REGION 7
Emergency Medical Services Systems

Advocate Christ Medical Center EMS System
Morris EMS System
Presence Saint Mary’s EMS System
Riverside EMS System
Silver Cross EMS System
South Cook County EMS System

INTERMEDIATE LIFE SUPPORT
Standing Medical Orders

REVISED: DECEMBER 1st, 2011
Effective: May 1st, 1998
INTRODUCTION

These orders are to be used as the pre-hospital treatment protocols. They are to be followed by all Intermediate Life Support (ILS) members of the EMS System. Deviations from these orders can be made only by the Medical Director or designee.

These orders are to be used in the following situations:

1. When the initiation of care begins before hospital communication is established.

2. In the event that communications cannot be established or communication is disrupted or lost between the responding paramedics and their directing hospital. Every effort should be made to contact the hospital over the telemetry radio, MERCI radio, cellular phone or landline phone.

3. Until the patient arrives at the hospital and the patient’s care has been transferred to the appropriate hospital personnel.

4. In disaster situations, when immediate action to preserve lives and limbs supersedes the need to communicate directly with the hospital.

All emergency patients must be transported to a hospital emergency department with inpatient facilities.

Due to geographic and regional considerations, some systems may include or exclude certain drugs as indicated.

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Revised 01/01/12
Effective 05/01/98

ILS
Only changed SMOs are listed below. If an SMO is not listed below, it was not changed.

Code 1- Added Zofran ODT for adults and pediatrics. Consider 12 lead EKG, if available

Code 3- Deleted pediatrics (< 1 year) airway obstruction guidelines from the adult airway obstruction SMO. Changed 5 abdominal thrust (or 5 chest thrusts if pregnant or obese) to perform CPR

Code 5- Add to consider ALS Mutual Aid for Cardiogenic Shock

Code 6- In order to minimize interruptions in CPR during the acute resuscitation phase, consider placement of King airway. Clarified Epinephrine Concentration

Code 9- Combined PEA and Asystole into one Code. In order to minimize interruptions in CPR during the acute resuscitation phase, consider placement of King airway. Clarified Epinephrine concentration. Deleted Atropine

Code 11- Induced Therapeutic Hypothermia -Not applicable for the EMT-Intermediate

Code 12- Added considerations for 12-Lead EKG, if available AND pregnancy to contraindications

Code 13- Consider CPAP enroute, if available, for patient’s with a BP > 90

Code 14- Reformatted for clarification

Code 21- Added Consider use of hemostatic agent, if available and use of tourniquet if needed

Code 21- IV Normal Saline bolus amount changed from 250ml bolus to 1000ml bolus

Code 21b- Added Suspension Trauma SMO

Code 22- Under chemical burn, perform routine burn wound care after irrigation or flushing

Code 24- Added letter G: Manually displace the uterus to the left side during CPR

Code 28- Added Pediatric Assessment and Trauma Score

Code 29- Added Pediatric Burns Thermal, Electrical, Chemical

Code 30- Added CPAP, if available

Code 31- Removed Cricothyroid Maneuver with intubation

Code 32- Added Intranasal Glucagon

Code 33- Added Intranasal Narcan and Intranasal Glucagon

Code 34- Added Intranasal Narcan

Code 35- Added Intranasal Glugocan
Only changed SMOs are listed below. If an SMO is not listed below, it was not changed.

Code 38- Perform 12 Lead EKG, added “if available”. Added Consider ALS Mutual Aid

Code 39- Removed “If indicated, flush skin with copious amounts of water”

Code 45- Removed “Involuntary pushing with contractions” and “Contractions less than 2 minutes apart”

Code 48- Added CPR ratio of 3:1 for newborn CPR for pulse <60

Code 50- Several grammar changes made

Code 56- Grammar change from back blows to back slaps.

Code 57- Added Pediatric Shock SMO

Code 60- Removed Narcan Sub Q and endotracheal route

Code 61- Removed Narcan Sub Q and endotracheal route

Code 62- Added Pediatric Heat Emergencies protocol

Code 65- Deleted #3 bullet point #3: Statement about child under the age of 10 being left unattended

Code 68- Added “Maintain situational awareness” to heading

Code 73- Added procedure for Intraosseous needle insertion

Code 75- Deleted cricoid pressure (Sellick Maneuver) during the endotracheal intubation procedures for adult and pediatric patients

Code 76- Added Continuous Positive Airway Pressure Administration

Code 85- Added procedure for Intranasal Administration

Code 86- Concealed Carry / Firearm
## REGION 7
### STANDING MEDICAL ORDERS

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**ILS**
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### REGION 7 - STANDING MEDICAL ORDERS

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86. CONCEALED CARRY / FIREARM

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ILS
1. Prehospital providers shall always assess the scene to assure the safety of all personnel.
2. Patient care and treatment begins at the “bedside.”
3. Prehospital personnel shall take all reasonable precautions to prevent exposure to blood
   and/or body fluids of any patient. Use fluid repellent gowns, masks and goggles as situation dictates.
4. For Pediatric Dosing, utilize a length based Pediatric Tape or Chart.

**GENERAL PATIENT ASSESSMENT**

1. Initial Assessment
   A. Airway - Establish and/or maintain an airway (cervical spine control, if indicated)
   B. Breathing - Assist ventilation as required
   C. Circulation (pulse) and hemorrhage control (if indicated)
   D. Disability (Level of Consciousness)
      1. “Alert”
      2. “Verbal” - (responds to verbal stimuli)
      3. “Pain” - (responds to painful stimuli)
      4. “Unresponsive”
   E. Exposure and examine (if indicated)
2. Focused Assessment
   A. Vital signs, and where applicable, Glasgow Coma Scoring parameters
   B. Systematic head - to - toe detailed assessment
   C. History of present illness/injury

**INITIAL MEDICAL CARE/Routine Cardiac Care**

1. Reassure patient, provide comfort and loosen tight clothing.
2. Sit patient in semi-Fowler’s or position of comfort (if applicable)
3. Obtain Pulse Oximeter value prior to oxygen delivery
   Deliver OXYGEN 2-6 L by nasal cannula or 12-15L by mask, unless otherwise specified.
4. Evaluate cardiac rhythm, if indicated. Consider use of 12-lead, if available. (All ALS patients do not necessarily require
   continuous ECG monitoring or transmission of a strip to the hospital.)
5. If patient’s condition warrants, obtain IV access (Saline lock or NS). Attempt x2 unless requested to continue.
6. For adult and pediatrics ≥ 1 year old experiencing nausea, consider Zofran ODT 4mg tab x 1 dose only.
7. Contact hospital as soon as patient’s condition permits. Transmit assessment information and await orders.
   If no radio contact can be established or patient’s condition requires immediate treatment, refer to appropriate
   SMO and begin intervention immediately.
8. Recheck vitals and other pertinent signs at least every 15 minutes and record, noting times.
9. Transport to closest hospital. NOTE: By law, a physician must certify that the benefits outweigh the risk of
   transport to a facility other than the nearest hospital. If the patient refuses care or transport to the closest
   hospital, refer to policy and document signatures and situation.
NOTE: In a combative or uncooperative patient, the requirement to initiate initial routine medical care, as written,
may be altered or waived in favor of rapidly transporting the patient for definitive care. Document the patient’s
actions or behaviors which interfered with the performance of any assessments and/or interventions.

**OUTLINE FOR RADIO REPORT** (Transmit using as few words as possible)

1. Name and vehicle number of provider
2. Requested destination, closest hospital, and estimated time of arrival
3. Age, sex, and approximate weight of patient
4. Chief Complaint, to include symptoms and degree of distress
5. History of present illness/injury
6. Pertinent Medical History:
   - Allergies
   - Medications
   - Past History of Current Illness
   - Last Meal
   - Events surrounding incident
7. Clinical condition:
   - Focused and detailed patient assessment findings
8. Treatment initiated and Response
The use of an abbreviated report is optional. A full report may always be given at the discretion of the prehospital provider. A full report must always be given when vital signs are unstable, when any treatment has been initiated other than OXYGEN AND/OR establishment of an IV, OR when requesting transport to other than the closest hospital (by time).

Refer to CODE 1 and follow the steps under GENERAL PATIENT ASSESSMENT and INITIAL MEDICAL CARE/ROUTINE CARDIAC CARE.

