - Monitor airway closely, support respirations if indicated, and secure airway if indicated.

## Burn Management

E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Monitor airway and manage as needed.</li><li>• Initiate ALS intercept, if needed.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
-------------	---

I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Administer IV fluid bolus. Refer to Parkland formula for bolus amount.</li><li>• Provide pain management according to <b>Acute Pain Management Protocol 1115</b>.</li><li>• Initiate ALS intercept if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
---	--

P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Monitor airway closely and secure airway if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
---	--

## Critical Thinking Elements

- Water-Jel® or equivalent may be used after the burn has been cooled.
- Burn Jel® or any product with external analgesic is not an approved product in the SAMIC EMS System.
- Treat other signs/symptoms or trauma according to the appropriate protocol.
- Vascular access should not be obtained through burned tissue unless no other site is available.
- Monitor the patient's response to fluid administration.
- Closely monitor airway and prepare for aggressive management.
- Do not delay transport in critical trauma patients for burn care.

## Smoke Inhalation/Cyanide Exposure

EMR	<ul style="list-style-type: none"><li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li><li>• Administer <b>Albuterol 2.5mg/3mL</b>, may repeat every 20 minutes as needed.</li></ul>
EMT	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Administer <b>Albuterol 2.5mg/3mL</b> mixed with <b>Ipratropium 0.5 mg/3 mL</b>, may repeat every 20 minutes as needed.</li><li>• Initiate ALS intercept, if needed.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate ALS intercept, if needed.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>

## Submersion Incident

- |             |   |
|-------------|---|
| E<br>M<br>R | <ul style="list-style-type: none"><li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li><li>• Consider c-spine injury and take appropriate precautions.</li><li>• Ensure scene safety. Use appropriate personnel and equipment for rescue.</li></ul> |
|-------------|---|

- |             |  |
|-------------|--|
| E<br>M<br>T | <ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Initiate ALS intercept, if needed.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul> |
|-------------|--|

- |   |  |
|---|--|
| I | <ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate ALS intercept, if needed.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul> |
|---|--|

- |   |   |
|---|---|
| P | <ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul> |
|---|---|

# ADULT ENVIRONMENTAL

## SCUBA Injury/Accident

# 4135

E  
M  
R

- Perform **Routine Patient Care Protocol 1105**.
- Administer high flow oxygen via non-rebreather mask.
- Ensure scene safety. Use appropriate personnel and equipment for rescue.
- Utilize Diver's Alert Network Emergency Hotline for guidance. 1-919-684-9111

E  
M  
T

- Continue EMR care.
- Initiate ALS intercept, if needed.
- Transport as soon as possible.
- Contact receiving facility as soon as possible.

I

- Continue EMT care.
- Check and treat for pneumothorax, if indicated.
- Initiate ALS intercept, if needed.
- Transport as soon as possible.
- Contact receiving facility as soon as possible.

P

- Continue ILS care.
- Transport as soon as possible.
- Contact receiving facility as soon as possible.

# ADULT ENVIRONMENTAL

# 4140

## Altitude Illness

- |             |   |
|-------------|---|
| E<br>M<br>R | <ul style="list-style-type: none"><li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li><li>• Administer high flow oxygen via non-rebreather mask.</li><li>• Treat signs and symptoms according to appropriate protocol.</li></ul> |
|-------------|---|

- |             |  |
|-------------|--|
| E<br>M<br>T | <ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Initiate ALS intercept, if needed.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul> |
|-------------|--|

- |   |  |
|---|--|
| I | <ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate ALS intercept, if needed.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul> |
|---|--|

- |   |   |
|---|---|
| P | <ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul> |
|---|---|

# ADULT ENVIRONMENTAL

# 4145

## Bites and Envenomation

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• Attempt to identify the animal without endangering EMS.</li> <li>• Determine the time of the bite. Mark a spot above and below the bite and measure the circumference. Mark the leading edge of any bruising and/or swelling, note the time.</li> <li>• Provide pressure immobilization. Wrap an ACE wrap around the entire length of the bitten extremity. The bandage should be comfortably tight and snug but allow a finger to be slipped under it. Splint the extremity. Ensure PMS is present after securing extremity.</li> <li>• Treat signs and symptoms according to appropriate protocol.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if needed.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if needed.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Heat Related Emergency

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Move the patient to a cool environment. Remove clothing as necessary to make the patient comfortable. Cold packs may be utilized for the posterior neck, armpits, groin, and along thorax. Do not cool the patient to a temperature that will cause them to shiver.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if needed.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg if patient is hypotensive, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>



## Hypothermia

EMR	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Handle the patient gently.</li> <li>• Move the patient to a warm environment. Remove wet and/or frozen clothing. Cover with warm blankets. Hot packs may be utilized for the posterior neck, armpits, groin, and along thorax.</li> <li>• Do not rub frostbitten or frozen body parts. Protect injured parts with dry, light, sterile, and loose dressings.</li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if needed.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV/IO access. Administer warmed fluid bolus 20mL/kg if patient is hypotensive, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li> <li>• Initiate ALS intercept, if needed.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Near Drowning

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Make sure scene is safe. Use appropriate personnel and equipment for rescue.</li> <li>• Establish and maintain spinal motion restriction.</li> <li>• Initiate CPR if indicated.</li> <li>• Treat symptoms per the appropriate protocol.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible to alert them of hazardous material exposure.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV/IO access. Administer warmed fluid bolus 20mL/kg if patient is hypotensive, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Burn

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1205.</b></li> <li>• <b>Thermal Burn Management:</b> <ul style="list-style-type: none"> <li>• If burn occurred within the last 20 minutes, reverse the burning process and cool the area by flushing with 1L of sterile saline or sterile water. The goal is to extinguish the burning process. Do not systemically cool the patient. Discontinue cooling if the patient begins to shiver.</li> <li>• Remove jewelry and clothing. Do not pull away clothing that is stuck to the burn.</li> <li>• Cover the wound with dry sterile dressings.</li> <li>• Wrap the patient with burn sheets and then blankets to conserve body heat.</li> </ul> </li> <li>• <b>Electrical Burn / Lightning Strike Treatment</b> <ul style="list-style-type: none"> <li>• Ensure power service has been cut off and removed from patient by trained personnel.</li> <li>• Assess for entry and exit wounds. No cooling or flushing is necessary for this type of burn.</li> <li>• Cover burn with dry, sterile dressings.</li> <li>• Closely monitor the patient.</li> </ul> </li> <li>• <b>Chemical Burn Treatment</b> <ul style="list-style-type: none"> <li>• Consider possible scene and patient contamination and follow agency safety procedures.</li> <li>• Note which chemical agent caused the burn and obtain SDS for the chemical (if possible).</li> <li>• Patient's clothing should be removed completely prior to being placed in ambulance for transport.</li> <li>• Dry chemical powder should be brushed off prior to applying water.</li> <li>• Flush skin for at least 1-2 minutes.</li> <li>• Irrigate burns to the eye with at least 1 Liter of Normal saline for at least 5 minutes.</li> </ul> </li> <li>• <b>Radiation Burn Treatment</b> <ul style="list-style-type: none"> <li>• Ensure appropriately trained providers with proper protective equipment respond and decontaminate patient.</li> <li>• All contaminated items should be left at the scene. Notify receiving facility as early as possible.</li> <li>• Treat signs and symptoms per appropriate protocol. Burns should be addressed as noted above with thermal burn treatment.</li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Monitor airway and manage as needed.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Burn

I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg if patient is hypotensive, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li><li>• Provide pain management according to <b>Acute Pain Management Protocol 1115</b>.</li><li>• Initiate ALS intercept, if needed.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>

## Domestic and Elder Abuse/Neglect

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• Maintain control of the scene and request law enforcement if they have not already been called.</li> <li>• Survey the scene for evidence of factors that could adversely affect the patient's welfare:             <ul style="list-style-type: none"> <li>○ Environmental</li> <li>○ Interaction with family members</li> <li>○ Discrepancies in history of events</li> <li>○ Injury patters that do not correlate with the history of patient use and mobility</li> <li>○ Signs of intentional injury or emotional harm.</li> </ul> </li> <li>• Treat injuries and/or illness according to appropriate protocol.</li> <li>• Illinois law establishes requirements that any person licensed, certified or otherwise authorized to provide healthcare shall offer immediate and adequate information regarding services available to abuse and neglect victims. EMS personnel should not rely on another mandated reported to file a report on the victim's behalf.</li> <li>• The following numbers regarding services available to victims of abuse shall be offered to all victims of abuse whether they are treated and transported or they refuse treatment and transportation to the hospital.             <ul style="list-style-type: none"> <li>○ Elder Abuse Hotline - 1-866-800-1409</li> <li>○ Crime Victims Compensation Program - 1-800-228-3368</li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Behavioral Emergency/Chemical Restraint

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• Maintain control of the scene and request law enforcement if needed.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Determine if patient is a threat to self or others.</li> <li>• Contact <b>Medical Control</b> as early as possible if restraints are needed.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Administer <b>Midazolam</b> for sedation if patient is agitated and needs to be restrained.             <ul style="list-style-type: none"> <li>• <b>5 mg IM</b></li> </ul> </li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Ketamine</b> for sedation if patient is agitated and patient needs to be restrained.             <ul style="list-style-type: none"> <li>• <b>2 mg/kg IM.</b></li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

**Critical Thinking Elements**

- Document patient's behavior, statements, actions, and surroundings.
- Attempt to verbally calm and reorient the patient.
- If restraints are used, thoroughly document the reasons for applying restraints, method of restraint, and any law enforcement involvement. Also, be sure to note time medical control was contacted.
- Patient and restraints should be checked every 15 minutes and checks must be documented.

## Teargas/Pepper Spray Exposure

EMR	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• Flush eyes with sterile water to aid in recovery if affected.</li> <li>• Administer <b>Albuterol 2.5mg/3mL</b> for wheezing and difficult breathing. May repeat every 20 minutes as needed.</li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Administer <b>Albuterol 2.5mg/3mL</b> mixed with <b>Ipratropium 0.5 mg/3 mL</b> for wheezing and difficulty breathing. May repeat every 20 minutes as needed.</li> <li>• Assess for secondary trauma that may be present and treat appropriately per appropriate protocols.</li> <li>• Assess for any secondary causes of patient behavior which lead to law enforcement subduing the patient.</li> <li>• Contact <b>Medical Control</b> as early as possible if restraints are needed.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>



**Teargas/Pepper Spray Exposure****Critical Thinking Elements**

- Chemical defense sprays leave residue that may be contacted and transferred to providers. Care must be taken to ensure cross contamination does not occur. Avoid touching your own face, eyes, or any other mucous membrane.
- Patients who have been subdued using less than lethal weapons are commonly agitated and may be combative. Safety of the EMS crew is of utmost importance.
- Monitor carefully for patients exhibiting signs or symptoms of excited delirium. Extra caution should be taken and carefully monitor the patient.

## Taser Related Injuries

EMR	<ul style="list-style-type: none"> <li>• <b>Perform Routine Patient Care Protocol 1105.</b></li> <li>• Taser probes may be removed as long as if the provider has been trained and are comfortable doing so.</li> <li>• If probes are in the face, eye, neck, genitalia, or female breast; leave the probes in place and have the patient transported to ED for further treatment.</li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

**Taser Related Injuries****Critical Thinking Elements**

- If law enforcement has removed the probes, treat the probes as biohazard sharps. Exercise caution to prevent accidental injury.
- Ask law enforcement to eject the cartridge from the Taser prior to patient contact.
- Patients who have been subdued using less than lethal weapons are commonly agitated and may be combative. Safety of the EMS crew is of utmost importance.
- Monitor carefully for patients exhibiting signs or symptoms of excited delirium. Extra caution should be taken and carefully monitor the patient.

**Biological Agent Exposure**

E M R	<ul style="list-style-type: none"><li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li><li>• Treat signs and symptoms per appropriate protocol.</li><li>• Decontaminate patient and take appropriate standard precautions.</li></ul>
E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>



### Bioterrorism Syndromes

In all cases of suspected bioterrorism activity, immediately notify your local health department and the Illinois Department of Public Health.



Syndrome	Primary Signs and Symptoms	Diagnostic Tests and Findings	Patient Placement	Isolation	Treatment	Pictures
<b>Acute Neurologic Syndrome</b>  <b>Acute Rash</b>	<b>Botulism</b>	Prosis, diplopia, blurred vision, myriades, sore throat, ophthalmia, and paralysis, respiratory distress	No restrictions	Standard precautions	Supportive care, including respiratory support and botulinum antitoxin, which is available only from the CDC	
	<b>Cutaneous Anthrax</b>	Localized itching; a painless papule after seven days; within one to two days, papule will enlarge and develop a central vesicle with surrounding non-pitting edema; seven to 10 days after papule formation, a painless central black eschar forms.	No restrictions	Standard precautions	<p>Without systemic signs or surrounding edema and cellulitis, ciprofloxacin or doxycycline for 60 days.</p> <p>With systemic signs or surrounding edema and cellulitis, same as inhalational anthrax (see below).</p>	 
	<b>Smallpox</b>	Papular rash with fever that begins on the face and extremities and uniformly spreads to the trunk; headache, vomiting, back pain and delirium common	Electron microscopy examination or PCR testing of vesicular or pustular fluid and/or scabs	Private negative pressure room. May place like patients together. Door must be closed at all times.	Standard precautions plus airborne and contact precautions. Goggles, gloves, fit-tested masks and negative pressure room are required.	Supportive care, along with antibiotics as indicated for treatment of secondary bacterial infections
<b>Respiratory Symptoms and Fever</b>	<b>Tularemia</b>	High fever, chills, headache, malaise, myalgias, arthralgias and progressive weakness. Incubation period is usually three to five days post exposure.	No restrictions	Standard precautions	Initial parenteral therapy may include streptomycin, gentamicin, doxycycline, ciprofloxacin or chloramphenicol. Therapy should continue for 10 days for streptomycin, gentamicin and ciprofloxacin; 14 days for doxycycline and chloramphenicol.	
	<b>Viral Hemorrhagic Fever</b>	Marked fever, fatigue, dizziness, muscle aches, loss of strength and exhaustion ranging from two days to three weeks post exposure. In severe cases show signs of hemorrhage under the skin, internal organs or from body orifices.	Private negative pressure room. May place like patients together. Door must be closed at all times.	Standard precautions plus airborne and contact precautions. Gowns, gloves, fit-tested masks and negative pressure room are required.	Ribavirin may be useful for a subset of viral hemorrhagic fevers caused by the arenavirus and bunyavirus families.	
	<b>Inhalational Anthrax</b>	Low-grade fever, nonproductive cough, malaise, fatigue, myalgias, dysphoresis and chest discomfort. Incubation period is usually one to six days post exposure but may be up to 60 days.	Blood culture and CSF culture as indicated Gram stain; gram-positive bacilli on buffy coat smear or CSF culture CT scan, hyperdense mediastinal and hilar lymph nodes, mediastinal edema, peribronchial thickening and pleural effusions CXR: widened mediastinum and pleural effusions	No restrictions	Standard precautions	<p>Initial intravenous therapy may include ciprofloxacin or doxycycline AND one or two additional antimicrobials such as rifampin, vancomycin, penicillin, ampicillin, chloramphenicol, imipenem, clindamycin or clarithromycin.</p> <p>Switch to oral medications when clinically appropriate. Therapy should continue for 60 days.</p>
<b>Plague</b>	Cough, hemoptysis and chest pain; tachycardia, chills and delirium. Incubation period is usually two to three days post exposure.	Blood culture and CSF culture as indicated CXR: bilateral infiltrates or consolidation Sputum and throat specimens for microscopy for specialized stains and/or fluorescent antibody tests	Private room. May place like patients together. Door must be closed at all times. Place mask on patient for transport.	Standard precautions and droplet precautions. Surgical mask to avoid respiratory spread	Initial parenteral therapy may include streptomycin, gentamicin, doxycycline, ciprofloxacin or chloramphenicol. Therapy should continue for 10 days.	

Photographs and images courtesy of the Public Health Image Library, created by a grant from the Agency for Toxic Substances and Hazardous Waste Investigation, U.S. Environmental Protection Agency, Washington, DC, and CDC, Atlanta, GA, USA.