OUTLINE FOR ABBREVIATED RADIO REPORT (Transmit using as few words as possible)

1. Name and vehicle number of provider
2. Requested destination, closest hospital, and estimated time of arrival
3. Age and sex
4. Chief Complaint, to include symptoms and degree of distress
5. Clinical condition:
   - Vital signs stable
Code 2

RESPIRATORY DISTRESS

Breathing Assessment

- Inadequate
  - Consider assist with BVM
    - Assess the need for intubation
      - Intubate per Code 75, 75a, 75b, as appropriate

- Adequate
  - 100% OXYGEN
    - Chest Assessment

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ILS
AIRWAY OBSTRUCTION

INITIAL MEDICAL CARE

Consider neck injury
Use neck extension and jaw lift

Ventilate

Still obstructed

Conscious
Cannot speak
> 1 year*

5 abdominal thrusts
(or 5 chest thrusts
if pregnant or obese)

Still cannot speak
REPEAT until...
obstruction relieved or unconscious

Conscious
TRANSPORT

Unconscious

Finger Sweep
Only if foreign body is visible

Perform CPR 30 : 2
Check during breathing for
visualized foreign body

Clear the airway by visualizing
with laryngoscope using forceps
and/or suction

Open airway
Support ventilation as required
TRANSPORT

Still obstructed
Attempt forced ventilation
If still unable to ventilate, intubate and pass tube
pushing foreign body into right mainstem,
then pull back tube and ventilate left lung.

If unsuccessful
Cricothyroid Airway Maneuver
TRANSPORT

Unconscious

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ILS
Code 4

CARDIAC ARREST

(SEE APPROPRIATE DYSRHYTHMIA)
CODE 5

CARDIOGENIC SHOCK

INITIAL MEDICAL CARE

SBP <90 WITHOUT DYSRHYTHMIA

TRANSPORT ASAP

IV NS fluid challenge in 200ml increments up to 1000ml (if lungs remain clear) OR until SBP >90

SBP >90

YES

Continue IMC and Rapid TRANSPORT

NO

Continue IMC, Rapid TRANSPORT and Consider ALS Mutual Aid

SBP <90 WITH DYSRHYTHMIA

TREAT UNDERLYING DYSRHYTHMIA AND TRANSPORT ASAP

NOTE TO PREHOSPITAL PROVIDERS:

If patient is in (or develops respiratory distress) despite treatment, maintain airway and prepare to intubate.

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ILS
VENTRICULAR FIBRILLATION/ PULSELESS VENTRICULAR TACHYCARDIA

- ABCs
  - Perform CPR until defibrillator attached
  - VF/VT present on monitor

Give 1 shock
Biphasic Device Specific (120-200J)
Monophasic 360J
Resume CPR Immediately

Continue CPR – minimize any interruptions throughout resuscitation
- Intubate if unable to BVM
- Consider King tube
- IV/IO NS without interrupting CPR

Perform 5 cycles of CPR
Check Rhythm
Shockable rhythm?

Continue CPR while Defibrillator is charging
Biphasic device specific (120-200J) or
Monophasic 360J
Resume CPR immediately after the shock
Epinephrine 1:10,000 mg IV/IO
Repeat every 3-5 minutes as long a rhythm persists

Perform 5 cycles of CPR
Check rhythm
Shockable rhythm?

Continue CPR while Defibrillator is charging
Give 1 shock
Biphasic Device Specific (120-200J)
or Monophasic 360J
Resume CPR immediately after shock
Consider antiarrhythmics; give during CPR
Lidocaine 1.5mg/kg IV/IO first dose
May repeat 0.75 mg/kg IV/IO
Maximum 3mg/kg

TRANSPORT
TACHYCARDIAS (WITH PULSE)

INITIAL MEDICAL CARE

STABLE
Rate >150
Patient is alert, without any signs of hypoperfusion*

Narrow Complex

Valsalva Maneuvers

Wide Complex

Continue IMC and TRANSPORT

Continue IMC and TRANSPORT

UNSTABLE
Rate >150 and signs of hypoperfusion*

Contact Medical Control for further orders
Consider ALS Mutual Aid and ACCELERATED TRANSPORT

NOTE TO PREHOSPITAL PROVIDERS:
1. *Signs of hypoperfusion: severe CP, severe SOB, SBP < 90, diaphoresis, altered mental status.
2. Always record rhythm strip and deliver to physician caring for patient.
3. Wide Complex = QRS > 0.12 sec. (3 small boxes)
   Narrow Complex = QRS < 0.12 sec.
4. Sinus Tachycardia should be treated appropriately.
Code 8

VENTRICULAR ECTOPY

DO NOT TREAT ASYMPTOMATIC VENTRICULAR ECTOPY WITHOUT BASE STATION CONTACT
PULSELESS ARREST
Perform CPR
Attach monitor/defibrillator

Asystole/PEA

Resume CPR immediately for 5 cycles
When IV available
Epinephrine 1:10,000 - 1 mg IV/IO
Repeat every 3 to 5 minutes

Perform 5 cycles of CPR
Check rhythm
Shockable rhythm?

Not Shockable
Consider Treatment for possible causes

TRANSPORT

Shockable
Go to Code 6

Hypothermia --------> Follow appropriate SMO
Hypovolemia --------> Fluid challenge (200ml of current IV)
Tension Pneumothorax --> Pleural Decompression
Acidosis/Hypoxemia --> Ventilate with 100% OXYGEN (Check tube placement)
Pulmonary Embolism --> Rapid TRANSPORT with 100% OXYGEN

AT DISCRETION OF A PHYSICIAN/ECRN:
ALS MUTUAL AID

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ILS
Code 10
BRADYCARDIA (Pulse < 60)

INITIAL MEDICAL CARE

UNSTABLE
Signs of hypoperfusion*
OR
altered mental status

ATROPINE 0.5mg IV
every 3 to 5 minutes
Up to a total dose of
0.04mg/kg

STABLE
Patient is alert,
without any signs of hypoperfusion*

Rapid TRANSPORT
Continue IMC enroute.

NOTE TO PREHOSPITAL PROVIDERS:
1. *Signs of hypoperfusion include: severe chest pain, severe SOB, SBP <90, diaphoresis
2. Consider ALS Mutual Aid

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ILS
Code 11

INDUCED THERAPEUTIC HYPOTHERMIA
(If available)

NOT Applicable for EMT-Intermediate
**Code 12**

**SUSPECTED CARDIAC PATIENT**

**INITIAL MEDICAL CARE**
Perform 12-Lead ECG and Transmit, if available

- **SBP <90mmHg**
  - 4 tabs *BABY ASPIRIN PO* unless contraindicated*
  - Refer to appropriate SMO

- **SBP 90-110mmHg**
  - 4 tabs *BABY ASPIRIN PO* unless contraindicated*

- **SBP >110mmHg**
  - 4 tabs *BABY ASPIRIN PO* unless contraindicated*
  - **NITROGLYCERIN****
    - gr 1/150 tab OR spray SL
    - May repeat X 2 in 5 minutes (If no IV, consider hospital contact prior to administration)
    - Repeat vital signs
    - TRANSPORT

**Consider 12-Lead EKG for complaints of:**
(may be deferred if patient unstable)
- Chest pain/Discomfort/Pressure
- Arm Pain (non-traumatic)
- Jaw Pain (non-traumatic)
- Upper back pain (non-traumatic)
- Unexplained diaphoresis
- Vomiting without fever or diarrhea
- Shortness of breath
- Dizziness/syncope
- Epigastric pain
- Fall in the elderly (unexplained)
- Weakness/Fatigue
- Bradycardia or Tachycardia

**NOTE TO PREHOSPITAL PROVIDERS:**
*Contraindications to ASPIRIN would include ASPIRIN allergy, pregnancy, and history of gastrointestinal bleeding.
**Contact Medical Control prior to administration of NITRATES if patient is taking erectile dysfunctional medications (i.e. Viagra, Levitra, Cialis).
PULMONARY EDEMA DUE TO HEART FAILURE

INITIAL MEDICAL CARE

If wheezing:
ALBUTEROL (Ventolin)
2.5mg via nebulizer
(May repeat X 1)

SBP < 90mmHg

If wheezing:
ALBUTEROL (Ventolin)
2.5mg via nebulizer
(May repeat X 1)

SBP 90 - 110mmHg

If wheezing:
ALBUTEROL (Ventolin)
2.5mg via nebulizer
(May repeat X 1)

SBP >110mmHg

NITROGLYCERIN*  
gr 1/150 tab OR spray SL  
(May repeat X 2 in 5 minutes)  
(If no IV, consider hospital contact prior to administration)

Consider CPAP enroute, if available
Refer to CONTINUOUS POSITIVE AIRWAY PRESSURE ADMINISTRATION CODE 76

TRANSPORT

NOTE TO PREHOSPITAL PROVIDERS:
* Contact Medical Control prior to administration of NITRATES if patient is taking erectile dysfunctional medications (i.e. Viagra, Levitra, Cialis).