## Suspected Child Maltreatment

E M R	<ul style="list-style-type: none"> <li>• Consider scene safety issues.             <ul style="list-style-type: none"> <li>• If the offender is present and interferes with transportation of the patient, or is influencing the patient's acceptance of medical care, contact law enforcement and <b>Medical Control</b> for consultation on the appropriate action to take.</li> <li>• If the parent/guardian refuses to allow transportation of the child, contact law enforcement and <b>Medical Control</b> for consultation on the appropriate action to take.</li> </ul> </li> <li>• Perform <b>Routine Patient Care Protocol 1205</b>.</li> <li>• Treat obvious injuries and illnesses.</li> <li>• Survey the scene for evidence of factors that could adversely affect the child's welfare:             <ul style="list-style-type: none"> <li>• Environmental</li> <li>• Interaction with parents/guardians</li> <li>• Discrepancies in the history of events</li> <li>• Injury patterns inconsistent with history of events or anticipated motor skills based on the child's growth and development stage.</li> <li>• Signs of intentional injury or emotional harm.</li> </ul> </li> <li>• Transport regardless of extent of injuries</li> <li>• Notify DCFS after incident 1-800-252-2873, all health care workers are mandated reporters.</li> <li>• Document thoroughly.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

### Critical Thinking Elements

- At no time should EMS confront the abusers.
- Do not make accusations on the PCR. Document objective physical findings.
- Willful failure to report suspected incidents of child abuse/neglect is a misdemeanor for 1<sup>st</sup> violation and class IV felony for subsequent violations.
- Reports must be confirmed in writing to the local investigation unit within 48 hours of the hotline call.

## Childbirth

E  
M  
R

- Perform **Routine Patient Care Protocol 1105**.
- Obtain a history on the patient including:
  - Gravida - Number of pregnancies
  - Para - Number of live births
  - Expected delivery date
  - Length of previous labor
  - Complications of previous pregnancies
  - Onset of contractions
  - Prenatal care
- Allow the expectant mother to remain in a position of comfort.
- If delivery is not imminent, transport the patient on her left side.
- Determine if there is adequate time to transport:
  - Assess the nature, extent, and time of contractions.
  - Assess the patient for high-risk factors.
  - Assess the status of the membranes and any discharge.
  - Assess for pushing with contractions.
  - Take into consideration the length of previous delivery.
- If delivery is imminent:
  - Do not attempt to restrain or delay delivery.
  - Position the mother supine on a flat surface, if possible.
  - Use full PPE.
- Prepare for delivery:
  - Control delivery of the head so that it does not emerge too quickly. Support the infant's head as it emerges and protect the perineum with gentle hand pressure.
  - Puncture the amniotic membrane with gentle finger pressure if it is still intact and visible outside the vagina.
  - Assess for nuchal cord and, if present, gently remove the cord from around the newborn's neck.
  - Suction the mouth, then nose of the newborn with a bulb syringe as soon as the head is delivered.
  - As the shoulders emerge, guide the head and neck downward to deliver the anterior shoulder. Support and lift the head and neck slightly to deliver the posterior shoulder.
  - Ensure a firm hold on the baby as the rest of the newborn's body delivers.
  - Keep the newborn level with the mother's vagina until the cord stops pulsating and is double clamped.
- Once delivered proceed to **6110 - Post Partum Care**.



**Childbirth**

E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul>

## Childbirth

### Critical Thinking Elements

- **High-Risk Pregnancy Factors**
  - Lack of prenatal care
  - Drug abuse
  - Teenage pregnancy
  - Diabetes
  - Hypertension
  - Cardiac disease
  - Previous breech or C-section delivery
  - Pre-eclampsia/toxemia/eclampsia
  - Multiple birth pregnancy.

## Post-Partum Care

E M R	<ul style="list-style-type: none"> <li>• Perform Routine Patient Care Protocol 1105.</li> <li>• <b>Infant Post-Partum Care</b> <ul style="list-style-type: none"> <li>• If the baby is term, has good tone, breathing and crying normally: place baby with mother for care, warm and maintain body temperature, position airway, clear secretions if needed, dry and continuously monitor.</li> <li>• If the baby is not term, has poor tone, not breathing or crying, initiate <b>Neonatal Resuscitation Protocol 2235</b></li> </ul> </li> <li>• <b>Mother Post-Partum Care</b> <ul style="list-style-type: none"> <li>• The placenta should deliver within 5 - 20 minutes. Collect the placenta in a plastic bag and bring it to the hospital with the mother. Do not pull on the cord to facilitate delivery of the placenta.</li> <li>• Do not delay transport for delivery of the placenta.</li> <li>• If the perineum is torn and bleeding, apply direct pressure with abd pads or trauma dressings and have the patient bring her legs together.</li> <li>• Massage the uterus until firm. <ul style="list-style-type: none"> <li>▪ To massage the uterus, place one hand with fingers fully extended just above the mother's pubic bone and use the other hand to press down into the abdomen and gently massage the uterus approximately 3 to 5 minutes until it becomes firm.</li> </ul> </li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Post-Partum Care

### Critical Thinking Elements

- High-Risk Pregnancy Factors
  - Lack of prenatal care
  - Drug abuse
  - Teenage pregnancy
  - Diabetes
  - Hypertension
  - Cardiac disease
  - Previous breech or C-section delivery
  - Pre-eclampsia/toxemia/eclampsia
  - Multiple birth pregnancy
- Documentation Requirements
  - Complete Emergency Childbirth Record
  - Document the date, time, and place of delivery.
  - Presence or absence of nuchal cord.
  - Appearance of the amniotic fluid.
  - Time the placenta was delivered and its condition.
  - APGAR score at 1 minute and 5 minutes.
  - Any resuscitation and treatment rendered and newborn response to treatment.

## Abnormal Delivery

EMR	<ul style="list-style-type: none"> <li>• Perform Routine Patient Care Protocol 1105.</li> <li>• <b>Breech Presentation</b> <ul style="list-style-type: none"> <li>• Never attempt to pull the baby from the vagina by the trunk or legs.</li> <li>• As soon as the legs are delivered, support the baby's body.</li> <li>• After the shoulders are delivered, gently elevate the trunk and legs to aid in the delivery of the head.</li> <li>• The head should deliver in 30 seconds. If it does not, reach two fingers into the vagina to locate the infant's mouth. Press the vaginal wall away from the baby's mouth to provide unrestricted respirations.</li> </ul> </li> <li>• <b>Prolapsed Cord</b> <ul style="list-style-type: none"> <li>• Elevate the mother's hips.</li> <li>• Do not pull the cord or attempt to push the cord back into the vagina.</li> <li>• Place a gloved finger/hand into the vagina between the pubic bone and the presenting part with the cord between the fingers and exert counter pressure against the presenting part.</li> <li>• Palpate the cord for pulsations.</li> <li>• Keep the exposed cord warm and moist.</li> <li>• Keep the hand in position and transport immediately.</li> </ul> </li> <li>• <b>Limb Presentation</b> <ul style="list-style-type: none"> <li>• Elevate the mother's hips.</li> <li>• Avoid touching the limb. Do not pull on the extremity and do not attempt to push the limb back into the vagina.</li> </ul> </li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Rape/Sexual Assault

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• Treat injuries according to the appropriate protocol.</li> <li>• Survey the scene and give special consideration to preserving any articles of evidence on or around the patient.</li> <li>• Strongly discourage the patient from urinating, washing/showering or changing clothes.</li> <li>• Collaborate with police to determine what articles will be transported with the patient.</li> <li>• Do not physically examine the genital area unless there are obvious injuries that require treatment.</li> <li>• All linen used by the patient should be left with the patient at the emergency department.</li> <li>• The following resources should be offered to all victims of abuse regardless of transport or not:             <ul style="list-style-type: none"> <li>• Crime Victims Compensation Program - 1-800-228-3368</li> <li>• Prairie Center Against Sexual Assault - 217-753-8081</li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Routine Trauma Care

E M R	<ul style="list-style-type: none"> <li>• Ensure scene safety.</li> <li>• Determine number of patients.</li> <li>• Identify the mechanism of injury.</li> <li>• Identify need for additional resources or specialized units.</li> <li>• Obtain a general impression of the patient's condition.</li> <li>• Assess, secure, and maintain a patent airway while simultaneously using C-spine precautions.</li> <li>• Assess breathing and respiratory effort.</li> <li>• Administer <b>Oxygen</b> to maintain SpO2 <math>\geq</math>92%.</li> <li>• Support respirations as needed.</li> <li>• Assess circulation.</li> <li>• Perform neurologic assessment.</li> <li>• Expose patient to identify any hidden injuries, use consideration with environmental factors.</li> <li>• Stabilize any penetrating objects and transport with the patient. Do not attempt to remove any objects unless the object is obstructing the airway.</li> <li>• Keep patient warm and prevent hypothermia.</li> <li>• Attempt to limit scene time to 10 minutes.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Establish IVs during transport. Do not delay transport for IV access unless there is prolonged extrication.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Consider <b>Tranexamic Acid</b> refer to <b>9533 - Tranexamic Acid</b> for indications and contraindications.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>

### Critical Thinking Elements

- Trauma patients should be transported to the closest most appropriate trauma center. If there is any question regarding the most appropriate facility consult medical control.
- Prompt transport and early notification is essential.



**Shock**

EMR	<ul style="list-style-type: none"><li>• Perform <b>Routine Trauma Care Protocol 7105</b>.</li><li>• Control bleeding using direct pressure, pressure dressings, pressure points, and tourniquet.</li></ul>
EMT	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Establish IVs during transport. Do not delay transport for IV access unless there is prolonged extrication. Administer fluid to maintain systolic blood pressure of at least 90 mmHg.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul>

## Shock

## Critical Thinking Elements

- Hypotension may not occur in the early stages of shock. However, aggressive therapy is indicated if there is a significant mechanism of injury and/or shock is suspected.
- IV fluid bolus should be regulated and patient response to fluid monitored closely.

## Head/Facial/Neck Trauma

<p style="text-align: center;">E M R</p>	<ul style="list-style-type: none"> <li>• Perform <b>Routine Trauma Care Protocol 7105</b>.</li> <li>• Control bleeding using direct pressure, pressure dressings, pressure points, and tourniquet.</li> <li>• Corneal Abrasion             <ul style="list-style-type: none"> <li>• Irrigate with normal saline as needed.</li> </ul> </li> <li>• Penetrating Injury to Eye/Ruptured or Lacerated Globe             <ul style="list-style-type: none"> <li>• Do not remove impaled objects.</li> <li>• Do not irrigate the eye.</li> <li>• Avoid any pressure on the injured eye. Cover with cup or protective shield.</li> <li>• Patch both eyes.</li> </ul> </li> <li>• Dental Management             <ul style="list-style-type: none"> <li>• Avoid touching root.</li> <li>• Rinse with normal saline. Do not scrub, dry, or wrap tooth in tissue or cloth.</li> <li>• Place tooth in container with milk or normal saline if milk is unavailable.</li> </ul> </li> <li>• Monitor airway and be prepared to suction, if necessary.</li> </ul>
<p style="text-align: center;">E M T</p>	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
<p style="text-align: center;">I</p>	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Establish IVs during transport. Do not delay transport for IV access unless there is prolonged extrication. Administer fluid to maintain systolic blood pressure of at least 90 mmHg.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
<p style="text-align: center;">P</p>	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>

**Critical Thinking Elements**

- Head trauma patients should receive oxygen to keep SpO<sub>2</sub> ≥ 93%.
- Cushing's response refers to the ominous combination of markedly increased arterial blood pressure and resultant bradycardia indicating cerebral herniation.
- Avoid prophylactic hyperventilation of a head trauma patient. If signs and symptoms of increased ICP are present then hyperventilate patients at a rate of 20 breaths per minute.
- Signs and symptoms of increased ICP:
  - Confusion
  - Altered level of consciousness
  - Dilated or unequal pupils
  - Markedly increased systolic blood pressure
  - Decreased pulse
  - Abnormal respiratory patterns

## Spinal Trauma

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Trauma Care Protocol 7105</b>.</li> <li>• Assess and record any pain on palpation of the spine, any motor/sensory deficits of the extremities, abnormal arm position, ptosis, and/or priapism.</li> <li>• Assess the skin for temperature. Cover the patient and keep warm.</li> <li>• Assess for neurogenic shock</li> <li>• Fully immobilize the patient and protect paralyzed limbs by securing the patient to the backboard.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Establish IVs during transport. Do not delay transport for IV access unless there is prolonged extrication. Administer fluid to maintain systolic blood pressure of at least 90 mmHg.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Dopamine</b>, if patient remains hypotensive.             <ul style="list-style-type: none"> <li>○ <b>2 - 20 mcg/kg/min IV.</b></li> </ul> </li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>

## Traumatic Arrest

E M R	<ul style="list-style-type: none"><li>• Rapidly assess to determine possible cause of the arrest and determine if resuscitation will be attempted.</li><li>• Initiate cardiac arrest protocols and procedures.</li><li>• Rapidly extricate and trauma package in preparation for transport.</li></ul>
E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Perform <b>Procedure 9023 Needle Decompression</b> if chest trauma is present and/or the patient is in PEA and tension pneumothorax is suspected.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul>

## Extremity Trauma

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Trauma Care Protocol 7105</b>.</li> <li>• Control any external bleeding.</li> <li>• Splint skeletal injuries. Check pulse, motor, and sensory before and after splinting.</li> <li>• If the extremity is angulated and no distal pulse is present, reduce by gently applying manual traction until the pulse returns.</li> <li>• For amputation cases:             <ul style="list-style-type: none"> <li>• Wrap severed part in sterile gauze.</li> <li>• Wet dressing with sterile water or saline.</li> <li>• Place part in plastic bag.</li> <li>• Place bag on ice or cold water.</li> <li>• Do not immerse part in water.</li> <li>• Do not allow the tissue to freeze.</li> <li>• Transport the part with the patient.</li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Manage pain according to <b>Acute Pain Management Protocol 1115</b>.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>

## Thoracic Trauma

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Trauma Care Protocol 7105</b>.</li> <li>• Open Pneumothorax – place occlusive dressing over injury site, via:             <ul style="list-style-type: none"> <li>○ Gloved hand and then commercial device</li> <li>○ Defib pad</li> <li>○ Vaseline gauze</li> </ul> </li> <li>• Continuously monitor airway and breathing.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept; begin transport as soon as possible.</li> <li>• Open pneumothorax – Monitor for development of tension pneumothorax. Remove dressing if needed. If unable to relieve symptoms after opening, consider <b>Procedure 9023 Needle Decompression</b>.</li> <li>• Tension Pneumothorax – perform <b>Procedure 9023 Needle Decompression</b></li> <li>• Flail chest – if ventilatory distress, adequate ventilatory effort; no suspected pneumothorax, consider early CPAP with PEEP of 5 – 10 cmH<sub>2</sub>O. If SBP drops to 90 mmHg decrease PEEP to 5, if hypotension persists, discontinue CPAP.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>



**Abdominal Trauma**

E M R	<ul style="list-style-type: none"><li>• <b>Perform Routine Trauma Care Protocol 7105.</b></li><li>• <b>Evisceration care</b><ul style="list-style-type: none"><li>• Remove clothing from around the wound.</li><li>• Cover wound with sterile dressing soaked with sterile normal saline.</li><li>• Cover the dressing with a sterile occlusive dressing.</li></ul></li></ul>
E M T	<ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul>
I	<ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul>
P	<ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul>

## Routine Trauma Care

E M R	<ul style="list-style-type: none"> <li>• Ensure scene safety.</li> <li>• Determine number of patients.</li> <li>• Identify the mechanism of injury.</li> <li>• Identify need for additional resources or specialized units.</li> <li>• Obtain a general impression of the patient's condition.</li> <li>• Assess, secure, and maintain a patent airway while simultaneously using C-spine precautions.</li> <li>• Assess breathing and respiratory effort.</li> <li>• Administer <b>Oxygen</b> to maintain SpO<sub>2</sub> ≥92%.</li> <li>• Support respirations as needed.</li> <li>• Assess circulation.</li> <li>• Perform neurologic assessment.</li> <li>• Expose patient to identify any hidden injuries, use consideration with environmental factors.</li> <li>• Attempt to limit scene time to 10 minutes.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Establish IVs during transport. Do not delay transport for IV access unless there is prolonged extrication.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>

## Shock

- |             |  |
|-------------|--|
| E<br>M<br>R | <ul style="list-style-type: none"><li>• Perform <b>Routine Trauma Care Protocol 7205</b>.</li><li>• Control bleeding using direct pressure, pressure dressings, pressure points, and tourniquet.</li></ul> |
|-------------|--|

- |             |   |
|-------------|---|
| E<br>M<br>T | <ul style="list-style-type: none"><li>• Continue EMR care.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul> |
|-------------|---|

- |   |  |
|---|--|
| I | <ul style="list-style-type: none"><li>• Continue EMT care.</li><li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li><li>• Initiate ALS intercept, if indicated.</li><li>• Begin transport as soon as possible.</li><li>• Contact receiving hospital as soon as possible.</li></ul> |
|---|--|

- |   |   |
|---|---|
| P | <ul style="list-style-type: none"><li>• Continue ILS care.</li><li>• Transport as soon as possible.</li><li>• Contact receiving facility as soon as possible.</li></ul> |
|---|---|

## Head Injury

E  
M  
R

- Perform **Routine Trauma Care Protocol 7205**.
- Control bleeding using direct pressure, pressure dressings, pressure points, and tourniquet.
- Monitor airway and be prepared to suction, if necessary.

E  
M  
T

- Continue EMR care.
- Initiate ALS intercept, if indicated.
- Begin transport as soon as possible.
- Contact receiving hospital as soon as possible.

I

- Continue EMT care.
- Initiate IV/IO access. Administer fluid bolus 20mL/kg, may repeat once. Any bolus >40mL/kg, consult **Medical Control**.
- Initiate ALS intercept, if indicated.
- Begin transport as soon as possible.
- Contact receiving hospital as soon as possible.

P

- Continue ILS care.
- Transport as soon as possible.
- Contact receiving facility as soon as possible.

## Hazardous Material Exposure

E M R	<ul style="list-style-type: none"> <li>• Perform <b>Routine Patient Care Protocol 1105</b>.</li> <li>• Remain uphill, upwind, and upstream of the incident.</li> <li>• Notify IEMA if needed at 1-800-782-7860.</li> <li>• <b>Ensure patient's clothing has been removed and patient has decontaminated prior to transport.</b></li> <li>• Contact receiving facility as soon as possible to alert them of hazardous material exposure.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Administer <b>Albuterol 2.5 mg/3 mL</b> mixed with <b>Ipratropium 0.5mg/3 mL</b>, if the patient has been exposed to irritant gas. May repeat every 20 minutes as needed.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Administer <b>Atropine</b> if suspected organophosphate/nerve agent poisoning. May repeat every 5 minutes with <b>Medical Control</b> order.             <ul style="list-style-type: none"> <li>• <b>2 mg IV.</b></li> </ul> </li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Initiate transport.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Special Healthcare Needs

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Attempt to track children with special healthcare needs in your service community. Become familiar with both the child and their anticipated emergency needs.</li> <li>• Refer to the child's emergency care plan formulated by their medical providers, if available. Rely on the parents/caregivers to provide information for the patient's baseline.</li> <li>• Be prepared for differences in medical treatment, anatomy, physical development, cognitive development, and medical/surgical adjuncts.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept, if indicated.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Begin transport as soon as possible.</li> <li>• Contact receiving hospital as soon as possible.</li> </ul>

### Critical Thinking Elements

- Utilize caregivers as medical resources during treatment and transport.
- Consider to allow caregiver to accompany patient during transport.
- Bring equipment to the hospital or have caregivers bring the equipment to the hospital.

## Basic Airway Management

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

1. Assure an open airway by utilizing either the head tilt/chin lift maneuver; the modified jaw thrust maneuver or the tongue-jaw lift maneuver. The head tilt/chin lift maneuver is not to be used if there is any possibility of cervical spine injury.
2. Expose the chest and visualize for chest rise and movement, simultaneously listen and feel for air movement at the mouth and nose. This procedure will need to be done initially and after correcting an obstruction and securing the airway.
3. If the chest is not rising and air exchange cannot be heard or felt:
  - a. Deliver two positive-pressure ventilations. If resistance continues, follow AHA guidelines for obstructed airway rescue.
  - b. Reassess breathing and check for a central pulse.
  - c. If spontaneous respirations and a pulse are present, provide supplemental oxygen by non-rebreather mask or assist respirations with bag-valve mask (BVM) at 15 LPM.
  - d. If the patient remains breathless and a pulse is present, initiate ventilations with a BVM at 15 LPM at an appropriate rate.
  - e. If the patient remains breathless and a pulse is not present, initiate CPR and institute the appropriate cardiac protocol.
4. If the patient presents with stridor, “noisy breathing” or snoring respirations, render treatment for partial airway obstruction in accordance with AHA guidelines.
  - a. Reassess effectiveness of the airway maneuver.
  - b. If initially unable to resolve partial airway obstruction, suction the airway and visualize the pharynx for any evidence of foreign objects. Perform a finger sweep if a foreign object can be seen.
  - c. If partial airway obstruction persists, treat according to AHA guidelines for resolving a complete airway obstruction.
5. Once the obstruction has been corrected:
  - a. Insert an oropharyngeal airway or a nasopharyngeal airway.
6. Establish the presence and adequacy of breathing by observing the frequency, depth and consistency of respirations. Also, observe the chest



## Basic Airway Management

wall for any indications of injuries which may contribute to respiratory compromise.

7. Supplemental oxygen should be delivered to any patient who exhibits signs of difficulty breathing, sensation of shortness of breath, tachypnea, use of accessory muscles, altered level of consciousness/altered mental status, cyanosis, cardiac symptoms, head injury or any indications of shock.
  - a. Supplemental oxygen should be provided by a non-rebreather mask (NRB) at a rate of 15 LPM.
  - b. If patient is unable to tolerate the NRB, administer oxygen via nasal cannula at a rate of 6 LPM.
8. Bag-valve mask ventilation with supplemental oxygen at 15 LPM should be initiated at the appropriate rate based on the age of the patient if respirations are absent, there is evidence of inadequate ventilation, respiratory rate is  $< 8/\text{min}$ , absent or diminished breath sounds or wounds to the chest wall.

**Critical Thinking Elements**

- Inadequate maintenance of the patient's airway, inappropriate airway maneuvers, using inappropriately sized airway equipment and/or failure to recognize an obstructed airway will complicate the patient's condition.
- Do not use the head tilt/chin lift maneuver on a patient with a suspected cervical spine injury.
- Proper facemask seal during artificial ventilations is imperative to assure adequate ventilation.

## Airway Obstruction

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

An airway obstruction is life threatening and must be corrected immediately upon discovery.

1. If the patient has an obstructed airway and is still conscious:
  - a. Encourage the patient to cough.
  - b. Perform abdominal thrusts or back blows/chest thrusts in an infant if the cough is unsuccessful.
  - c. Repeat until the obstruction is relieved or the patient becomes unconscious.
  - d. Administer oxygen at 15 LPM if the patient has a partial airway obstruction and is still able to breathe.
  
2. If the patient is unconscious:
  - a. Perform CPR, 30 chest compressions; open the patient's airway and attempt to ventilate.
  - b. Reposition the head and reattempt to ventilate if initial attempt is unsuccessful.
  - c. Continue CPR with chest compressions and attempt to ventilate
  - d. Perform visualized finger sweep of the patient's mouth and reattempt to ventilate.
  - e. Repeat steps (c) and (d) if obstruction persists.
  - f. **ILS & ALS** may attempt direct extraction via laryngoscope and Magill forceps.
    - I. Use the laryngoscope and examine the upper airway for foreign matter and suction as needed.
    - II. Remove any foreign objects with forceps and suction.
    - III. Re-establish an open airway and attempt to ventilate.
    - IV. If the obstruction is relieved, continue with airway control, ventilations, assessment and care.
  - g. Continue abdominal thrust sequence or back blows/chest thrusts in infants if unable to relieve obstruction and expedite transport.

### Critical Thinking Elements

- Maintain in-line c-spine stabilization using 2 EMTs in patients with suspected cervical spine injury.
- Poor abdominal thrust technique, inappropriate airway maneuvers, and/or failure to recognize an obstructed airway will complicate the patient's condition.

## Capnography

Level of Care	EMR	EMT	ILS	ALS
Approved		Optional	X	X

Capnography, specifically waveform capnography, provides assessment of the quality of respiratory efforts as well as patency of airway adjuncts. Capnography can identify changes sooner than waiting for signs and symptoms in a patient who is not able to communicate those changes. During transport, capnography is a more reliable and easily assessable tool for verification of airway patency and effects or respiratory support.

All patients with advanced airways and complaining of respiratory distress should be monitored based on their quantitative (waveform) capnography (CPAP may not fit properly with capnography). Additional complaints such as sepsis and trauma may benefit from capnography.

1. Assemble all equipment prior to utilization.
  - a. If required by unit model, zero out unit.
2. Apply ETCO<sub>2</sub> adapter.
  - a. If utilizing for monitoring of conscious patient, nasal cannula can be applied.
  - b. If utilizing with ETT/King LTS-D placement location in circuit should be based on manufacturer recommendations.
3. Resume ventilations (continue spontaneous respirations)
4. Observe monitor for numeric value and waveform.
  - a. Obtain documentation strip prior to and after patient move.
  - b. If absent or low numeric value and/or absent or inappropriate waveform.
    - i. Immediately verify placement of advanced airway via direct visualization and stethoscopy.
    - ii. Assess Circulation for possible cause of low/absent/inappropriate readings
5. Unless directed otherwise by specific treatment protocol, seek to maintain ETCO<sub>2</sub> range of 35- 45mmHg.
  - i. A sudden decrease in ETCO<sub>2</sub> in any situation could signal a change in patient condition. Immediately assess patient and begin resuscitation as indicated.
  - ii. A sudden increase in ETCO<sub>2</sub> during cardiac arrest may indicate ROSC. Assess patient.

### Critical Thinking Elements

- Know your equipment.
- Providers must know the difference between no value detected and no

## Capnography

signal detected.

- Reasons for no value detected must immediately assessed and include:
  - Loss of airway
  - Apnea
  - Obstruction
  - Circulatory collapse
  - Cardiac arrest
  - Equipment failure

## CPAP/PEEP/BiPAP

Level of Care	EMR	EMT	ILS	ALS
Approved		X	X	X

CPAP (Continuous Positive Airway Pressure) can be applied to achieve PEEP (Peak End Expiratory Pressure) for patients presenting with signs & symptoms of respiratory distress and need support. The patient must be alert and able to adequately ventilate spontaneously in order for CPAP to be initiated. PEEP valves should be utilized with airway management and BVM utilization. BiPAP may be utilized in place of CPAP, as long as agencies have EMS System approval and documented provider training and competency.

1. Assess vital signs
2. If the systolic BP is between 90-100mmHg contact Medical Control prior to initiating.
3. Connect the generator to the 50 psi oxygen outlet.
4. Attach the mask.
5. Attach the PEEP valve package with the CPAP circuit.
6. Attach the filter to the air entrapment port.
7. Secure the mask on the patient's face.
8. Treat continuously while en route to the receiving facility.
9. Obtain and record vital signs every 5 minutes.
10. In case of life-threatening complications:
  - a. Stop CPAP treatment.
  - b. Offer reassurance.
  - c. Institute appropriate BLS & ALS support per protocol.
  - d. Adverse reactions to CPAP are to be documented on an incident report and forwarded to the HSHS St. John's Hospital EMS System Coordinator within 24 hours of the occurrence.
  - e. On arrival at the receiving hospital, immediately communicate any adverse reactions to the ED staff.
11. Documentation in the patient care record should include:
  - a. Detailed description of the initial assessment findings.
  - b. Vitals, including pulse oximetry, prior to initiating CPAP.
  - c. Vitals (& pulse oximetry) every 5 minutes.
  - d. Patient response to treatment (positive effects, no change or adverse reaction).

**Contraindications:**

## CPAP/PEEP/BiPAP

- Systolic BP < 90mmHg
- Severe cardiorespiratory instability and impending arrest
- Respiratory or cardiac arrest
- Upper airway abnormalities or trauma
- Penetrating chest trauma
- Compromised thoracic organs
- Persistent nausea & vomiting
- Gastric distention
- Obtunded patient/ questionable ability to protect airway

## King LTS-D

Level of Care	EMR	EMT	ILS	ALS
Approved		Adult Only	Adult/Pedi	Adult/Pedi

The KING Airway is an effective airway adjunct when intubation is not available or difficult to perform. Insertion is rapid & easy and does not require specialized equipment or visualization of the larynx. It is latex-free and should be considered safe to use on latex-sensitive patients. King Airways are to be phased out and replaced with i-gel O<sub>2</sub><sup>TM</sup>.

### Indication

- The King L TS-D is an airway device designed for emergency or difficult intubation in the apneic or unresponsive patient without a gag reflex.

Size	Pediatric				Adult		
	0	1	2	2.5	3	4	5
Patient Criteria	<5 kg	5-12 kg	12-25 kg	25-35 kg	4-5 ft.	5-6 ft.	>6 ft.
Cuff Volume	10 mL	20 mL	35 mL	40-45 mL	50-60 mL	70-80 mL	80-90 mL
Maximum Cuff Pressure	60 cm H <sub>2</sub> O						
Suction Catheter	10 Fr	10 Fr	16 Fr	16 Fr	18 Fr	18 Fr	18 Fr

### Contraindications:

- Responsive patients with an intact gag reflex.
- Patients with known esophageal disease.
- Patients who have ingested caustic substances.

This airway device is not proved to protect the airway from the effects of regurgitation and aspiration. The risk of regurgitation and aspiration must be weighed against the potential benefit of establishing an airway.

- Using the information provided, choose the correct size, based on patient height.
- Test cuff inflation system by injecting the maximum recommended volume of air into the cuff. Remove all air from cuffs prior to insertion.

## King LTS-D

3. Apply a water-based lubricant to the beveled distal tip and posterior aspect of the tube, taking care to avoid introduction of lubricant in or near ventilator openings.
4. Have a spare airway device ready and prepared for immediate use.
5. Pre-oxygenate.
6. Ensure gag reflex is not intact.
7. Position the head into a sniffing position or neutral position.
8. Hold the device at the connector with dominant hand. With non-dominant hand, hold mouth open and apply chin lift unless contraindicated by position or c-spine precautions.
9. With the device rotated laterally 45-90° such that the blue orientation line is touching the corner of the mouth, introduce tip into mouth and advance behind base of tongue. Never force the tube into position.
10. As tube tip passes under tongue, rotate tube back to midline.
11. Without exerting excessive force, advance airway until base of connector aligns with teeth or gums.
12. Inflate cuffs using the maximum volume.
13. Attach BVM. While gently bagging, simultaneously withdraw the airway until ventilation is easy.
14. Confirm proper position by auscultation and chest movement and capnography.
15. Secure device to patient using tape.



## i-gel O<sub>2</sub><sup>TM</sup> Supraglottic Airway

Level of Care	EMR	EMT	ILS	ALS
Approved		Adult Only	Adult/Pedi	Adult/Pedi

### Indications:

- Apneic patient when endotracheal intubation is not possible or not available.
- Patient must be unconscious, without a gag reflex.
- Failed Airway
- No history of esophageal foreign body, disease, or caustic ingestion.

Size	Pediatric				Adult		
	1	1.5	2	2.5	3	4	5
Color	Pink	Light Blue	Grey	White	Yellow	Green	Orange
Patient Type	Neonate	Infant	Small Pediatric	Large Pediatric	Small Adult	Medium Adult	Large Adult
Patient Criteria	2 - 5 kg	5 - 12 kg	10 - 25 kg	25-35 kg	30 - 60 kg	50 - 90 kg	90+ kg
Suction Catheter	N/A	10 Fr	12 Fr	12 Fr	12 Fr	12 Fr	14 Fr

### Contraindications:

- Responsive patients with an intact gag reflex.
- Patients with known esophageal disease.
- Patients who have ingested caustic substances.

This airway device is not proved to protect the airway from the effects of regurgitation and aspiration. The risk of regurgitation and aspiration must be weighed against the potential benefit of establishing an airway.