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ILS
FIELD TRIAGE PROTOCOLS

• Transport directly to the nearest Level I Trauma Center if transport time is less than 25 minutes.
• Transport to the nearest Level II Trauma Center if transport time is less than 30 minutes.
• Transport to the nearest Emergency Department if transport time is greater than 30 minutes.

FIELD TRIAGE CATEGORY I

Sustained hypotension - B/P ≤ 90 systolic (Peds ≤ 80 systolic) on two consecutive measurements five minutes apart.

■ Cavity penetration of the torso or neck

⇒ MANDATORY NOTIFICATION OF THE TRAUMA SURGEON FROM THE FIELD (done by the Trauma Center).

⇒ PATIENTS BEING BYPASSED TO A TRAUMA CENTER MUST BE ADEQUATELY VENTILATED (ET TUBE OR BVM) AND HAVE CERVICAL IMMOBILIZATION AS INDICATED. OTHERWISE, THE PATIENT SHOULD BE TRANSPORTED TO THE CLOSEST COMPREHENSIVE EMERGENCY DEPARTMENT.

■ Blunt or penetrating trauma with unstable vital signs and/or:
  • Hemodynamic compromise as evidenced by:
    Adult B/P ≤ 90 systolic  
    Peds B/P ≤ 80 systolic
  • Respiratory compromise as evidenced by:
    respiratory rate <10 OR >29
  • Head injury with altered mentation as evidenced by a Glasgow Coma Score ≤ 10.

■ Anatomical Injury:
  • Penetrating injury of the head, neck, chest or abdomen.
  • Two or more body regions with potential life or limb threat.
  • Combination trauma with ≥ 20% TBSA.
  • Amputation above the wrist or ankle.
  • Limb paralysis and/or sensory deficit above the wrist or ankle.
  • Flail chest.
  • Two or more proximal long bone fractures.

■ All patients who, in the judgement of the prehospital personnel, would benefit from the care derived at a Trauma Center - those conditions which may be considered for direct bypass to a Trauma Center may include:
  • Head Injury with persistent unconsciousness or focal signs such as seizures, posturing or the inability to respond to simple commands.
  • Transmediastinal gunshot wounds
  • Spinal cord injury with paralysis
  • Maternal trauma with significant mechanism and/or obvious trauma at 20-32 weeks gestation.
  • Pediatric trauma including blunt or penetrating head, chest or abdominal trauma.

CATEGORY II

Mechanism of Injury:

■ Ejection from a motor vehicle.
■ Death in the same passenger compartment.
■ Falls > 20 feet.
■ Falls > three times the body length of a child.
■ Maternal trauma > 24 weeks.
A standard procedure for assessing revised trauma scores in the field is necessary so that the reliability of that revised trauma score is recognized by both field personnel and emergency department personnel.

The patient is scored by assessing the following vital functions and computing a score - the **REVISED TRAUMA SCORE**.

A. Respiratory rate  
B. Systolic blood pressure  
C. Glasgow coma scale

For the Glasgow Coma Scale, the examiner determines the best response the patient can make to a set of standardized stimuli.

I. Eye opening:
The examiner determines the minimum stimulus that evokes opening of one or both eyes.
   a. (4 points) SPONTANEOUS  
   b. (3 points) VOICE  
   c. (2 points) PAIN  
   d. (1 point) NONE

Note: If the patient cannot open the eyes because of bandages, edema or direct trauma, please note and document in the patient's record.

II. Best Verbal Response:
The examiner determines the BEST response after arousal:
   a. (5 points) ORIENTED  
   b. (4 points) CONFUSED  
   c. (3 points) INAPPROPRIATE WORDS  
   d. (2 points) INCOMPREHENSIBLE SOUNDS  
   e. (1 point) NO VERBAL RESPONSE

Note: If the patient is intubated, dysphasic or has maxillofacial injuries which may preclude a verbal response, the examiner's assessment should be documented in the patient's record.

III. Best Motor Response:
The examiner determines the BEST movement from either arm in response to stimulus.
   a. (6 points) OBEYS SIMPLE COMMANDS  
   b. (5 points) LOCALIZES PAIN  
   c. (4 points) FLEXION WITHDRAWAL  
   d. (3 points) ABNORMAL FLEXION  
   e. (2 points) ABNORMAL EXTENSION  
   f. (1 points) NO MOTOR RESPONSE

Note: If the patient has suspected or known spinal cord injury, this neurologic deficit should be noted in the patient's record.

The components necessary to calculate the Revised Trauma Score and Glasgow Coma Scale will be obtained by prehospital personnel. The actual calculation of these scores will be performed by medical control. These scores are to be obtained when the need for transport to a trauma center is questionable.

Revised 01/01/12  
Effective 05/01/98  
ILS
ROUTINE TRAUMA CARE

1. Prehospital providers shall always assess the scene to assure the safety of all personnel.
2. Patient care and treatment begins at the scene.
3. Prehospital personnel shall take all reasonable precautions to prevent exposure to blood and/or body fluids of any patient. Use fluid repellent gloves, gowns, masks and goggles, as situation dictates.
4. For Pediatric Dosing, utilize the length based Pediatric Tape or Chart.

PRIMARY PATIENT ASSESSMENT

1. ESTABLISH LEVEL OF RESPONSIVENESS
   - Brief history: Any dyspnea or pain?

2. IMMOBILIZE C-SPINE
   - Manual immobilization initially
   - Rigid collar, Cervical Immobilization Device, and backboard prior to transport
   (Refer to SUSPECTED SPINAL CORD INJURY/SPINAL IMMOBILIZATION CODE 18)

3. AIRWAY  (If obstructed Refer to OBSTRUCTED AIRWAY CODE 3)
   - Open or secure as needed

4. CHECK THE NECK
   - Carotid pulses
     If absent: CPR, Accelerated transport (Refer to TRAUMATIC CARDIOPULMONARY ARREST CODE 20)
   - Tracheal deviation (Refer to CHEST TRAUMA CODE 23)
   - JVD (Refer to CHEST TRAUMA CODE 23)

5. BREATHING (Refer to CHEST TRAUMA CODE 23 and RESPIRATORY DISTRESS CODE 2)
   - ASSIST VENTILATION AS REQUIRED
     - Inspect the chest
     - Palpate the chest
     - Auscultate the chest (including the heart)

6. CIRCULATION (Refer to HEMORRHAGIC SHOCK CODE 17)
   - Life threatening hemorrhage - STOP THE BLEEDING.
     For uncontrolled hemorrhage, consider use of a hemostatic agent.
   - Peripheral pulses (weak, thready, absent)
   - Capillary refill (if delayed)

7. NEUROLOGIC DEFICIT (Refer to HEAD TRAUMA/UNCONSCIOUS PATIENT CODE 19)
   - AVPU
   - Motor & Sensory
   - Pupils

Revised       01/01/12
Effective       05/0198
ILS
SECONDARY PATIENT ASSESSMENT

1. Vital Signs
2. GCS scoring parameters
3. Systematic head to toe assessment
4. Medications
5. Allergies
6. Reassure patient, provide comfort and loosen tight clothing
7. Evaluate cardiac rhythm, if indicated. (All ALS patients do not necessarily require continuous ECG monitoring or transmission of a strip to the hospital.)
8. Contact hospital as soon as patient’s condition permits. Transmit assessment information and await orders. If no radio contact can be established or patient’s condition requires immediate treatment, refer to appropriate SMO and begin intervention immediately.
9. Recheck vitals and other pertinent signs at least every 15 minutes and record, noting times. If unstable vital signs/sustained hypotension (SBP <90 on two separate readings 5 minutes apart), vital signs should be taken and recorded every 5 minutes.
10. All patients, who, in the judgment of prehospital personnel, would benefit from care derived from a Trauma Center, should be transported accordingly (Refer to FIELD TRIAGE PROTOCOLS CODE 14). If unable to ventilate, transport to nearest hospital.

NOTE TO PREHOSPITAL PROVIDERS:
In a combative or uncooperative patient, the requirement to initiate initial routine trauma care, as written, may be altered or waived in favor of rapidly transporting the patient for definitive care. Document the patient’s actions or behaviors which interfered with the performance of any assessments and/or interventions.

OUTLINE FOR RADIO REPORT (Transmit using as few words as possible)

1. Name and vehicle number of provider
2. Requested destination, closest hospital, and estimated time of arrival
3. Age, sex, and approximate weight of patient
4. Chief Complaint, to include symptoms and degree of distress
5. History of present illness/injury
6. Pertinent Medical History:
   - Allergies
   - Medications
   - Past History of Current Illness
   - Last Meal
   - Events surrounding incident
7. Clinical condition:
   - Focused and detailed patient assessment findings
8. Treatment initiated and Response

Revised 01/01/12
Effective 05/01/98
ILS
Code 17
HEMORRHAGIC SHOCK

ROUTINE TRAUMA CARE WITH 100% OXYGEN

Circulatory Assessment

Control External Hemorrhage if present

Immobilize to long board

Shock position

ECG Monitor

2 large bore IVs NS wide open*
(to be started enroute after transportation begun)**

ACCELERATED TRANSPORT

NOTE TO PREHOSPITAL PROVIDERS:
* If patient unresponsive, consider IO NS wide open.
** If total transport time <30 minutes, no IV should be attempted unless it will not delay transport to the nearest Trauma Center.

Reviewed 01/01/12
Effective 05/01/98
ILS
**SUSPECTED SPINAL CORD INJURY**

**SPINAL IMMobilization**

**Mechanism:**
- Suspected Deceleration Injuries,
- Motor Vehicle Crashes, Falls, etc.

- Spine pain/tenderness or complaint of neck/spine pain

- Physical findings suggesting neck and/or back injury

- Other painful injury identified (Distracting Injury)

- Decreased or altered level of consciousness

- Motor/Sensory Exam

- Patient is:
  - Calm
  - Cooperative
  - Alert
  - Ambulatory without pain
  - No apparent distress
  - No suspected intoxication

- Reliable patient exam

- Having an acute stress reaction
- Suspected of being intoxicated
- Have symptoms of brain injury
- Acting inappropriately
- Having difficulty communicating, such as, speaks a foreign language, deaf, etc.

**IMMOBILIZE**

**NO IMMobilIZATION NEEDED**

Reviewed 01/01/12
Effective 05/01/98
NOTE TO PREHOSPITAL PROVIDERS:
1. Do not delay transport time with multiple intubation attempts.
2. If unequal or fixed pupils and/or posturing, ventilate at 20 breaths/min.
Confirm Arrest

Yes

CPR

Maintain C-Spine in Neutral Position

Secure Airway

Ventilate with 100% OXYGEN

ACCELERATED TRANSPORT

2 large bore IV/IO NS wide open (to be started enroute after transportation begun)*

Routine Trauma Care

NOTE TO PREHOSPITAL PROVIDERS:
* If total transport time <30 minutes, no IV should be attempted unless it will not delay transport to the nearest Trauma Center.
  • If IV attempt is unsuccessful, refer to APPROPRIATE DYSRHYTHMIA CODE.
  • Consider bilateral chest decompression in Blunt Trauma.
ISOLATED EXTREMITY INJURY AND/OR AMPUTATED AND AVULSED PARTS

INITIAL TRAUMA CARE
(ABCs always take priority over the severed part)

Control bleeding with direct pressure and elevation
For uncontrolled hemorrhage:
• Consider use of a hemostatic agent
• Use a tourniquet if needed
  • Note time of placement
  • Apply as close to the injury as possible
  • DO NOT release once applied

Consider ALS Mutual Aid for Pain control

• Wrap part in sterile gauze, sheet or towel.
• Place part in waterproof bag or container and seal.
• DO NOT immerse part in any solutions.
• Place this container in a second one filled with ice, cold water or cold pack.

Transport part to hospital with patient

TRANSPORT

Revised 01/01/12
Effective 05/01/98
ILS
Code 21
Crush Injury

Suspected in extended extremity
and/or
Torso entrapment

Check for:
- Pain
- Paresthesia
- Paralysis
- Pallor
- Pulselessness

Not needed, but good indicators

INITIAL MEDICAL CARE

AIRWAY AS NEEDED
Cardiac monitor as soon as possible
Consider ALS Mutual Aid for Pain Control

PRIOR TO RELEASE OF COMPRESSION, INITIATE
- IV Normal Saline 1000ml bolus
- Albuterol (Ventolin) 2.5mg via Nebulization

If hyperkalemia suspected
and abnormal ECG rhythm - peaked T-wave or widened QRS → No → Transport

YES ↓
• ALS MUTUAL AID

TRANSPORT

NOTE TO PREHOSPITAL PROVIDERS:
Consider hypoglycemia and need for 50% Dextrose IV.

Revised 01/01/12
Effective 06/01/06
ILS
Suspension trauma is a term used to describe the condition where a person is trapped in an upright position while using a safety harness for fall protection.

**INITIAL MEDICAL CARE**

**AIRWAY AS NEEDED**
Do NOT allow the patient to lie flat or stand up. Provide oxygen at 100% for all patients. Manually stabilize the C-Spine via all possible means (KED), but do not lie the patient flat.

**FULLY CONSCIOUS and MOBILE:**
Place Pt. in a safe position which is, sitting upright with the legs bent at the waist ('W-position') for 30 mins. Cardiac monitor as soon as possible. IV Normal Saline 1000ml bolus. Albuterol (Ventolin) 2.5mg via Nebulization.

**TRANSPORT**
Transport the patient, in the sitting position, to the nearest hospital unless in arrest.

**NOTE TO PREHOSPITAL PROVIDERS:**
Consider hypoglycemia and need for 50% Dextrose IV.
Burn patients are often victims of multiple trauma. Treatment of major traumatic injuries takes precedence over wound management. Isolated burn injury patients should be transferred to the closest available hospital.

**ASSESS**

- Total body surface area: use rule of 9s or estimate using patient’s palmar surface as 1%
- Depth of burn: partial or full thickness, consider exposure to products of combustion and treat as soon as possible.

**THERMAL**

**INITIAL TRAUMA CARE**

- OXYGEN 100% (Use humidified Oxygen, if available). Note presence of hoarseness, wheezing, stridor or productive cough and document. If present, refer to ACCELERATED TRANSPORT CODE 26

- Note quality of distal pulse in extremity burns and document.

- Burn Wound Care - Moderate to Critical Burn

- Wear sterile gloves and masks until burn wounds are covered. Remove clothing, jewelry, etc. Do not pull away clothing that is stuck to burn wound.

- COOL BURN with sterile water or saline until skin feels cool to your touch. Don’t overcool any major burn. Do not use ICE directly on burn. Cover burn wound with sterile dressing. Moisten with Normal Saline. DO NOT BREAK BLISTERS. DO NOT APPLY CREAMS, OINTMENTS OR ANTIDOTES TO BURNS.

- Apply sterile dry dressing.

- Open sterile sheet on stretcher before placing patient for TRANSPORT. Cover patient with dry, sterile sheets and blanket to maintain body temperature.

**CHEMICAL**

**INITIAL TRAUMA CARE**

- Brush off excess dry chemicals

- Irrigate or flush with copious amounts of water or saline unless contraindicated.

- For eye exposures Refer to HAZARDOUS MATERIALS-EYE CODE 40

- Follow routine Burn Wound Care

- TRANSPORT

**ELECTRICAL**

**INITIAL TRAUMA CARE**

- Without placing self at risk for injury, remove patient from source of electricity or have power cut off.

- Perform spinal immobilization, apply monitor and treat dysrhythmias per appropriate SMO.

- Burn Wound Care

- Assess for entry and exit wounds, neurovascular status of affected parts.

- No cooling necessary

- Cover with dry, sterile dressings

**TRANSPORT**

**NOTE TO PREHOSPITAL PROVIDER:**

FOR ALL TYPES OF BURNS:

- Consider ALS Mutual Aid

Revised 01/01/12
Effective 05/01/98

ILS
Code 23

CHEST TRAUMA

Sucking Chest Wound?

Partially Occlusive Dressing

Reassess

Flail Chest?

Assure Adequate Ventilation

Reassess

Tension Pneumothorax?