1. Using the information provided, choose the correct size, based on patient weight.
2. Open the i-gel package and take out the protective cradle containing the device. Remove the accessory pack containing the sachet of lubricant and airway support strap from the protective cradle and place to side.
3. Remove the i-gel and transfer it to the palm of the same hand that is holding the protective cradle, supporting the device between the thumb and index finger.

**i-gel O<sub>2</sub><sup>™</sup> Supraglottic Airway**

4. Open the sachet of lubricant and place a small bolus onto the middle of the smooth surface of the cradle in preparation for lubrication. Do not use silicone based lubricants.
5. Grasp the i-gel with the free hand along the integral bite block and lubricate the back, sides, and front of the cuff with a thin layer of lubricant.
6. Inspect the device carefully; confirm there are no foreign bodies or a bolus of lubricant obstructing the distal opening. Place the i-gel back into the cradle in preparation for insertion.
7. Remove the i-gel from the cradle. Grasp the lubricated i-gel firmly along the integral bite block. Position the device so that the i-gel cuff outlet is facing towards the chin of the patient. The patient should be in the sniffing position with the head extended and neck flexed. The chin should be gently pressed down before proceeding introducing the leading soft tube into the mouth of the patient in a direction towards the hard palate.
8. Glide the device downwards and backwards along the hard palate with a continuous but gentle push until a definitive resistance is felt. The tip of the airway should be located into the upper esophageal opening and the cuff should be located against the laryngeal framework. The incisors should be resting on the integral bite block.
9. Utilize the airway support strap or tape the i-gel in place maxilla to maxilla.

## Orotracheal Intubation

Level of Care	EMR	EMT	ILS	ALS
Approved			Adult/Pedi	Adult/Pedi

### Indications:

- Respiratory arrest
- Cardiac arrest
- Patients where complete obstruction of the airway is imminent, i.e. respiratory burns, anaphylaxis
- Inability of the conscious patient to breathe adequately
- Inability of the unconscious patient to protect their airway, i.e. overdose, ETOH, coma

### Relative Contraindications:

- Severe airway trauma or obstruction that does not permit safe passage of an endotracheal tube. Emergency cricothyrotomy is indicated in such cases
- Cervical spine injury, in which the need for complete immobilization of the cervical spine makes endotracheal intubation difficult.
- Mallampati Classification of class III / IV or other determination of potential difficult airway

### Side Effects:

- An endotracheal tube that is mistakenly sized or misplaced, especially in the apneic patient, can quickly lead to hypoxia and death
- Accidental intubation of the esophagus
- Oropharyngeal trauma
- Broken teeth or dentures
- Endobronchial intubation, ETT inserted too far

### Tracheal Intubation Procedure:

- Check the equipment: laryngoscope, curved (Macintosh type) and straight (Miller type) blades of an appropriate size for the patient and ensure that the light works, check ETT cuff for leaks.
- Assemble all materials close at hand (laryngoscope handle, blades, assorted ET tube sizes, 10mL syringe, water - soluble lubricant, securing device, BVM, suction equipment, stethoscope).

## Orotracheal Intubation

- Position of the patient: Unless contraindicated (trauma), elevate the patient's head about 10cm with pads under the occiput and extension of the head into the sniffing position serve to align the oral, pharyngeal and laryngeal axis, so that the passage from the lips to the glottic opening is almost a straight line. This position permits better visualization of the glottis and vocal cords and allows easier passage of the endotracheal tube.
- Curved blade technique:
  - Ventilate the patient with 100% oxygen for 2 minutes.
  - Open the patient's mouth with the right hand, and remove any dentures.
  - Grasp the laryngoscope in the left hand. Spread the patient's lips, and insert the blade between the teeth, being careful not to break a tooth.
  - Pass the blade to the right of the tongue, and advance the blade into the hypopharynx, pushing the tongue to the left.
  - Lift the laryngoscope upward and forward, without changing the angle of the blade, to expose the vocal cords. The cricoid pressure is used to lower the trachea to facilitate tube passage and to compress the epiglottis and prevent aspiration. A crewmember should apply gentle downward pressure on the cricoid cartilage, start off slowly and then gradually increase the downward force.
  - Pass the tube through the vocal cords.
- Straight blade technique:
  - Follow the steps outlined above, but advance the blade down the hypopharynx, and lift the epiglottis with the tip of the blade to expose the vocal cords.
- Withdraw the stylet.
- Connect the bag - valve mask and begin ventilation with 100% oxygen.
- Verify tube placement. **Bolded are mandatory.**
  - Visualize tube passing through the cords.
  - Misting of the tube with respirations (not always reliable).
  - **Movement of the chest with respirations.**
  - **Auscultation of the chest (you should hear breath sounds on both sides of the chest).**
  - **Auscultation of the stomach (you shouldn't hear gurgles here when bagging).**
  - **Wave form CO2 with numeric reading**
  - Esophageal detector device.
  - Rising or stable O2 saturation.

## Orotracheal Intubation

- Clinical improvement of the patient.
- Reasons for acute deterioration of the intubated patient:
  - Displacement of the tube.
  - Obstruction of the tube (mucous plug, biting).
  - Pneumothorax, PE, pulselessness (cardiac arrest or shock).
  - Equipment failure (No oxygen, failure of the ventilator, disconnected tubing).
- Secure the tube in place with tape or a commercial device.

## Endotracheal Introducer

Level of Care	EMR	EMT	ILS	ALS
Approved			Adult	Adult

### Indications:

- Patient meets clinical indications for oral intubation
- Initial intubation attempt(s) unsuccessful
- Predicted difficult intubation.

### Contraindications:

- Three attempts at orotracheal intubation.
- Age less than eight or ETT size less than 6.5 mm

### Procedure:

- Prepare position and oxygenate the patient with 100% oxygen.
- Select proper ET tube without stylet, test cuff and prepare suction.
- Load the Bougie on to the ETT and lubricate the distal end and cuff of the endotracheal tube (ETT) and the distal 1/2 of the Endotracheal Tube Introducer (Bougie) Failure to lubricate the Bougie and the ETT may result in being unable to pass the ETT.
- Using laryngoscopic techniques, visualize the vocal cords if possible using cricoid pressure as needed.
- Introduce the Bougie with curved tip anteriorly and visualize the tip passing the vocal cords or above the arytenoids if the cords cannot be visualized.
- Once inserted, gently advance the Bougie until you meet resistance or “hold - up” (if you do not meet resistance you have a probable esophageal intubation and insertion should be re - attempted or the failed airway protocol implemented as indicated).
- While maintaining a firm grasp on the proximal Bougie, introduce the ET tube over the Bougie passing the tube to its appropriate depth.
- If you are unable to advance the ETT into the trachea and the Bougie and ETT are adequately lubricated, withdraw the ETT slightly and rotate the ETT 90 degrees counter clockwise to turn the bevel of the ETT posteriorly. If this technique fails to facilitate passing of the ETT you may attempt direct laryngoscopy while advancing the ETT. This will require an assistant to maintain the position of the Bougie and, if so desired, advance the ETT.

## Endotracheal Introducer

- Once the ETT is correctly placed, hold the ET tube securely and remove the Bougie.
- Confirm tracheal placement according to the intubation protocol, inflate the cuff with 3 to 10mL of air, auscultate for equal breath sounds and reposition accordingly.
- When final position is determined secure the ET tube, reassess breath sounds, apply ETCO<sub>2</sub> monitor, and record and monitor readings to assure continued tracheal intubation.

## Orogastric Tube Insertion

Level of Care	EMR	EMT	ILS	ALS
Approved				X

### Indications:

- After placement of endotracheal tube or BIAD.

### Contraindications:

- Known esophageal varices.
- Esophageal stricture.
- Esophageal or stomach cancer.
- Esophagectomy or partial gastrectomy.
- Gastric bypass surgery.
- Penetrating neck trauma.

### Procedure:

- Estimate the length of the tube needed to reach the stomach by measuring the tube from the corner of the mouth to the earlobe and down to the xiphoid process. Mark the length with tape.
- Lubricate the OG tube with water soluble lubricant.
- Insert the tube through the oropharynx or through the gastric access lumen on the King LTS-D Airway until the marked depth is reached.
- If the tube coils in the posterior pharynx, direct laryngoscopy can be utilized to place the tube in the esophagus.
- Instill 30 mL of air into the tube and auscultate over the epigastrium for air sounds.
- Aspirate for gastric contents.
- Secure tube with tape.
- Decompress with suction as needed or continual low suction.



## 12 Lead ECG

Level of Care	EMR	EMT	ILS	ALS
Approved		Acquire	X	X

### Indications:

### Contraindications:

- None

### Procedure:

- Explain the procedure to the patient.
- Lay patient on stretcher in position of comfort.
- Ensure patient does not chill, shivering may cause artifact.
- Reassure patient as tense muscles may cause artifact.
- Prepare the chest to ensure it is dry, free of debris and oil. Clip excessive hair with scissors.
- Place limb leads on the limbs, ensure placement is equal on upper and lower extremities (distal or proximal arms and distal or proximal legs).
- Place the precordial leads:
  - V1 - 4<sup>th</sup> intercostal space to the right of the sternum
  - V2 - 4<sup>th</sup> intercostal space to the left of the sternum
  - V3 - directly between V2 and V4
  - V4 - 5<sup>th</sup> intercostal space at left midclavicular line
  - V5 - 5<sup>th</sup> intercostal space at left anterior axillary line
  - V6 - 5<sup>th</sup> intercostal space at left mid-axillary line
- Obtain ECG and transmit to receiving facility.
- Contact medical control to confirm receipt of ECG.

## Manual Defibrillation

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

### Indications:

- Patient presenting with ventricular fibrillation or pulseless ventricular tachycardia.

### Contraindications:

- Patient with a pulse.

### Procedure:

- Attach defibrillation pads.
- Charge the device, while performing chest compressions.
  - For adults, defibrillate per manufacture's recommendations.
  - For children and infants, defibrillate at 2 J/kg and increase doses by 2 J to a max dose of 10 J/kg.
- Clear the patient.
- Deliver shock
- Immediately resume chest compressions.

### Notes:

- If pediatric pads are unavailable, you may use adult pads placed anteriorly and posteriorly.
- If the cardiac arrest is witnessed by EMS personnel, defibrillate immediately after pads have been placed.

## Synchronized Cardioversion

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

### Indications:

- Patient presenting unstable ventricular or supraventricular tachydysrhythmias with a pulse.

### Contraindications:

- Patient's without a pulse

### Procedure:

- Attach the limb leads.
- Attach defibrillation pads.
- Provide sedation if time permits.
- Synchronize the monitor.
- Charge the device.
  - For adults(biphasic devices)
    - Narrow, regular: 50-100 J
    - Narrow irregular: 100-120 J
    - Wide regular: 100 J
    - Wide irregular: defibrillate (not synchronized)
  - For children and infants(biphasic devices):
    - 0.5 - 1 J/kg. If not effective, increase to 2 J/kg.
- Clear the patient.
- Deliver shock
- Note rhythm and treat according to appropriate protocol.

### Notes:

- If pediatric pads are unavailable, you may use adult pads placed anteriorly and posteriorly.

## Transcutaneous Pacing

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

### Indications:

- Symptomatic bradycardia
- Type II 2<sup>nd</sup> degree AV block
- 3<sup>rd</sup> degree AV block

### Contraindications:

- Patients not meeting indications.

### Procedure:

- Attach the limb leads.
- Attach defibrillation pads.
- Provide sedation if time permits.
- Activate pacer mode.
- Set the heart rate at 70 bpm.
- Set the current at the minimum and increase as needed to obtain mechanical and electrical capture.
- Assess vitals.
- Sedate and manage discomfort as needed.

### Notes:

- If pediatric pads are unavailable, you may use adult pads placed anteriorly and posteriorly.
- Pacing may also be effective for a patient in asystole if performed early.
- To transfer pacing at the receiving facility. Have the ED connect their monitor and increase their rate by 2 bpm and match current. Then, turn off EMS monitor.

## Intravenous Cannulation

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

### Procedure:

- Explain to the patient the need for and a brief description of the procedure.
- Observe universal precautions for body substance exposure.
- Gather necessary equipment.
- Attach catheter.
- Observe for appropriate site. Start distally and move proximally.
- Cleanse area.
- Obtain an appropriately sized catheter:
  - 14 or 16 for trauma patients
  - 14, 16, or 18 gauge for fluid replacement
  - 20, 22, or 24 for elderly patients, pediatric patients, or for difficult cannulations.
- Stabilize the vein by applying traction below the puncture site.
- Enter the vein directly from above or from the side of the site. With the bevel of the needle upward, puncture the skin at a 30-45 degree angle.
- If blood returns through the catheter, proceed with insertion.
  - If you do not see blood return, release the tourniquet and discontinue the attempt. If time and patient conditions allows, you may attempt another site with a new catheter. Do not exceed more than two attempts.
- Carefully advance the catheter into the vein.
- Remove the needle while occluding catheter.
- Release tourniquet and attach administration set.
- Secure catheter and tubing.
- Administer fluid per appropriate protocol.

### Notes:

- Saline locks may be used if fluid replacement is not indicated.
- One liter bags of fluid should be used if more than 3 events of medication administration are expected.

## Intraosseous Cannulation

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

### Indication:

- Emergent/urgent situations
  - Anaphylaxis
  - Altered LOC
  - Burns
  - Dehydration
  - DKA
  - Drug Overdose
  - Dysrhythmias
  - End Stage Renal Disease
  - RSI
  - Resuscitation
  - Seizures
  - Sepsis
  - Shock
  - Sickle Cell Crisis
  - Stroke
  - Trauma
- Non-Urgent/medically necessary situations; difficult vascular access
  - Analgesia
  - Antibiotic Therapy
  - Chest Pain
  - Fluid Management
  - Metabolic Disorders
  - Rescue Line
  - Sedation

### Contraindications:

- Fracture in target bone
- Infection at area of insertion
- Inability to identify landmarks
- IO access or attempted IO access in target bone within previous 48 hours
- Previous, significant orthopedic procedure at the site, prosthetic limb or joint

### Site Selection

- Adult
  - Proximal humerus
  - Proximal tibia
  - Distal tibia
- Pediatrics
  - Distal femur
  - Proximal humerus
  - Proximal tibia
  - Distal tibia

## Intraosseous Cannulation

Studies show less pain with infusion and greater infusion rate 5 L/Hr in the proximal humerus.

Procedure:

- Observe universal precautions
- Prepare equipment
- Identify site.
  - Proximal Humerus
    - Place patient's hand over the abdomen.
    - Place your palm on the patient's shoulder anteriorly.
      - The area that feels like a ball under your palm is the general target area.
      - You should be able to feel this ball, even on obese patients.
    - Place the ulnar aspect of your hand vertically over the axilla. Place the ulnar aspect of your other hand along the midline of the upper arm laterally.
    - Place our thumbs together over the arm.
      - This identifies the vertical line of insertion on the proximal humerus.
    - Palpate deeply up the humerus to the surgical neck.
    - The insertion site is 1 to 2 cm above the surgical neck, on the most prominent aspect of the greater tubercle.
    - Point the needle tip at a 45 degree angle to the anterior plane and posteromedial
  - Proximal Tibia - Adult
    - Extend the leg
    - Insertion site is approximately 2 cm medial to the tibia tuberosity or approximately 3 cm below the patella and 2 cm medial, along the flat aspect of the tibia.
    - Insert the needle at a 90 degree angle to the bone.
  - Proximal tibia insertion site - Infant/Child
    - Extend the leg.
    - Insertion site is approximately 1 cm medial to the tibia tuberosity, or just below the patella and slightly medial, along the float aspect of the tibia.
    - Insert the needle at a 90 degree angle to the bone.
  - Distal Tibia - Adult

## Intraosseous Cannulation

- Insertion site is approximately 3 cm proximal to the most prominent aspect of the medial malleolus. Palpate the anterior and posterior borders of the tibia to assure that your insertion site is on the flat center aspect of the bone.
- Insert the needle at a 90 degree angle to the bone.
- Distal Tibia – Pediatric
  - Insertion site is located approximately 1-2 cm proximal to the most prominent aspect of the medial malleolus.
  - Palpate the anterior and posterior borders of the tibia to assure that your insertion site is on the flat center aspect of the bone.
  - Insert the needle at a 90 degree angle to the bone.
- Distal Femur
  - Secure the leg out-stretched to ensure the knee does not bend. Identify the patella.
  - The insertion site is approximately 1 cm proximal to the superior border of the patella and approximately 1-2 cm medial to midline.
  - Insert the needle at a 90 degree angle to the bone.
- Select the correct needle
  - Red hub – 3 -39 kg weight range
  - Blue hub – 3 kg and overweight range
  - Yellow hub – 40 kg and overweight range and/or excessive tissue depth
  - At least one black line must be visible above the skin prior to inserting into the bone.
- Open set and prime the extension set.
  - If the patient is unresponsive to pain, attach a saline flush to the extension set and prime the tubing with saline.
  - If the patient is responsive to pain, prime the extension set with lidocaine.
- Prep the area of insertion.
- Stabilize the extremity
- Gently press the needle though the skin until the tip touches the bone.
  - Ensure 1 black mark is visible above the skin.
- Squeeze the trigger and apply gentle steady pressure. Release once the pop or give is felt.
- Stabilize the hub and remove the driver.
- Place the stabilizer over the hub.
- Attach the primed extension set, firmly secure by twisting the hub.