Needle Decompression

Reassess

Massive Hemothorax?

ACCELERATED TRANSPORT

Pericardial Tamponade?

Refer to HEMORRHAGIC SHOCK CODE 17

TRANSPORT

Chest Assessment
Principles of Management

A. Routine Trauma Care

B. Increased IV volume is needed. Establish IV. If total transport time is less than 30 minutes, no IV should be attempted unless it will not delay transport to the nearest Trauma Center

C. Check externally for uterine contractions.

D. Check externally for vaginal bleeding.

E. Unless spinal injury is suspected, transport the patient on her left side to minimize uterine compression of the inferior vena cava.

F. If a patient with suspected spinal injury becomes hypotensive while supine on backboard, elevate right side of backboard to relieve pressure on vena cava from uterus.

G. Manually displace the uterus to the left side during CPR.
INITIAL MANAGEMENT OF THE PEDIATRIC TRAUMA PATIENT

- Assess ABCs
- Administer 100% OXYGEN
- Immobilize spine as indicated
- Complete initial assessment, including *Pediatric Trauma Score
- Cardiac monitor
- Keep warm

Refer to HEAD TRAUMA CODE 19 as indicated

Ventilation, respiratory effort adequate

- Control hemorrhage
- Establish vascular access IV/IO NS @ TKO**
- **Fluid bolus** 20ml/kg until SBP >80
- Pulse oximetry
- Reassess perfusion
- Repeat IV fluid bolus as indicated to a maximum of 60ml/kg** or until SBP >80

Normal perfusion

- Splint/immobilize fracture(s) as indicated

Hypoperfusion*

- Support ABCs
- Keep warm
- Observe
- TRANSPORT

Refer to PEDIATRIC SHOCK CODE 57 OR PEDIATRIC CARDIAC ARREST CODE 51 as indicated

Inadequate ventilation, respiratory effort

- Jaw thrust
- Relieve upper airway obstruction as indicated
- Assist ventilation with BVM as indicated
- Secure airway as appropriate

NOTE TO PREHOSPITAL PROVIDERS:

* Refer to PEDIATRIC ASSESSMENT AND TRAUMA SCORE CODE 28.
** If total transport time <30 minutes, no IV/IO should be attempted unless it will not delay transport to the nearest Trauma Center.
Certain situations require treatment within minutes. These situations occur when a problem is discovered in the primary survey that cannot be rapidly resolved by field intervention. Only airway and spinal immobilization should be managed prior to transport. Further efforts at stabilization should be performed enroute and should not delay transport.

If circumstances demand hospital care for patient stability, rapid transport is indicated. Each case will be unique and compelling reasons must be documented. Notify the receiving hospital of the situation so that preparations can be made. Primary resuscitative measures must be initiated. Establish contact with medical control as soon as possible.
I. Routine Trauma Care

A. Airway - Keep suction available
   - C-Spine immobilization

B. Breathing
   1. Note changes in ventilation rates by age
   2. 100% OXYGEN
   3. Assist ventilations as needed

C. Circulation
   1. Note variation of normal values
   2. IV access more difficult
      - Antecubital fossa ideal
      - May attempt external jugular
      - Intraosseous line if patient unconscious and not able to begin peripheral line
   3. Shock resuscitation = 20ml/kg NS bolus (estimate weight in kg)

II. Treatment of Suspected Battered or Abused Child
(Refer to SUSPECTED CHILD ABUSE AND NEGLECT CODE 65):

A. Treat obvious injuries

B. If parents refuse to let you transport the child after treatment:
   1. Remain at the scene
   2. Call for police assistance
   3. Request that the officer place the child under protective custody
   4. Assist with transport

C. You are required by law to report your suspicions to the Department of Children and Family Services (DCFS). Also, document and report your suspicions to the ED physician and/or charge nurse.

D. Carefully document history, physical findings and environmental surroundings on patient care report.
**Indicators of hypoperfusion:**

- Respiratory difficulty
- Cyanosis despite oxygen administration
- Truncal pallor/cyanosis and coolness
- Hypotension (ominous sign)
- Bradycardia (late sign)
- Weak, thready, or absent peripheral pulses
- Decreasing consciousness
- No palpable blood pressure

### Pediatric vital signs:

<table>
<thead>
<tr>
<th></th>
<th>Newborn</th>
<th>1 year</th>
<th>3 years</th>
<th>6 years</th>
<th>10 years</th>
<th>15 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse</td>
<td>100-160</td>
<td>90 - 120</td>
<td>80 - 120</td>
<td>70 - 110</td>
<td>60 - 90</td>
<td>60 - 90</td>
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<tr>
<td>Respirations</td>
<td>30- 60</td>
<td>20 - 30</td>
<td>20 - 30</td>
<td>18 - 25</td>
<td>15 - 20</td>
<td>15 - 18</td>
</tr>
<tr>
<td>Systolic Pressure</td>
<td>50- 90</td>
<td>80 - 100</td>
<td>80 - 110</td>
<td>80 - 110</td>
<td>90 - 120</td>
<td>100 - 130</td>
</tr>
</tbody>
</table>

### Pediatric Trauma Score*:

<table>
<thead>
<tr>
<th>Component</th>
<th>+2</th>
<th>+1</th>
<th>-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>&gt;20 kg</td>
<td>10-20 kg</td>
<td>&lt;10 kg</td>
</tr>
<tr>
<td>Airway</td>
<td>Normal</td>
<td>Maintainable</td>
<td>Unmaintainable</td>
</tr>
<tr>
<td>CNS</td>
<td>Awake</td>
<td>Obtunded</td>
<td>Coma</td>
</tr>
<tr>
<td>Systolic BP or <strong>Pulse Palpable</strong></td>
<td>&gt;90mmHg</td>
<td>90-50mm Hg</td>
<td>&lt;50 mmHg or No Pulse Palpable</td>
</tr>
<tr>
<td>Open Wound</td>
<td>None</td>
<td>Minor</td>
<td>Major</td>
</tr>
<tr>
<td>Skeletal Injury</td>
<td>None</td>
<td>Closed Fx</td>
<td>Open/Multiple Fx</td>
</tr>
</tbody>
</table>

*If proper size BP cuff is unavailable, BP may alternatively be assigned by determining pulse palpable point.

**TOTAL POINTS**

(Total points range from -6 to +12)
PEDIATRIC BURNS
THERMAL, ELECTRICAL, CHEMICAL

•Assess scene safety. As indicated:
  • Remove patient to safety
  • Appropriate body substance isolation
•Assess ABCs
•Administer 100% OXYGEN
•Complete initial assessment. Assess for:
  • Wheezing
  • Retractions
  • Stridor
  • Diminished respirations or apnea
  • Tachypnea
  • Grunting
  • Decreasing consciousness
•Refer to INITIAL MGMT OF THE PEDS TRAUMA PT CODE 25
•Assess percentage/depth of burn
•Remove constricting jewelry and clothes.

THERMAL BURNS
Superficial (1st degree)
• Cool burned area with water or saline
• If <20% body surface involved, apply sterile saline soaked dressings. DO NOT OVER COOL major burns or apply ice directly to burned areas.
Partial or Full thickness (2nd or 3rd degree)
• Wear sterile gloves/mask while burn areas exposed
• Cover burn wound with DRY sterile dressings
• Place patient on clean sheet on stretcher and cover patient with dry clean sheets and blanket to maintain body temperature.
• Establish vascular access IV/IO NS @ TKO as indicated
• Refer to PEDIATRIC SHOCK CODE 57 as indicated.

ELECTRICAL BURNS
• Immobilize as indicated
• Assess cardiac monitor for dysrythmias and treat according to appropriate protocol
• Establish vascular access IV/IO NS @ TKO as indicated
• Identify and document any entrance and exit wounds
• Assess neurovascular status of affected part
• Cover wounds with dry sterile dressings

CHEMICAL BURNS
• Refer to PEDIATRIC TOXIC EXPOSURE/INGESTIONS CODE 61
• If powdered chemical, brush away excess
• Remove clothing if possible
• Rapid visual acuity
• If eye involvement, irrigate with saline or sterile water continuously. DO NOT CONTAMINATE THE UNINJURED EYE WITH EYE IRRIGATION
• Irrigate area with copious amounts of sterile water or saline ASAP and during transport
• Establish vascular access IV/IO NS @ TKO as indicated

SPECIAL CONSIDERATIONS:
• Assess for potential child abuse and follow appropriate reporting mechanism
• Keep the child warm and protect from hypothermia. Be cautious with cool dressings.
• Pulse oximetry as directed by Medical Control

ESTIMATING % OF BODY SURFACE AREA

<table>
<thead>
<tr>
<th>Body Area</th>
<th>0-1</th>
<th>1-4</th>
<th>4-9</th>
<th>10-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>19%</td>
<td>17%</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>Neck</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Chest or Back</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Buttock (each)</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Genitalia</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Upper Arm (each)</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Lower Arm (each)</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Hand (each)</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Thigh (each)</td>
<td>5.5%</td>
<td>6.5%</td>
<td>8.5%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Lower leg (each)</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Foot (each)</td>
<td>3.5%</td>
<td>3.5%</td>
<td>3.5%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>
STANDING MEDICAL ORDERS

PROTOCOLS FOR MEDICAL EMERGENCIES

Reviewed 01/01/12
Effective 05/01/98
ILS
ACUTE ASTHMA/COPD WITH WHEEZING

INITIAL MEDICAL CARE*

TRANSPORT IMMEDIATELY DO ALL TREATMENT ENROUTE

ALBUTEROL (Ventolin)
2.5mg via nebulizer
(may repeat x1)

May administer patient’s EPINEPHRINE PEN, if available

Continue TRANSPORT

AT THE DESCRETION OF A PHYSICIAN/ECRN:
1. Administer EPINEPHRINE 1:1000 @ 0.01mg/kg
   up to 0.3mg IM (may repeat in 15 minutes).
2. CPAP if available

NOTE TO PREHOSPITAL PROVIDERS:
1) *OXYGEN @ 2 - 6L/min. If severe respiratory distress or cyanosis, 15L NRB
2) IV optional unless patient is in severe respiratory distress or pending failure
3) For pediatric patients, refer to PEDIATRIC RESPIRATORY DISTRESS CODE 55.
4) If intubation required, may give ALBUTEROL (Ventolin) in-line via ET tube.
5) For prolonged geographical transport, consider METHYLprednisolone (Solu-Medrol) 125mg IV push.
INITIAL MEDICAL CARE

If swelling is increasing rapidly, apply a tourniquet proximal to injection site or insect bite.

Ventilate as necessary

SBP >90
Alert, skin warm and dry
(Local reaction)

May administer patient’s EPINEPHRINE PEN, if available

DIPHENHYDRAMINE (Benadryl) 50mg IVP slowly over 2-3 minutes
If no IV, 50mg IM

Improved?

No

In presence of facial swelling, wheezing or tongue swelling
EPINEPHRINE 1:1000
0.3-0.5mg IM

If wheezing is present, ALBUTEROL (Ventolin) Nebulizer Treatment
Refer to ASTHMA/COPD CODE 30

TRANSPORT

Yes

SBP <90
Altered level of consciousness, signs of hypoperfusion (Systemic Reaction)

Maintain airway. If obstructed due to edema, attempt ET.
OXYGEN 100%

IV wide open

EPINEPHRINE 1:10,000
0.3-0.5mg IVP
If no IV, EPINEPHRINE 1:1,000
0.3 - 0.5mg IM
May repeat x1 in 5 minutes

DIPHENHYDRAMINE (Benadryl) 50mg IVP slowly over 2-3 minutes
(If no IV, 50mg IM)

If respiratory distress
ALBUTEROL Nebulizer Treatment
Refer to ACUTE ASTHMA/COPD CODE 30

TRANSPORT

NOTE TO PREHOSPITAL PROVIDERS:
• IV lines should not be started in same extremity as a bite or injection of allergen.
• For prolonged geographical transport, consider

Revised 01/01/12
Effective 05/01/98
ILS
**DIABETIC/GLUCOSE EMERGENCIES**

**INITIAL MEDICAL CARE**
(Include history of time last medication taken and whether or not patient has eaten.)

Obtain blood sugar level reading

If patient is awake and gag reflex intact, administer small amounts of sugar solution sublingually if unable to establish IV.

**Blood sugar level <60 or signs & symptoms of Insulin Shock or Hypoglycemia**

50% DEXTROSE 50ml IV OR GLUCAGON 1mg IM/IN, if available (If IV not able to be established)

If none or limited response: may repeat DEXTROSE IVP

**Blood sugar level >180 or signs & symptoms of Ketoacidosis**

IV NS – 200ml bolus May repeat at Physician discretion

**TRANSPORT**

Revised 01/01/12
Effective 05/01/98
ILS
**Code 33**

**DRUG OVERDOSE**

**ALCOHOL RELATED EMERGENCIES/POISONING**

**INITIAL MEDICAL CARE**

Obtain Blood Glucose Reading

If suspected narcotic or synthetic narcotic overdose and respiratory rate <12
Administer **NALOXONE** (Narcan) 2mg IV/IM/IN
(Consider restraints prior to administration.)
May be repeated every 5 minutes as necessary, up to 6mg.

If blood sugar level <60:
**DEXTROSE** 50% 50ml IVP
**OR**
**GLUCAGON** 1mg IM/IN
(If IV not able to be established)

**TRANSPORT**

---

**NOTE TO PREHOSPITAL PROVIDERS:**
*Refer to PEDIATRIC ALTERED LEVEL OF CONSCIOUSNESS CODE 60, as needed*

---

**SUSPECTED TRICYCLIC ANTIDEPRESSANT OVERDOSE**

**INITIAL MEDICAL CARE**

Consider ALS Mutual Aid

**TRANSPORT**

---

**TRICYCLIC ANTIDEPRESSANTS INCLUDE:**
AMITRIPTYLINE, AMOXAPINE, ASCENDIN, DESIPRAMINE, DESYREL, ELAVIL, ENDEP, IMIPRAMINE, LUDIOMIL, NORPARMINE, PAMELOR, SINEQUAN, TRIAVIL, TOFRANIL, and others
COMA OF UNKNOWN ORIGIN (NO HISTORY OF TRAUMA)

INITIAL MEDICAL CARE

Assess level of consciousness using Glasgow Coma Scale

Obtain Blood Glucose Reading
If <60
DEXTROSE 50ml of 50% IVP
OR
GLUCAGON 1mg IM/IN, if available (If IV not able to be established)

If respiratory rate <12
Administer NALOXONE (Narcan) 2mg IV/IM/IN, if available (Consider restraints prior to administration)
May be repeated every 5 minutes as necessary, up to 6mg.

Monitor neuro status, vital signs, ECG and transport patient secured to backboard.
Protect airway - be prepared to suction and/or intubate if no gag reflex present.

TRANSPORT

Revised 01/01/12
Effective 05/01/98
ILS
**Code 35**

**SEIZURES/STATUS EPILEPTICUS**

**INITIAL MEDICAL CARE**
- Protect patient from injury
- Protect patient airway

Obtain Blood Glucose Reading
  - If <60
  - OR signs and symptoms of Insulin Shock or Hypoglycemia
    - DEXTROSE 50ml of 50% IVP
    - OR
    - GLUCAGON 1mg IM/IN, if available

If seizure activity > 2 - 3 minutes,
- ALS MUTUAL AID

**TRANSPORT**

* Refer to **PEDIATRIC SEIZURES CODE 59**, as indicated
HEAT EMERGENCIES

INITIAL MEDICAL CARE

HEAT CRAMPS OR TETANY
(IV may not be necessary)
Allow for oral intake of water or
electrolyte replacement fluids

Move patient to a cool environment,
do not massage cramped muscles

TRANSPORT

HEAT STROKE

B/P <90
IV NS fluid challenge in
200ml increments up to 1000ml
(if lungs remain clear)
OR
until SBP >90

Move patient to a cool environment

B/P >90
IV NS TKO

Move patient to a cool environment

Place in semi-reclining position with head elevated.
Take seizure precautions.

Increase OXYGEN to 100%.
When indicated,
intubate and use positive pressure ventilations.

Initiate rapid cooling:
• Remove as much clothing as possible.
• Cool packs to lateral chest wall, groin, axilla, carotid arteries, temples, and behind knees
and/or sponge with cool water or cover with wet sheet and fan the body.

TRANSPORT

HEAT EXHAUSTION OR SYNCOPE
IV NS rapid rate- regular tubing
If B/P <90, IV wide open,
establish second IV.