## Intraosseous Cannulation

- Remove the adhesive cover from the stabilizer and attach to the skin.
- Aspirate for blood/bone marrow return.
- Flush with normal saline

### Infusion Pain Management

- Infuse lidocaine over 120 seconds (adults - 40 mg, pediatric - 0.5 mg/kg)
- Let lidocaine sit in IO space for 60 seconds.
- Flush with 5 mL of normal saline
- Slowly administer a second dose (adult/pediatric dose - ½ initial dose).  
Repeat PRN.
- Consider **Acute Pain Management Protocol 1115**, if patient is not responsive to lidocaine.

For patient's less than 3 kg; utilize manual IO needle in place of EZIO. Procedure is the same with the exception of manually inserting needle.

## External Jugular Cannulation

Level of Care	EMR	EMT	ILS	ALS
Approved				X

### Indication:

- Situation when traditional extremity cannulation cannot be established and the patient requires immediate stabilizing fluid replacement and/or drug administration route.

### Contraindications:

- Suspected cervical spine injury.

### Procedure:

- Observe universal precautions
- Prepare equipment
- Position patient supine with the feet elevated.
- Turn the patient's head in the direction away from the side to be cannulated.
- Cleanse the site.
- Stabilize the vein by applying traction just above the clavicle.
- Enter the vein midway between the angle of the jaw and the clavicle. With the bevel of the needle upward, puncture the skin using a 30 degree angle and aim toward the shoulder on the same side.
- Once you obtain flash, advance the catheter.
- Distally occlude the catheter and withdraw the needle.
- Attach extension set and secure.

Only one attempt at EJ vein cannulation may be attempted in the prehospital setting.

## Medication Administration

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

### Preparation:

- Observe universal precautions.
- Confirm drug order.
- Verify patient allergies.
- Explain to the patient what medication they are receiving and why.
- Check the medication
  - Correct medication
  - Color and clarity
  - Expiration date
- Assemble the necessary equipment.
- Calculate and draw up desired dose amount.
  - Pediatric doses should not exceed adult dose.
- Eject air.
- Confirm 6 rights:
  - Right medication.
  - Right patient.
  - Right dose.
  - Right route.
  - Right time.
  - Right documentation.

### Intranasal (IN) Medication Administration

- Approved Medications
  - Narcan
  - Fentanyl
  - Glucagon
  - Versed
- Contraindications
  - Nasal trauma or recent sinus or nasal surgery.
  - Epistaxis, nasal congestion, or significant nasal discharge.
- Procedure
  - Select desired medication and draw up appropriate dose.
  - Attach the Mucosal Atomizer Device (MAD) to syringe.

## Medication Administration

- Place tip of MAD snugly against nostril aiming slightly superior and lateral.
- Rapidly administer  $\frac{1}{2}$  the dose of medication into one nostril and repeat in the other.
- Maximum volume per nostril is 1mL.
- Properly dispose of equipment.
- Document intervention and response.
- Monitor vitals.

## Intravenous (IV)/Intraosseous (IO) Medication Administration

- Procedure
  - Cleanse the injection port or luer port with alcohol prep pad.
  - Attach the syringe or insert needle.
  - Inject desired amount.
  - Remove syringe and flush with at least 10mL of normal saline or lactated ringers.
  - Properly dispose of equipment.
  - Document intervention and response.
  - Monitor vitals.

## Endotracheal Medication Administration

- Approved Medications
  - Naloxone
  - Atropine
  - Epinephrine 1:10,000
  - Lidocaine
- Procedure
  - Double the dose of medication and prepare for delivery.
  - Disconnect the BVM.
  - Inject the medication directly into the ETT or attach MADett®.
  - Reconnect BVM and deliver ventilations.
  - Properly dispose of equipment.
  - Document intervention and response.
  - Monitor vitals.

## Subcutaneous Medication Administration

- Procedure
  - Identify an injection site (tissue over tricep muscle is commonly used).

## Medication Administration

- Prep the injection site with alcohol prep pad.
- Pinch the site.
- Insert needle at 45 - 90 degree angle into the subcutaneous tissue and administer medication.
- Withdraw needle and apply gauze pad and pressure.
- Properly dispose of equipment.
- Document intervention and response.
- Monitor vitals.

## Intramuscular Medication Administration

- Procedure
  - Identify an injection site.
    - Left or right deltoid.
    - Upper outside quadrant of the gluteus muscle.
  - Prep the area with alcohol prep pad.
  - Stretch the skin.
  - Insert the needle at a 90 degree angle into the muscle tissue. Draw back to confirm needle is not placed in vascular space.
  - Administer medication.
  - Withdraw needle and apply pressure to the site with a gauze pad.
  - Properly dispose of equipment.
  - Document intervention and response.
  - Monitor vitals.

## Central Lines and Fistula Access

Level of Care	EMR	EMT	ILS	ALS
Approved				X

### Indications

- Unable to establish IV, IO or EJ access, and;
  - Cardiac arrest
  - Systolic BP < 80 mmHg

### Central Line Procedure

- Utilize a 10 mL syringe or larger.
- Clean hub with alcohol prep pad twice with different pads prior to accessing each time.
- Draw up 5 mL of blood and discard prior to use.
- Do not remove cap.
- Do not allow IV fluids to run dry.
- Ensure all air is expelled from syringe prior to accessing.

### Fistula Procedure

- Access fistula with 14ga or 16ga catheter.
- Do not obtain blood pressure or peripheral IV access in arm with shunt.
- In the event the shunt tubing is pulled out. Apply direct pressure, elevate the arm, and transport immediately.

### Internal Medi-port

- EMS does not carry specialized needles required to access ports; therefore, they cannot utilize internal medi-port.

## Patient Restraint

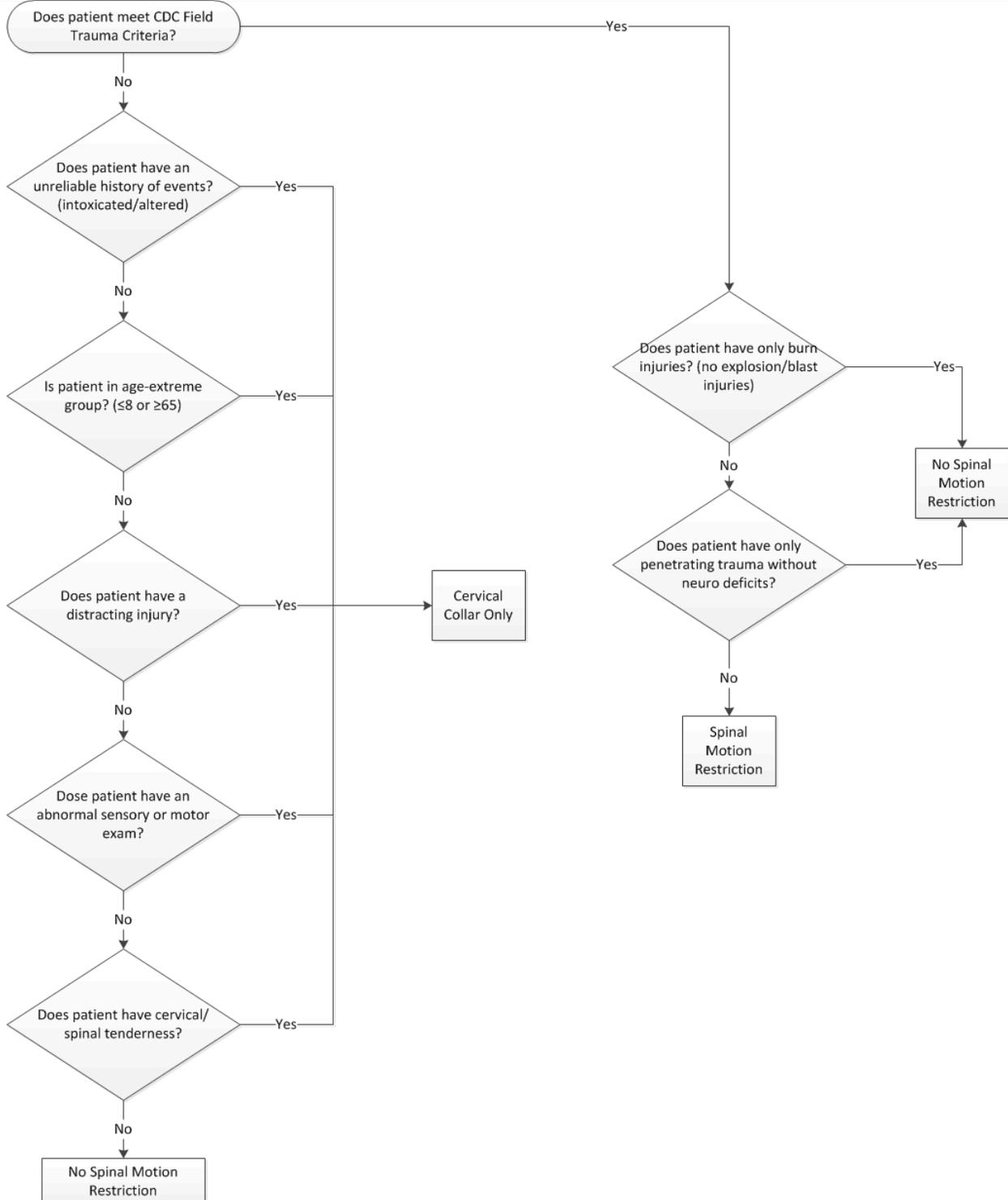
Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

**Procedure:**

- Use a minimum of four people.
- Contact **Medical Control** as soon as possible for an order/guidance.
- If available, utilize law enforcement.
- Explain the procedure to the patient (and family) if possible. The team leader should be the person communicating with the patient.
- If attempts at verbally calming the patient have failed and the decision is made to use restraints, do not waste time bargaining with the patient.
- Remember to remove any equipment from your person which can be used as a weapon against you.
- Assess the patient and surroundings for potential weapons.
- Approach the patient, keeping the team leader near the head to continue communications and at least one person on each side of the patient.
- Move the patient to a backboard or stretcher.
- Place the patient supine and place soft, disposable restraints on 2 to 4 limbs and fasten to the backboard or stretcher. Avoid restraining the patient prone at all costs.
- Transport as soon as possible.
- Document circulation checks every 15 minutes for each restrained limb.
- Ensure thorough documentation including reasons for restraining, time of application, condition of patient before and after application, method of restraint, and any law enforcement involvement.
- Do not remove restraints until released by medical personnel at the receiving hospital.

## Spinal Motion Restriction

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X





## Tourniquet

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

### Procedure:

- Render care according to **Routine Trauma Care 7105**.
- Recognize bleeding is uncontrollable with direct pressure, elevation, and pressure points. In cases of severe bleeding, do not delay tourniquet application.
- Apply Combat Application Tourniquet (CAT)
  - Place CAT around extremity as 2 - 3 inches proximal to the wound directly on the skin.
  - If you are unable to locate wound due to time or other circumstances, place tourniquet as proximal as possible on the limb.
  - Pull self-adhering band tight and secure back against itself.
  - Twist tension rod until bleeding stops.
  - Lock tension rod in the windlass clip
  - Secure tension rod with the windlass clip strap.
- Make note of application time.
- Use care when moving patient
- Continuously reassess for hemostasis.
- Ensure tourniquet is not hidden from view.
- Removal of tourniquet must be done with an order from **Medical Control**.
- More than one tourniquet may be required for complete hemostasis.

## Hemostatic Agent

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

## Indications:

- Active bleeding from open wounds that cannot be controlled with tourniquet. Most often involving wounds to the scalp, face, neck, axilla, groin, or buttocks.

## Contraindications:

- Not to be used to treat internal bleeding such as intra-abdominal, intra-thoracic, or vaginal bleeding.
- Not to be used for minor bleeding that can be controlled by other means.

## Procedure:

- Render care according to **Routine Trauma Care 7105**.
- Deploy the hemostatic agent via packing directly onto the wound and then apply direct consistent pressure for at least 3 minutes over the bleeding source. Do not lift or remove the dressing once it has been applied.
- Wrap the hemostatic dressing with another suitable dressing such as kling, ace wrap, ect. In order to maintain direct pressure.
- Place the empty hemostatic agent packaging into the outer dressing to notify the receiving facility of its presence.

## Pelvic Sling

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

### Indications:

- Unstable pelvic injury.

### Procedure:

- Render care according to **Routine Trauma Care 7105**.
- Remove objects from patient's pockets and pelvic area.
- Place sling with white side closest to patient beneath the hips (trochanters). Do not apply over pelvic crest.
- Place black strap through buckle and pull completely though until snug.
- Hold orange strap ad pull black strap in opposite directions until you hear and feel one buckle click. A second click after the device is secure is not uncommon.
- Utilizing sling with pediatrics and adolescents requires **Medical Control** order.

## Needle Decompression

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

### Indication:

- Tension pneumothorax.

### Procedure:

- Locate the side of the pneumothorax. Approved sites are 2<sup>nd</sup> intercostal space mid-clavicular line and 5<sup>th</sup> intercostal space mid-axillary line.
- Cleanse the site with povidone-iodine preps. Attempt to maintain sterile field as much as possible.
- Attach a 10-20mL syringe to a 2 inch 14ga IV catheter.
- Puncture the skin perpendicularly, just above the rib in the intercostal space. A “pop” should be felt as well as a “rush of air” along with the plunger of the syringe moving outward.
- Advance the catheter while removing the needle and syringe.
- Attach extension tubing, gate valve, and one way valve device from pneumothorax kit.
- Secure the catheter in the chest wall with dressing tape.
- Monitor patient closely and continue to reassess.

## Medication Assisted Intubation

Level of Care	EMR	EMT	ILS	ALS
Approved				X

### Indication:

- Actual or potential airway impairment or aspiration risk,
- Actual/impending ventilatory failure (HF, Pulmonary edema, COPD, asthma, anaphylaxis, shallow or labored effort),
- Increased work in breathing resulting in severe fatigue,
- GCS 8 or less,
- Inability to ventilate/oxygenate adequately after inserting OPA/NPA and/or via BVM
- Need for increased inspiratory or positive end expiratory pressures to maintain gas exchange,
- Need for sedation to control respirations

### Procedure

- Make sure all equipment is prepared and medication is ready.
- Preoxygenate with 100% O<sub>2</sub> with a BVM or non-rebreather mask. Preoxygenation is more successful if the head is elevated at least 20°.
- Administer **Ketamine**
  - **2 mg/kg IV/IO.** Repeat **1 mg/kg IV/IO** every 5-10 minutes to keep sedation.
- Administer **Fentanyl.**
  - **100 mcg IV/IO.**
- Consider **Zofran** for nausea.
- Intubate the patient, making sure you visualize the tube passing the vocal cords.
- Assess for correct placement; bilateral breath sounds, ETCO<sub>2</sub> reading of at least 35 mmHg and chest rise and fall.
- Secure ETT.
- Continue to reassess and monitor patient.