Move patient to a cool environment

Place in supine position with feet elevated

Remove as much clothing as possible to facilitate cooling

TRANSPORT

Code 36

Reviewed 01/01/12
Effective 05/01/98
ILS
Frostbite

- Move patient to a warm environment as soon as possible
- Handle skin like a burn
- Protect with light sterile dressings.
- Do not let skin rub on skin (between fingers or toes).
- Cover patient and prevent re-exposure.

Systemic Hypothermia

Mild/Moderate 93.2 - 86 F (34-30 C)
  - Conscious
  - OR
  - Altered sensorium with shivering
- OXYGEN 12-15 L/mask
- IV NS TKO (Attempt to warm IV bag and tubing with hot packs)
- Rewarm patient:
  - Place patient in a warm environment.
  - Remove wet clothing.
  - Apply hot packs wrapped in towels to axilla, groin, neck, thorax.
  - Wrap patient in blankets.

Severe Hypothermia

86 F or less (<30 C):
- Handle patient very gently to avoid precipitating V-Fib.
- Patient may appear uncoordinated with poor muscle control, or stiff simulating rigor mortis.
- There will be NO SHIVERING.
- Level of consciousness may be confused, lethargic and/or withdrawn
- Coma

- OXYGEN 100%
- Do not hyperventilate
- IV NS TKO (Attempt to warm IV bag and tubing with hot packs)

Transport

At discretion of a physician or ECRN:
- ALS Mutual Aid for Pain Control

Note to Prehospital Providers:
- Assess pulse for 30-45 seconds before beginning CPR.
- Do not give any drugs!
- May attempt defibrillation X 1 at maximum setting

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Effective 05/01/98
ILS
**Code 38**

**SUSPECTED STROKE**

**INITIAL MEDICAL CARE**

Perform Cincinnati Pre-Hospital Stroke Scale*

Identify patients last “known normal”

If Stroke scale positive and “last known normal” < 3 hours, transport to the nearest most appropriate facility.

*Do not delay scene time. Initiate rapid transport.*

Consider ALS Mutual Aid

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**Blood Glucose**

< 60 or > 400

**GO TO CODE 32**

**12 Lead EKG, if available**

**Other SMO CODE’s as indicated:**

- Coma of Unknown Origin
- Seizures

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*Cincinnati Prehospital Stroke Scale*

Facial Droop (Have the patient show teeth or smile)

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

Arm Drift (Patient closes eyes and holds both arms straight out for 10 seconds)

- Normal – Both arms move the same or both arms do not move at all (other findings, such as pronator grip, may be helpful)
- Abnormal – One arm does not move or one arm drifts down compared with the other

Speech (Have the patient say, "You can't teach an old dog new tricks.")

- Normal – Patient uses correct words with no slurring
- Abnormal – Patient slurs words, uses inappropriate words, or is unable to speak
PROTECT YOURSELF FIRST: 
ALL PERSONNEL SHOULD BE APPROPRIATELY TRAINED AND 
HAVE PROTECTIVE CLOTHING AS INDICATED

Identify substance, if possible
Contact local HazMat Unit*

Isolate

Brush off solid substances, remove contaminated clothing and decontaminate as indicated
The decontaminate should be contained if possible.

Maintain Airway. Administer OXYGEN 12-15L/min. by mask, 
or consider intubation, if indicated, using 100% OXYGEN.

Cardiac monitoring

IV NS TKO

Treat per SMO:
Shock
Cardiac dysrhythmias
Pulmonary edema
Seizures
Burns (Chemical)
Unconsciousness
Asthma/COPD with Wheezing
Frostbite

Refer to HAZARDOUS MATERIALS EYE CODE 40, for eye exposures

Treat specific poisons with antidotes per Medical Control

TRANSPORT
HAZARDOUS MATERIALS
EYE

Indication: Suspected or actual HazMat eye exposure
(Refer to HAZARDOUS MATERIALS GENERAL CODE 39 as needed)

- Identify substance
- Decontamination
- Initial Medical Care

Consider ALS Mutual Aid to provide local anesthesia for eyes

- Establish Medical Control contact ASAP
- Eye irrigation with Normal Saline may be instituted prior to contact.
  Irrigate at "wide-open" rate, using IV tubing attached to 1000ml NS

Confirm that contact lenses are not present, or remove if present.

Volume to be used is 1000ml Normal Saline per eye, minimum.
For suspected or actual alkali exposure, continue irrigation until advised by Medical Control to stop.

TRANSPORT
HAZARDOUS MATERIALS
PESTICIDE/NERVE AGENT

**Indications:**
Poisoning with anticholinesterase agents (e.g., chemicals or pesticides of the organophosphate class)

**Signs & Symptoms:**
- Bradycardia leading to heart block
- Chest tightness and wheezing due to bronchospasm
- Increased salivation, sweating and tearing
- Increased urination
- Abdominal cramps with nausea and vomiting
- Constricted pupils
- Weakness, muscle tremors/twitching/cramps
- Seizures, coma, shock, respiratory arrest

- Identify substance
- Decontamination
- Initial Medical Care

Establish Medical Control contact ASAP

**ATROPINE**
2mg IVP (0.02mg/kg if pediatric)
every 5 minutes until:
Secretions are significantly diminished

Signs and symptoms persist after initial 2mg bolus?

- **NO**
  - TRANSPORT
  
- **YES**
  - Is patient seizing?
    - **NO**
      - TRANSPORT
    
    - **YES**
      - Refer to [SEIZURES/STATUS EPILEPTICUS CODE 35]
        - TRANSPORT
HAZARDOUS MATERIALS
RADIATION

Protect Yourself First:
Keep each rescuer’s exposure time to a minimum. (Female paramedics who are pregnant or may be pregnant should stay out of the radiation area).

Identify universal radiation symbol (if possible)

Isolate area and contact local Haz Mat Unit

Treat patients per appropriate SMO

Notify receiving hospital of patient condition and exposure.

TRANSPORT
Venous Access in a Dialysis Patient

Consider ALS Mutual Aid for IV access to fistula.

Cardiac Arrest in a Dialysis Patient

In the event of cardiac arrest, follow the appropriate SMO, including dosage of medications.

DO NOT GIVE EXCESSIVE FLUIDS. Use enough IV fluid to establish a B/P then maintain a TKO rate.

Consider ALS Mutual Aid.

Pulmonary Edema in a Dialysis Patient

Give high flow OXYGEN via a non-rebreather mask if possible. Place patient in upright position. May assist patient’s preload and afterload status with NITROGLYCERIN SL. Refer to PULMONARY EDEMA DUE TO HEART FAILURE CODE 13.
INITIAL TRAUMA CARE
(C-spine precautions as indicated)
Begin CPR if indicated

OXYGEN to 100%

Remove wet clothing - consider hypothermia

Awake, alert, or semi-conscious with purposeful response to pain, normal respirations and pupil response

TRANSPORT

Comatose: unresponsive to verbal stimuli, abnormal response to pain, abnormal respirations or pupil response

Normothermic

Treat dysrhythmias refer to APPROPRIATE SMO

TRANSPORT

Hypothermic

Treat dysrhythmias refer to COLD EMERGENCIES CODE 37

TRANSPORT

NOTE TO PREHOSPITAL PROVIDERS:
After 90 minutes of documented submersion time, the receiving hospital should be contacted for concurrence of no resuscitative efforts on recovery of the patient. The Dive Team will at this time go from rescue to recovery mode.

Reviewed 01/01/12
Effective 05/01/98
ILS
REGION 7

STANDING MEDICAL ORDERS

OBSTETRIC/GYNECOLOGICAL PROTOCOLS
EMERGENCY CHILDBIRTH
LABOR AND DELIVERY

Obtain history and determine if there is adequate time to transport.
- # of pregnancies
- # of live births
- Due date
- How far apart are contractions
- Duration of contractions
- Length of previous labors - in hours
- Bag of waters intact or time since membrane rupture
- High risk concerns - Drug use, multiple births, amniotic fluid color

If mother is hyperventilating encourage slow deep breaths.
Administer OXYGEN 12-15L/mask

PREPARE FOR DELIVERY IF ANY OF THE FOLLOWING ARE PRESENT:
- Bulging perineum
- Crowning

DO NOT ATTEMPT TO RESTRAIN OR DELAY DELIVERY

Place mother in a supine position, put on sterile gloves, open OB pack and drape mother’s abdomen and perineum.