## Surgical Cricothyrotomy

Level of Care	EMR	EMT	ILS	ALS
Approved				X

### Indication:

- A life-threatening condition exists AND advanced airway management is indicated AND you are unable to establish an airway or ventilate the patient by any other means.

### Contraindication

- Age < 12 years: for children a percutaneous needle Cricothyrotomy with large angiocath is preferred surgical airway for anatomic reasons.

### Procedure

1. Position the patient supine, with in - line spinal immobilization if indicated. If cervical spine injury not suspected, neck extension will improve anatomic view.
2. Using an aseptic technique (betadine/alcohol wipes), cleanse the area.
3. Standing on the left side of the patient, stabilize the larynx with the thumb and middle finger of your left hand, and identify the cricothyroid membrane, typically 4 fingerbreadths below mandible
4. Using a scalpel, make a 3cm centimeter vertical incision 0.5cm deep through the skin and fascia, over the cricothyroid membrane. With finger, dissect the tissue and locate the cricothyroid membrane.
5. Make a horizontal incision through the cricothyroid membrane with the scalpel blade oriented caudal and away from the cords.
6. Insert the bougie curved - tip first through the incision and angled towards the patient's feet
  - If no bougie available, use tracheal hook instrument to lift caudal edge of incision to facilitate visualization and introduction of ETT directly into trachea and skip to # 9.
7. Advance the bougie into the trachea feeling for "clicks" of tracheal rings and until "hang-up" when it cannot be advanced any further. This confirms tracheal position.
8. Advance a 6.0 endotracheal tube over the bougie and into the trachea. It is very easy to place tube in right mainstem bronchus, so carefully assess for symmetry of breath sounds. Remove bougie while stabilizing ETT ensuring it does not become dislodged

Surgical Cricothyrotomy

9. Ventilate with BVM and 100% oxygen
10. Confirm and document tracheal tube placement as with all advanced airways: ETCO<sub>2</sub> as well as clinical indicators e.g.: symmetry of breath sounds, rising pulse oximetry, etc.
11. Secure tube.
12. Some subcutaneous air is normal, if you have an excess amount, check the tube placement.
13. Continually reassess ventilation, oxygenation and tube placement.

Precautions:

- Success of procedure is dependent on correct identification of cricothyroid membrane
- Bleeding will occur, even with correct technique. Straying from the midline is dangerous and likely to cause hemorrhage from the carotid or jugular vessels, or their branches.

## High Quality CPR

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

The successful resuscitation of patients in cardiac arrest is dependent on a systematic approach of initiating life-saving CPR and early defibrillation and transferring care to advanced life support providers in a safe, timely and effective manner. The majority of adults who survive non-traumatic cardiac arrest are resuscitated from ventricular fibrillation with defibrillation but require high quality CPR, specifically chest compressions, for neurologically intact survival. The primary factor for successful defibrillation and resuscitation is decreasing the time interval from the onset of cardiac arrest to effective defibrillation and advanced life support. Uninterrupted CPR without pauses is the goal of Pit Crew CPR.

### Procedure

1. Determine unresponsiveness. Confirm that a transporting unit (and ALS intercept) has been initiated.
2. Immediately initiate CPR with BLS Triangle.
  - a. First rescuer at patient's right side.
    - i. Compressions at a rate of 120/minute. Consider use of a portable metronome to keep high quality pace of compressions.
    - ii. Counting out every 20th compression.
    - iii. First and second rescuer change roles NOT locations every two minutes/240 compressions while rhythm/pulse check occurs.
  - b. Second rescuer patients left side.
    - i. Place patient on AED or manual defibrillator.
    - ii. Defibrillating, if indicated, after every two minute cycle.
  - c. Third rescuer at patients head.
    - i. Ensures seal of face mask of BVM with two hand seal.
    - ii. Reminds rescuer to provide the ventilations after every 20th compression.
    - iii. Secure airway.
3. Other Rescuers
  - a. ALS
    - i. May be ILS until ALS arrives.
    - ii. Perform IO/IV access
    - iii. Administer fluids and medications
  - b. Code Commander
    - i. Directs resuscitative efforts



## High Quality CPR

- ii. Completes interventions not already complete
- iii. Tracks timing of interventions.
- c. Other Providers
  - i. Assist as needed



Source: Wichita Sedgwick County EMS Protocols

Position 1 and 2

- Should be ventilating patient when not performing compressions. Ventilations are delivered on the 20<sup>th</sup> compression.
- Providers may switch out when not performing compressions.

At the 180<sup>th</sup> compression, a provider should check for a pulse; preferably femoral. Once the 240<sup>th</sup> compression complete, a pulse check can be performed without increasing time off the chest.

At the 220<sup>th</sup> compression the monitor should be charged. Once the 240<sup>th</sup> compression is complete, the monitor can be evaluated and defibrillation can be performed if indicated, again reducing the time off of the chest. If no indication to defibrillate, dump the charge.

## Pediatric AED

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

Ideally utilization of an AED with pediatric capabilities is preferred. However, if one is not available; use of any AED is appropriate.

Apply pediatric pads according to manufacture instructions. When using adult pads, apply pads to the child's chest and back.

1. Confirm pulseless and apnea.
2. Perform CPR
3. Apply AED as indicated.
4. Follow prompts on AED.

## Field Triage

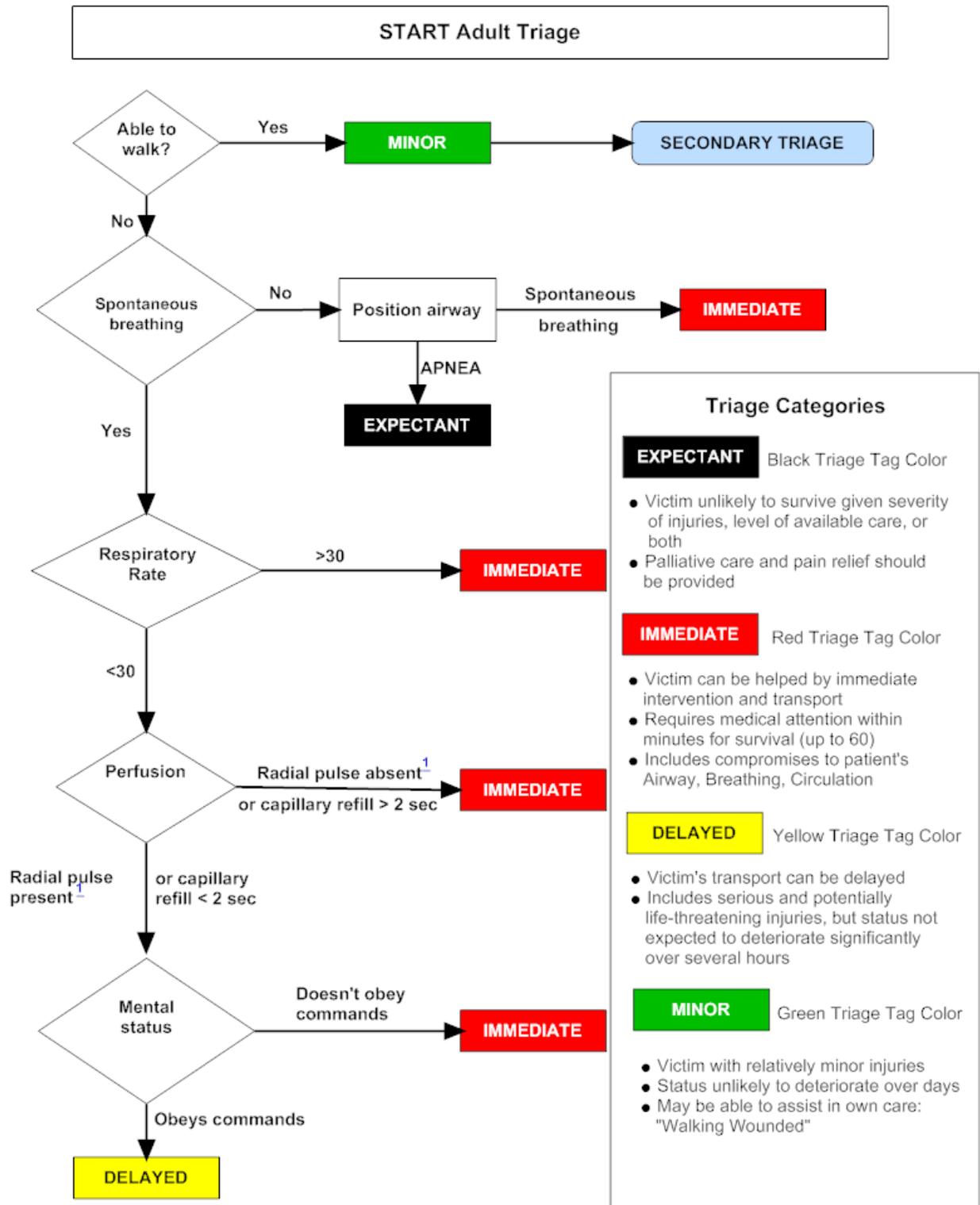
Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

Field triage is indicated at any incident where resources are stressed. No more than 60 seconds should be spent with each patient. Opening of airways, clearing airways, and bleeding control are the only interventions to be performed during triage. Triage should be a continuous process and once all patients are triaged, the process should continue.

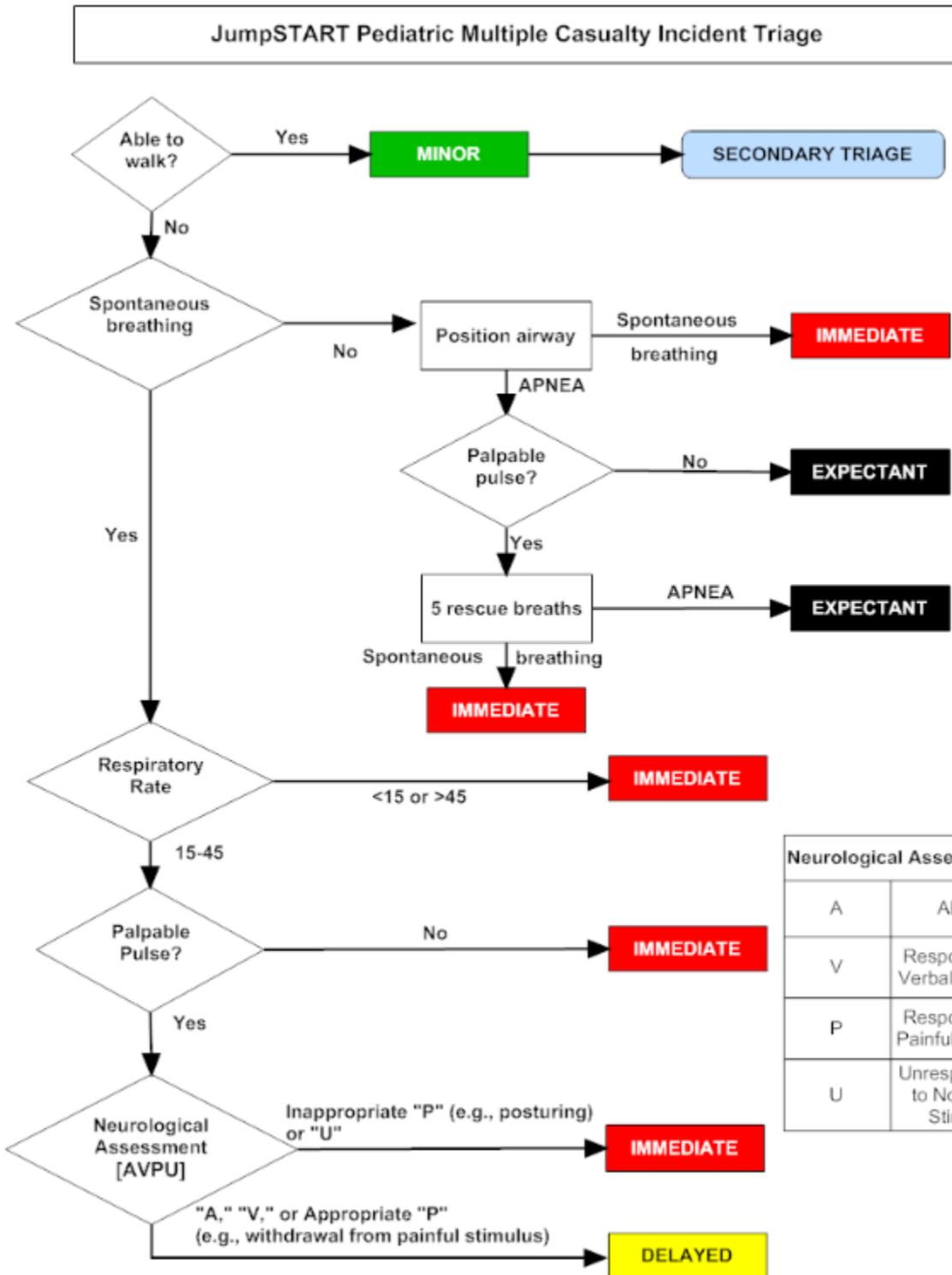
1. Ensure scene safety.
2. Size up scene and request additional resources as needed and ensure notification to dispatch.
3. Designate staging area and triage/treatment area.
4. All incoming units must report to the staging area and await further orders.

Begin START and JumpSTART Triage Algorithm

## Field Triage



## Field Triage



## Field Triage

Use JumpSTART if the Patient appears to be a child.

Use an adult system, such as START, if the patient appears to be a young adult.

## Triage Categories

**EXPECTANT**

Black Triage Tag Color

- Victim unlikely to survive given severity of injuries, level of available care, or both
- Palliative care and pain relief should be provided

**DELAYED**

Yellow Triage Tag Color

- Victim's transport can be delayed
- Includes serious and potentially life-threatening injuries, but status not expected to deteriorate significantly over several hours

**IMMEDIATE**

Red Triage Tag Color

- Victim can be helped by immediate intervention and transport
- Requires medical attention within minutes for survival (up to 60)
- Includes compromises to patient's Airway, Breathing, Circulation

**MINOR**

Green Triage Tag Color

- Victim with relatively minor injuries
- Status unlikely to deteriorate over days
- May be able to assist in own care: "Walking Wounded"

## Approved Administration Routes

	Oral Dissolving Tablet	Oral	Sublingual	Inhalation	Intramuscular	Intranasal	Intravenous	Intraosseous
<b>EMR</b>								
Albuterol				X				
Aspirin		X						
Epinephrine Auto Injector					X			
Naloxone						X		
Oral Glucose		X						
<b>BLS</b>								
Albuterol				X				
Aspirin		X						
Diphenhydramine		X						
Epinephrine 1mg/ml					X			
Glucagon					X	X		
Ipratropium				X				
Naloxone				X	X	X		
Nitroglycerin			X					
Ondansetron	X							
Oral Glucose		X						
<b>ILS</b>								
Adenosine							X	X
Albuterol				X				
Amiodarone							X	X
Aspirin		X						
Atropine							X	X
Dextrose 10%							X	X
Diphenhydramine							X	X
Epinephrine 1mg/ml					X			
Epinephrine 0.1mg/ml							X	X
Fentanyl					X	X	X	X
Furosemide							X	X
Glucagon					X	X	X	X
Ipratropium				X				
Ketorolac					X		X	X
Lidocaine							X	X



## Approved Administration Routes

	Oral Dissolving Tablet	Oral	Sublingual	Inhalation	Intramuscular	Intranasal	Intravenous	Intraosseous
<b>ILS Cont.</b>								
Midazolam					X	X	X	X
Nitroglycerin			X					
Naloxone				X	X	X	X	X
Ondansetron	X				X		X	X
<b>ALS</b>								
Adenosine							X	X
Albuterol				X				
Amiodarone							X	X
Aspirin		X						
Atropine							X	X
Dextrose 10%							X	X
Diphenhydramine		X			X		X	X
Epinephrine 1mg/ml					X			
Epinephrine 0.1mg/ml							X	X
Fentanyl					X	X	X	X
Furosemide							X	X
Glucagon					X	X	X	X
Ipratropium				X				
Ketamine								
Ketorolac					X		X	X
Lidocaine							X	X
Methylprednisolone					X		X	X
Midazolam					X	X	X	X
Morphine					X		X	X
Naloxone				X	X	X	X	X
Nitroglycerin			X					
Ondansetron	X				X		X	X
Sodium Bicarbonate							X	X
Ticagrelor		X						
Tranexamic Acid							X	X

## Adenosine

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

**Alternate Names:**

- Adenocard
- Adenoscan

**Class:**

- Antiarrhythmic Agent, Miscellaneous

**Indication:**

- Narrow complex tachycardia at a rate greater than 150, PSVT and WPW.

**Contraindication:**

- Hypersensitivity to adenosine
- Second or third degree AV block
- Sick Sinus Syndrome
- Bradycardia
- Asthma

**Side Effects:**

- Cardiac arrhythmia
- Chest pain
- Dyspnea
- Bronchospasm (rare)

**Supplied:**

- 6 mg vial

**Dose:**

- Adult – 6 mg rapid IVP, may repeat 12 mg rapid IVP – **MC Order Required**
- Pediatric – 0.1 mg/kg rapid IVP, may repeat 0.2 mg/kg rapid IVP – **MC Order Required**

## Albuterol

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

**Alternate Names:**

- Proventil
- Ventolin

**Class:**

- Beta<sub>2</sub> Agonist

**Indication:**

- Bronchospasm

**Contraindication:**

- Hypersensitivity
- Use Caution in:
  - o Pregnancy
  - o Cardiovascular Disease
  - o CHF
  - o Tachycardia

**Side Effects:**

- Tremors or nervousness
- Dizziness
- Nausea and vomiting
- Elevated pulse and blood pressure
- Tachydysrhythmias

**Supplied:**

- 2.5mg/3mL

**Dose:**

- Adult - 2.5mg/3mL nebulized, may repeat as needed every 20 minutes.
- Pediatric - 2.5 mg/3mL nebulized, may repeat as needed every 20 minutes.

## Amiodarone

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

**Alternate Names:**

- Cardarone
- Nexterone
- Pacerone

**Class:**

- Antiarrhythmic Agent, Class III

**Indication:**

- Ventricular tachycardia or ventricular fibrillation

**Contraindication:**

- Hypersensitivity
- Bradycardia
- Second or third degree AV blocks
- Cardiogenic Shock

**Side Effects:**

- Hypotension
- Nausea & vomiting
- Bradycardia
- Headache
- Dizziness
- Pulmonary Fibrosis

**Supplied:**

- 150mg/3mL

**Dose:**

- Adult - Perfusing Rhythm - 150mg/100mL D5W over 10 minutes, filter required
- Adult - Non-perfusing Rhythm - 300mg IVP, may repeat 150 mg IVP
- Pediatric - Perfusing Rhythm - 5mg/kg in 100mL D5W over 20 to 60 minutes, filter required, repeat to daily max 15mg/kg
- Pediatric - Non-perfusing Rhythm - 5mg/kg IVP, repeat to daily max 15mg/kg

## Aspirin

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

**Alternate Names:**

- ASA

**Class:**

- Antiplatelet Agent

**Indication:**

- Chest pain with suspected cardiac nature

**Contraindication:**

- Hypersensitivity
- Asthma
- Platelet and bleeding disorders
- Ulcer
- GI Bleeding
- Third trimester pregnancy
- Patient has already taken ASA in the last 4 hours.

**Side Effects:**

- Bleeding

**Supplied:**

- 81mg Tablets

**Dose:**

- Adult - 324mg PO

## Atropine

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

**Alternate Names:**

- Atropine Sulfate

**Class:**

- Anticholinergic Agent

**Indication:**

- Symptomatic Bradycardia
- Organophosphate Poisoning

**Contraindication:**

- Hypersensitivity

**Side Effects:**

- Arrhythmia
- Dehydration
- Sensorium changes
- Headache
- Blurred Vision

**Supplied:**

- 1mg Prefilled Syringe

**Dose:**

- Adult - Bradycardia - 0.5 mg
- Pedi - Bradycardia - 0.02 mg/kg
- Adult - Organophosphate - 2 mg

## Brilinta

Level of Care	EMR	EMT	ILS	ALS
Approved				X

**Alternate Names:**

- Ticagrelor

**Class:**

- P2Y12 platelet inhibitor

**Indication:**

- EMS diagnosed STEMI with Medical Control confirmation of diagnosis.

**Contraindication:**

- Active bleeding
- History of intracranial bleeding
- Reduced liver function

**Side Effects:**

- Bleeding
- Dyspnea
- Dizziness
- Nausea
- Diarrhea
- Ventricular pauses

**Supplied:**

- 90mg Tablets

**Dose:**

- Adult - 180mg PO

## Dextrose 10%

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

**Alternate Names:**

- D<sub>10</sub>W

**Class:**

- Nutrient

**Indication:**

- Hypoglycemia

**Contraindication:**

- Hyperglycemia
- Hemorrhagic CVA

**Side Effects:**

- Diuresis

**Supplied:**

- 25 g/250 mL

**Dose:**

- Adult - Administer until patient is capable of eating a meal.
- Pediatric - 5-10 mL/kg



## Diphenhydramine

Level of Care	EMR	EMT	ILS	ALS
Approved		X	X	X

**Alternate Names:**

- Benadryl

**Class:**

- Antihistamine

**Indication:**

- Allergic Reaction
- Anaphylaxis
- Extra-Pyramidal Symptoms

**Contraindication:**

- Hypersensitivity

**Side Effects:**

- Drowsiness
- Increased heart rate and blood pressure
- Headache
- Palpitations
- Thickness of bronchial secretions
- Dry mouth
- Paradoxical excitation in children

**Dose:**

- Adult - 25 - 50 mg
- Pediatric - 1mg/kg

## Dopamine

Level of Care	EMR	EMT	ILS	ALS
Approved				X

**Alternate Names:**

- Intropin

**Class:**

- Inotrope

**Indication:**

- Symptomatic bradycardia not responsive to atropine
- Cardiogenic shock
- Neurogenic Shock
- Septic Shock

**Contraindication:**

- Hypersensitivity
- Hypotension due to tachydysrhythmias
- Pheochromocytoma

**Side Effects:**

- Nausea and vomiting
- Diarrhea
- Headache
- Hypertension
- Dyspnea
- Tachycardia
- PVCs
- SVT
- VT
- Focal necrosis with infiltration

**Supplied:**

- 400mg/250mL D<sub>5</sub>W

**Dose:**

- 2-20 mcg/kg/min

## Epinephrine 1mg/mL

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

**Alternate Names:**

- Adrenalin

**Class:**

- Alpha/Beta Agonist

**Indication:**

- Asthma
- Allergic Reaction

**Use Caution With:**

- Tachydysrhythmias
- Coronary Artery Disease

**Side Effects:**

- Palpitations
- Anxiety
- Tremors
- Tachydysrhythmias
- VT
- VF
- Angina
- Hypertension

**Supplied:**

- 1mg/1mL

**Dose:**

- Adult - 0.3 mg IM
- Pediatric - 0.01 mg/kg IM

## Epinephrine 0.1 mg/mL

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

**Alternate Names:**

- Adrenalin

**Class:**

- Alpha/Beta Agonist

**Indication:**

- Cardiac Arrest

**Contraindication:**

- None in cardiac arrest

**Supplied:**

- 1mg/10mL

**Dose:**

- Adult - 1 mg
- Pediatric - 0.01mg/kg

## Glucagon

Level of Care	EMR	EMT	ILS	ALS
Approved		X	X	X

**Alternate Names:**

- GlucaGen

**Class:**

- Antidote, Hypoglycemia

**Indication:**

- Hypoglycemia

**Contraindication:**

- Hypersensitivity
- Pheochromocytoma
- Insulinoma
- Glucagonoma

**Side Effects**

- Nausea and vomiting
- Hypertension
- Tachycardia
- Shortness of breath

**Supplied:**

- 1mg and Diluent

**Dose:**

- $\geq 20$  kg - 1 mg
- $< 20$  kg - 0.5 mg

## Ipratropium Bromide

Level of Care	EMR	EMT	ILS	ALS
Approved		X	X	X

**Alternate Names:**

- Atrovent

**Class:**

- Anticholinergic Agent

**Indication:**

- COPD
- Asthma

**Contraindication:**

- Hypersensitivity
- Hypersensitivity to atropine

**Side Effects**

- Bronchitis
- Exacerbation of COPD
- Sinusitis
- Headache
- Dizziness
- Nausea
- UTI
- Back Pain
- Dyspnea
- Flu-like symptoms

**Supplied:**

- 0.5mg / 3mL

**Dose:**

- Adult - 0.5 mg mixed with 2.5 mg of Albuterol Q20 minutes
- Pediatric - 0.25mg - 0.5mg with 2.5 mg of Albuterol Q20 minutes

## Lidocaine

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

**Alternate Names:**

- Xylocaine

**Class:**

- Antiarrhythmic Agent, Class Ib
- Local Anesthetic

**Indication:**

- Cardiac Arrest
- Tachyarrhythmia
- Pain Control in IO

**Contraindication:**

- Hypersensitivity
- 2<sup>nd</sup> and 3<sup>rd</sup> degree heart block
- Hypotension (not applicable in cardiac arrest)
- Adam-Stokes Syndrome
- Wolff-Parkinson-White Syndrome

**Side Effects**

- Headache,
- Bradycardia
- Cardiac Arrhythmia
- Circulatory Shock
- Vasospasm
- Flushing
- Agitation
- Anxiety
- Coma
- Confusion
- Dizziness

**Supplied:**

- 100mg/5mL

**Dose:**

- Adult - 1.5mg/kg IV may repeat to total dose of 3mg/kg
- Pediatric - 1mg/kg to total of 3 mg/kg
- IO Pain - Adult - 40 mg over 120 sec, wait 1 min, flush with 5 mL saline, 20 mg over 1 min and repeat 20 mg PRN
- IO Pain - Pediatric - 0.5mg/kg over 120 sec, wait 1 min, flush with 2 mL saline, half dose over 1 min and repeat PRN

## Naloxone

Level of Care	EMR	EMT	ILS	ALS
Approved	X	X	X	X

**Alternate Names:**

- Narcan

**Class:**

- Opioid Antagonist

**Indication:**

- Opioid Overdose
- Altered LOC with unknown origin

**Contraindication**

- Hypersensitivity

**Side Effects**

- Flushing
- Hypertension
- Hypotension
- Tachycardia
- VF
- VT
- Agitation
- Pain
- Confusion
- Disorientation
- Dizziness
- Hallucination
- Headache
- Abdominal Cramps
- Nausea/Vomiting

**Supplied:**

- 2mg/2mL

**Dose:**

- Adults - 2mg
- Pediatric - 0.1 mg/kg



## Nitroglycerin

Level of Care	EMR	EMT	ILS	ALS
Approved		X	X	X

**Alternate Names:**

- Nitrostat

**Class:**

- Vasodilator

**Indication:**

- ACS
- Angina
- Hypertension
- CHF

**Contraindication**

- Recent use of phosphodiesterase-5 inhibitors (-fil)
- Hypotension
- Aortic Stenosis
- RVI
- Severe bradycardia or tachycardia

**Side Effects**

- Headache
- Hypotension
- Syncope
- Tachycardia
- Flushing

**Supplied:**

- 0.4mg tablets

**Dose:**

- Adults - 1 tablet every 5 minutes max 3 tablets

## Ondansetron

Level of Care	EMR	EMT	ILS	ALS
Approved		ODT Only	X	X

**Alternate Names:**

- Zofran

**Class:**

- Antiemetic

**Indication:**

- Nausea/Vomiting

**Contraindication**

- Hypersensitivity

**Side Effects**

- Headache
- Dizziness
- Abdominal Pain
- Seizures
- Sedation
- Anxiety
- Tachycardia
- Chest Pain

**Supplied:**

- 4 mg ODT
- 4 mg IV

**Dose:**

- Adults - 1 tablet Q20 min, or 4 mg IV/IM

## Sodium Bicarbonate

Level of Care	EMR	EMT	ILS	ALS
Approved				X

**Alternate Names:**

- NaHCO<sub>3</sub>

**Class:**

- Alkalinizing Agent

**Indication:**

- Cardiac arrest with hyperkalemia or metabolic acidosis
- Overdose of Tricyclic Antidepressants and Aspirin
- Acidosis from shock or burn
- Chlorine gas inhalation

**Contraindication:**

- Alkalosis
- Hypernatremia
- Severe pulmonary edema
- Hypocalcemia

**Side Effects:**

- Edema
- Hemorrhage
- Metabolic Alkalosis
- Hypokalemia
- Hypocalcemia

**Supplied:**

- 50 mEq/50mL

**Dose:**

- 1 mEq/kg

## Fentanyl

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

**Alternate Names:**

- Sublimaze

**Class:**

- Analgesic

**Indication:**

- Moderate to severe acute pain

**Contraindication:**

- Hypersensitivity

**Side Effects:**

- CNS Depression
- Hypotension
- Respiratory Depressions
- Serotonin Syndrome

**Supplied:**

- 100mcg/2mL

**Dose:**

- Adult - 50 mcg over 2 min, may repeat in 5 min, max dose 100 mcg
- Pediatric - 1 mcg/kg IV, 2mcg/kg IN
- Reduce dose 50% in renal patients

## Morphine

Level of Care	EMR	EMT	ILS	ALS
Approved				X

**Class:**

- Analgesic

**Indication:**

- Moderate to severe acute pain

**Contraindication:**

- Hypersensitivity
- Respiratory Depression
- Asthma
- MAOI use in last 14 days
- GI Obstruction

**Side Effects:**

- CNS Depression
- Hypotension
- Respiratory Depressions
- Nausea/Vomiting
- Constipation
- Urinary Retention

**Supplied:**

- 4mg/1mL

**Dose:**

- Adult - 2-5mg
- Pediatric - 0.1 mg/kg, max single dose 2mg

## Versed

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

**Alternate Name:**

- Midazolam

**Class:**

- Benzodiazepine

**Indication:**

- Seizure
- Premedication for pacing and cardioversion
- Treatment of anxiety and agitation
- Alcohol withdrawal
- Cocaine related chest pain

**Contraindication:**

- Hypersensitivity
- Respiratory Depression
- Hypotension

**Side Effects:**

- Bradypnea
- Decreased tidal volume
- Hypotension
- Drowsiness

**Supplied:**

- 20mg/2mL

**Dose:**

- Adult - 10 mg IM for Status Epilepticus
- Adult - 2 mg IV slow for anxiety and CPAP
- Pediatric - 0.2 mg/kg IM for Status Epilepticus

## Tranexamic Acid

Level of Care	EMR	EMT	ILS	ALS
Approved				X

**Alternate Name:**

- TXA

**Class:**

- Hemostatic Agent

**Indication:**

- Blunt or penetrating trauma with signs and symptoms of hemorrhagic shock.
- Systolic blood pressure of less than 90 mmHg at scene of injury, during ground medical transport, or on arrival to designated trauma centers.
- Estimated blood loss of 500 mL in the field accompanied by a heart rate greater than 120 bpm.
- Bleeding not controlled by direct pressure or tourniquet (non-compressible).
- Less than three hours from the time of injury.

**Contraindication:**

- Under 18 years of age
- Active thromboembolic event (within the last 24 hours) i.e. stroke, MI, or PE
- Hypersensitivity
- More than three hours post injury.
- Traumatic Arrest with greater than five minutes of CPR without return of spontaneous circulation.
- Penetrating cranial injury.
- Traumatic brain injury with brain matter exposed.
- Isolated drowning or hanging victim.
- Documented cervical cord injury with motor deficit.

**Supplied:**

- 1 g /10 mL

**Dose:**

- 1 g in 100 mL of Normal Saline via IV/IO over 10 minutes

**Trauma Center Contact is Mandatory**

## Ketamine

Level of Care	EMR	EMT	ILS	ALS
Approved				X

**Alternate Name:**

- Ketalar

**Class:**

- General Anesthetic

**Indication:**

- Acute pain uncontrolled by narcotics
- Sedation for procedure or restraints
- Asthma exacerbation with decline in condition
- Medication assisted intubation

**Contraindication:**

- Hypersensitivity
- Known or suspected schizophrenia
- Infants < 3 months of age

**Supplied:**

- 500 mg/10 mL

**Dose:**

- Sedation
  - o IM 4 mg/kg
  - o IV 2 mg/kg
- Pain
  - o IM 2 mg/kg
  - o IV 0.3 mg/kg over 10 minutes as a drip
- Medication Assisted Intubation
  - o IV 2 mg/kg
- Agitation
  - o IM 2mg/kg



## Methylprednisolone

Level of Care	EMR	EMT	ILS	ALS
Approved				X

**Alternate Name:**

- Solu-medrol

**Class:**

- Corticosteroid

**Indication:**

- Asthma
- COPD
- Anaphylaxis

**Contraindication:**

- Hypersensitivity

**Supplied:**

- 125 mg Act-O-Vial

**Dose:**

- Adult: 125 mg
- Pediatric 1-2 mg/kg

## Ketorolac

Level of Care	EMR	EMT	ILS	ALS
Approved			X	X

**Alternate Name:**

- Toradol

**Class:**

- NSAID

**Indication:**

- Acute pain management

**Contraindication:**

- Hypersensitivity
- Active or history of peptic ulcer disease
- Recent or history of GI bleeding or perforation
- History of asthma

**Supplied:**

- 30 mg vial

**Dose:**

- $\leq 65$  years old and/or  $\geq 50$  kg - 30 mg IV/IM.
- $\geq 66$  years old and/or  $\leq 49$  kg - 15 mg IV or 30 mg IM.

## Calcium Chloride

Level of Care	EMR	EMT	ILS	ALS
Approved				X

**Class:**

- Electrolyte Supplement

**Indication:**

- Cardiac arrest or cardiotoxicity in the presence of hyperkalemia, hypocalcemia, or hypermagnesemia.
- Calcium channel blocker overdose.
- Beta Blocker overdose with shock refractory to other measures.

**Contraindication:**

- Known or suspected digoxin toxicity
- Not recommended as routine treatment in cardiac arrest.

**Supplied:**

- 1g/10mL

**Dose:**

- Adult
  - o Cardiac Arrest
    - 0.5 - 1g over 2 to 5 minutes, may repeat as necessary
  - o Beta Blocker Overdose
    - 20mg/kg over 5 - 10 minutes followed by an IV infusion
  - o Calcium Channel Blocker Overdose
    - 1 - 2g over 5 minutes, may repeat every 10 - 20 minutes

## Furosemide

Level of Care	EMR	EMT	ILS	ALS
Approved				X

**Alternate Name:**

- Lasix

**Class:**

- Loop Diuretic

**Indication:**

- Pulmonary Edema

**Contraindication:**

- Sensitivity
- Anuria

**Supplied:**

- 40 mg vial

**Dose:**

- Adult - 40 mg or double daily dose.

## EMS License Renewal Request

Name (as written on license): \_\_\_\_\_

License Held: \_\_\_\_\_ License Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Agency: \_\_\_\_\_

Category	EMR	ECRN	EMD	LI	BLS	ILS	ALS
Airway, including skills lab	2	0	0	4	4	8	10
Breathing, Patient Assessment	3	0	0	6	6	8	8
Circulation, Trauma, Shock/Resuscitation, Pathophysiology	8	0	0	12	18	24	32
Disability, Medical, Behavioral, OB, Infant, Children	6	0	0	12	14	18	18
Environment, Preparations/Operations, Special Populations, Pharmacology	5	0	0	6	10	14	16
<b>Subtotal:</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>52</b>	<b>72</b>	<b>84</b>
Open Topic	0	32	48	0	8	8	16
<b>Total:</b>	<b>24</b>	<b>32</b>	<b>48</b>	<b>40</b>	<b>60</b>	<b>80</b>	<b>100</b>

### Other Documentation Required

- **All Levels**
  - CPR for Healthcare Provider
- **ILS/ALS/ECRN**
  - ACLS
  - PALS, PEPP, or ENPC
  - PHTLS, TECC, TCCC, ITLS, TNCC, or TNS
- **Lead Instructor**
  - Course Evaluations

---

### EMS Office

- Renewal Received in EMS Office Date: \_\_\_\_\_ By: \_\_\_\_\_
- Renewal Reviewed and Approved Date: \_\_\_\_\_ By: \_\_\_\_\_
- Issues Affecting Renewal: \_\_\_\_\_

## Pain Scales

### Pediatric Pain Scale:

#### Wong-Baker FACES® Pain Rating Scale



**0**

**No  
Hurt**



**2**

**Hurts  
Little Bit**



**4**

**Hurts  
Little More**



**6**

**Hurts  
Even More**



**8**

**Hurts  
Whole Lot**



**10**

**Hurts  
Worst**

### Dementia Pain Scale:

**TABLE 2**

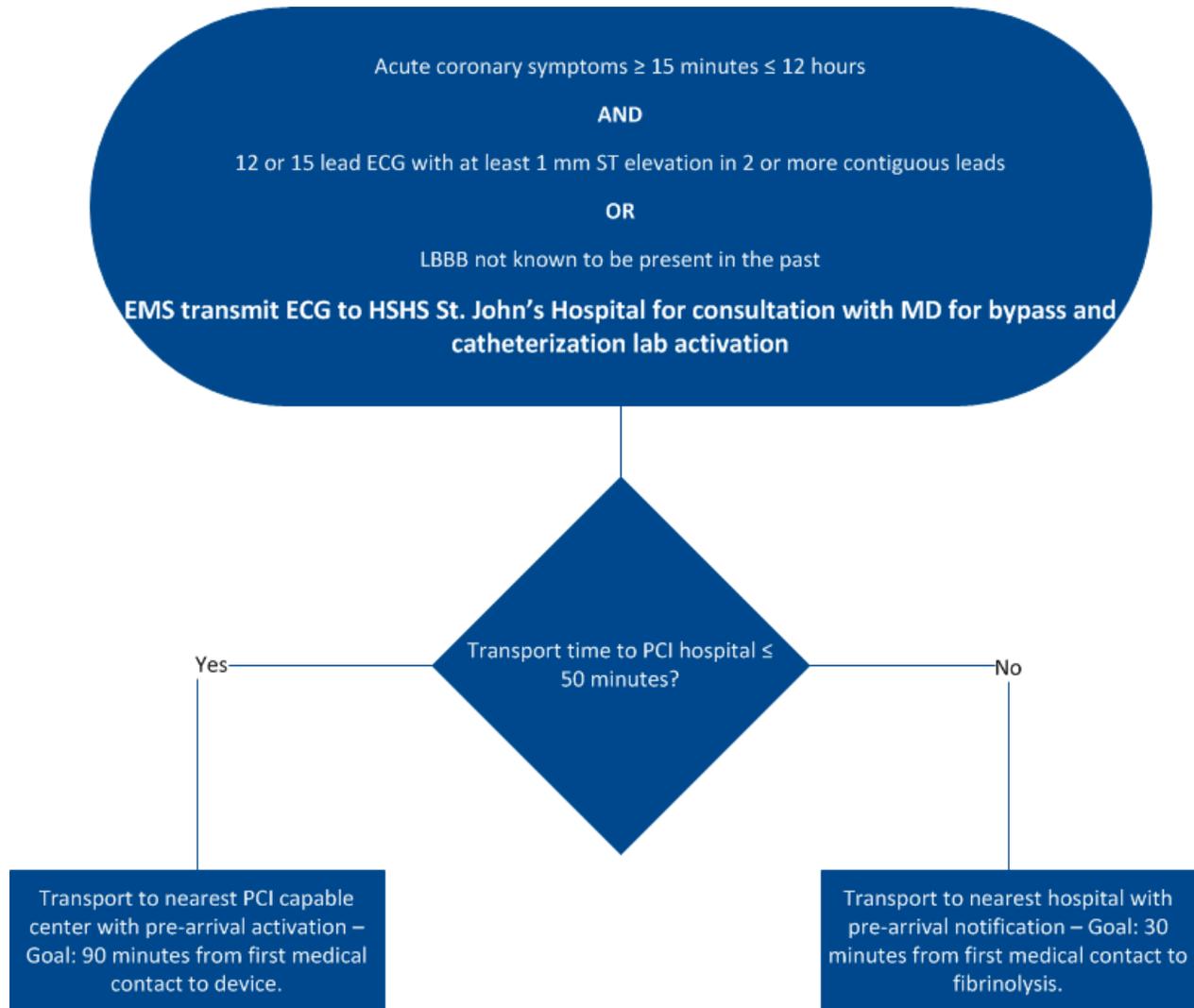
**PAIN ASSESSMENT IN ADVANCED DEMENTIA (PAINAD) SCALE**

Items	Score = 0	Score = 1	Score = 2	Score
Breathing (independent of vocalization)	Normal	<ul style="list-style-type: none"> <li>Occasional labored breathing</li> <li>Short period of hyperventilation</li> </ul>	<ul style="list-style-type: none"> <li>Noisy labored breathing</li> <li>Long period of hyperventilation</li> <li>Cheyne-Stokes respirations</li> </ul>	
Negative vocalization	None	<ul style="list-style-type: none"> <li>Occasional moan or groan</li> <li>Low level of speech with a negative or disapproving quality</li> </ul>	<ul style="list-style-type: none"> <li>Repeated troubled calling out</li> <li>Loud moaning or groaning</li> <li>Crying</li> </ul>	
Facial expression	Smiling or inexpressive	<ul style="list-style-type: none"> <li>Sad</li> <li>Frightened</li> <li>Frown</li> </ul>	<ul style="list-style-type: none"> <li>Facial grimacing</li> </ul>	
Body language	Relaxed	<ul style="list-style-type: none"> <li>Tense</li> <li>Distressed pacing</li> <li>Fidgeting</li> </ul>	<ul style="list-style-type: none"> <li>Rigid</li> <li>Fists clenched</li> <li>Knees pulled up</li> <li>Pulling or pushing away</li> <li>Striking out</li> </ul>	
Consolability	No need to console	<ul style="list-style-type: none"> <li>Distracted or reassured by voice or touch</li> </ul>	<ul style="list-style-type: none"> <li>Unable to console, distract, or reassure</li> </ul>	
Total				

Note. Total scores range from 0 to 10 (based on a scale of 0 to 2 for each of five items), with a higher score indicating more behaviors indicating pain (0 = no observable pain to 10 = highest observable pain).

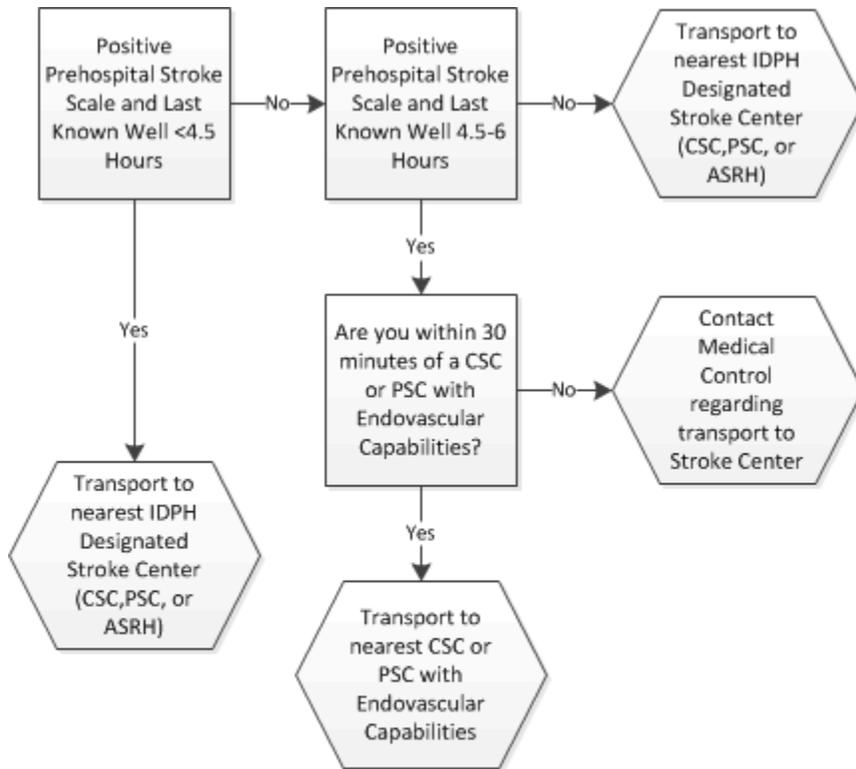
Adapted from Warden, V., Hurley, A.C., & Volicer, L. (2003). Development and psychometric evaluation of the Pain Assessment in Advanced Dementia (PAINAD) scale. *Journal of the American Medical Directors Association*, 4, 9-15.

## STEMI Destination Determination



This bypass applies to specific agencies with system approval. The hospital bypass is ultimately up to the paramedic's discretion after ECG review and physician consultation. Patients who are not hemodynamically stable or suspected to become hemodynamically unstable should be transported to the nearest hospital.

## Region 3 Stroke Destination Determination



IDPH Designated Stroke Centers  
 CSC- Comprehensive Stroke Center  
 PSC- Primary Stroke Center  
 ASRH- Acute Stroke Ready Hospital

If patient is hemodynamically unstable or EMS suspects deterioration of condition **REGARDLESS** of hospital capabilities, transport to closest appropriate hospital.



## Emergency Childbirth Record

Presentation (head or feet): \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Time of Birth: \_\_\_\_\_

Nuchal Cord: **Yes** **No** Number of times: \_\_\_\_\_

Time Membranes Ruptured: \_\_\_\_\_

Appearance of Amniotic Fluid: \_\_\_\_\_

APGAR Score:

	0	1	2	1 Minute Score	5 Minute Score
Appearance	Body and Extremities Cyanotic	Acrocyanosis	Pink		
Pulse Rate	Absent	< 100 bpm	>100 bpm		
Grimace (Irritability)	No Response	Minimal Response	Prompt Response		
Activity	Limp	Flexed Arms and Legs	Active		
Respiration	Absent	Slow and Irregular	Strong Cry		
Total Score:					

Time Placenta Delivered: **Intact** **Not Intact** \_\_\_\_\_

Number of Vessels in Cord: \_\_\_\_\_

Infant Resuscitation Interventions: \_\_\_\_\_

Remarks: \_\_\_\_\_

Provider Name (Print): \_\_\_\_\_

Provider Signature: \_\_\_\_\_

Driver Name (Print): \_\_\_\_\_

Driver Signature: \_\_\_\_\_

## Complaint/Unusual Occurrence Report

Report Date: \_\_\_\_\_ Incident Date: \_\_\_\_\_ Person Reporting Complaint: \_\_\_\_\_

Patient Name: \_\_\_\_\_ Follow Up Phone Number: \_\_\_\_\_

Incident Narrative:

Complaint Investigation Notes:

Action Taken: \_\_\_\_\_ Letter to: \_\_\_\_\_

Closing Notes:

## School Bus Incident Log

All individuals on the bus age 18 and older should initial in the indicated space adjacent to their name when uninjured. Parent/legal guardian should initial in the indicated space adjacent to their child's name when uninjured. Initials indicate agreement that no injury has been suffered and no transportation is required to the hospital.

<b>Date:</b>	<b>Location:</b>	<b>District Name:</b>	<b>Bus Number:</b>
<b>Incident Number</b>	<b>Total Patients:</b>	<b># Transported:</b>	<b># Not Transported</b>
<b>Adult Name</b>	<b>Function</b>	<b>Address &amp; Telephone</b>	<b>Initials</b>
<b>Child Name</b>	<b>Age</b>	<b>Address &amp; Telephone</b>	<b>Initials</b>



## Notice of EMS Response to a Minor

**Date:** [Click here to enter a date.](#)

**From:** (Chief or President of Agency)

(Provider Agency)

(Address)

(Phone Number)

**Child's Name:** \_\_\_\_\_

Members of our EMS agency were called to evaluate your son/daughter/ward today as a result of a bus collision/incident.

After responding to the above incident, we evaluated the child. Based on our assessment and statements made by the child, it was determined that he or she did not require emergency care and/or transportation to an emergency department at that time.

Whereas your child is a minor, it is our duty to inform you of this incident so that an informed decision can be made as to whether follow-up evaluation with a physician is desired.

The child was released to a designated school representative who accepted further responsibility for him or her.

**If you wish additional information, please contact our agency at the above phone number.**

\*Note – fillable form available online at [www.samicems.org](http://www.samicems.org)