Cord around neck  Delivery  Normal presentation

In unable to loosen and remove cord from around infant’s neck, clamp x2 and cut between clamps.

Control delivery of head so it does not emerge too quickly. Support infant’s head as it emerges and protect perineum with gentle hand pressure. Tear amniotic membrane if it is still intact and visible outside vagina. When infant’s head delivered, suction and maintain airway. As shoulders emerge, guide head and neck downward to deliver anterior shoulder. Support and lift head and neck slightly to deliver posterior shoulder. Remainder of infant’s delivery should occur with passive participation. Maintain a firm hold on the baby.
Refer to RESUSCITATION AND CARE OF THE NEWBORN CODE 48

Wrap in blanket and position on side or back with constant airway monitoring

Administer post-partum care - Refer to MATERNAL CARE CODE 49

TRANSPORT
OBSTETRICAL COMPLICATIONS

THIRD TRIMESTER BLEEDING - 6-9 MONTHS
(Placenta Previa, Abruptio Placenta, Trauma)

TRANSPORT IMMEDIATELY

IV NS, run to maintain systolic B/P > 90mmHg, 100% OXYGEN, place mother on LEFT side

Note type and amount of bleeding and/or discharge. Do NOT place gloved hand in vagina to check for bleeding. Palpate uterus externally for tonicity

TRANSPORT

PRE-ECLAMPSIA OR TOXEMIA

TRANSPORT IMMEDIATELY

OXYGEN 12-15 L/mask

INITIAL MEDICAL CARE:
Gentle handling

Place mother on LEFT side

Minimal CNS stimulation - do not check pupillary light reflex

Seizure precautions

If seizures occur: Increase OXYGEN to 100% and Consider ALS Mutual Aid

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ILS
ABNORMAL DELIVERIES

PROLAPSED CORD

TRANSPORT IMMEDIATELY

INITIAL MEDICAL CARE:
Increase OXYGEN to 100%

Elevate mother’s hips

Place gloved hand in vagina between pubic bone and presenting part with cord between fingers and exert counterpressure against presenting part

Keep exposed cord moist and warm

Keep hand in position while enroute

BREECH BIRTH

• Accelerated transport indicated with care enroute

• NEVER ATTEMPT TO PULL THE BABY FROM THE VAGINA BY THE LEGS OR TRUNK.

• As soon as legs are delivered, support baby’s body, wrapped in towel.

• After shoulders are delivered, gently elevate trunk and legs to aid in delivery of head (if face down). Head should deliver in 30 seconds. IF NOT, reach two gloved fingers into the vagina to locate infant’s mouth. Press vaginal wall away from baby’s mouth to form an airway and apply gentle pressure to mother’s mid upper abdomen. Maintain this position until delivery or arrival at the hospital.

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Effective 05/01/98
ILS
RESUSCITATION AND CARE OF THE NEWBORN

Infant Care

Begin Infant Prehospital Care Report

Document time of delivery

Is meconium present?

No

Quickly dry baby & continue airway support. Spontaneous respirations should begin within 15 seconds after stimulating reflexes. If not, begin ventilations at 40-60 breaths per minute. If no brachial pulse or pulse <60, begin CPR at 3 to 1 and accelerated transport. Refer to Code 51

Obtain one minute APGAR SCORE

Wait for cord pulsations to stop. Clamp cord 6-8 inches from infant’s body. Cut between clamps with sterile knife or scissors.

Dry baby, wrap in chux or blanket to maintain body heat. Utilize an infant hat, if available. If in cold environment, wrap aluminum foil or silver swaddler around blanket to insulate. If placenta has delivered, it may be used as a heat source. Place placenta in plastic bag and wrap infant and placenta in blanket insulated with foil.

Place infant on side, preferably head lower than trunk, suction as needed. IF INFANT IS CYANOTIC, BUT BREATHING SPONTANEOUSLY, place adult face mask next to infant’s face & administer OXYGEN at 6L/minute.

Obtain five minute APGAR SCORE and document on report form.

Place ID tags on mother and infant.

Yes

Is infant limp?

No

Clear airway
Intubate as soon as possible. Refer to MECONIUM ASPIRATOR (CODE 84) 1 time. Attempt to ventilate with BVM

Able to ventilate?

Yes

Continue to repeat MECONIUM ASPIRATOR (CODE 84) and attempt to ventilate with BVM until able to ventilate

ACCELERATED TRANSPORT

No

THE APGAR SCORE

<table>
<thead>
<tr>
<th>Sign</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (Skin Color)</td>
<td>Blue, pale</td>
<td>Body pink, extremities blue</td>
<td>Completely pink</td>
</tr>
<tr>
<td>Pulse Rate (Heart Rate)</td>
<td>Absent</td>
<td>Below 100</td>
<td>Above 100</td>
</tr>
<tr>
<td>Grimace (Irritability)</td>
<td>No Response</td>
<td>Grimaces</td>
<td>Cries</td>
</tr>
<tr>
<td>Activity</td>
<td>Limp</td>
<td>Some flexion of extremities</td>
<td>Active Motion</td>
</tr>
<tr>
<td>Respiratory (Effort)</td>
<td>Absent</td>
<td>slow and irregular</td>
<td>Strong Cry</td>
</tr>
</tbody>
</table>

TOTAL SCORE=

Score 1 min 5 min

TRANSPORT

Reviewed 01/01/12
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TRANSPORT IMMEDIATELY

Allow the placenta to deliver on its own, but **DO NOT** delay transport waiting for it. (It should deliver within 20 - 30 minutes.) **DO NOT** pull on cord to facilitate delivery. If delivered, collect placenta in a plastic bag and bring to hospital.

If the perineum is torn and bleeding, apply direct pressure with a sterile dressing or sanitary pad.

Observe for profuse bleeding (>500ml). If present, massage uterus and give 1000ml bolus of NS IV.

Mother may be encouraged to breastfeed to stimulate uterine contraction.

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ILS
REGION 7

STANDING MEDICAL ORDERS

PEDIATRIC PROTOCOLS
I. SCENE SIZE UP

* Identify possible hazards.
* Assure safety for patient and responder.
* Observe for mechanism of injury/nature of illness.
* Note anything suspicious at the scene, i.e., medications, household chemicals, other ill family members.
* Assess any discrepancies between the history and the patient presentation, i.e., infant fell on hardwood floor - however floor is carpeted.
* Initiate appropriate body substance isolation (BSI) precautions
* Determination of number of patients.

II. GENERAL APPROACH TO THE STABLE/CONSCIOUS PEDIATRIC PATIENT

A. Assessments and interventions must be tailored to each child in terms of age, size and development.
   * Smile if appropriate to the situation.
   * Keep voice at even quiet tone, don’t yell.
   * Speak slowly, use simple, age appropriate terms.
   * Use toys or penlight as distracters; make a game of assessment.
   * Keep small children with their caregiver(s);
   * Kneel down to the level of the child if possible.
   * Be cautious in use of touch. In the stable child, make as many observations as possible before touching (and potentially upsetting) the child.
   * Adolescents may need to be interviewed without their caregivers present if accurate information is to be obtained regarding drug use, alcohol use, LNMP, sexual activity, child abuse.

B. While walking up to the patient, observe/inspect the following:
   * General appearance, age appropriate behavior.
   * Maltreated appearance? Is child looking around, responding with curiosity or fear, playing, sucking on a pacifier or bottle, quiet, eyes open but not moving much or uninterested in environment?
   * Obvious respiratory distress or extreme pain.
   * Position of the child. Are the head, neck or arms being held in a position suggestive of spinal injury? Is the patient sitting up or tripoding?
   * Level of consciousness, i.e., awake vs asleep or unresponsive.
   * Muscle tone: good vs limp.
   * Movement: spontaneous, purposeful, symmetrical.
   * Color: pink, pale, flushed, cyanotic, mottled.
   * Obvious injuries, bleeding, bruising, impaled objects or gross deformities.
   * Determine weight - Use length/weight tape to determine kilos for medication administration. A length/weight tape will be utilized to determine medication dosing.
III. INITIAL ASSESSMENT

A. Airway Access/Maintenance with Cervical Spine Control
   * Maintainable with assistance: positioning.
   * Maintainable with adjuncts: oral airway, nasal airway.
   * Maintainable with endotracheal tube.
   * Listen for any audible airway noises, i.e., stridor, snoring, gurgling, wheezing.
   * Patency: suction secretions as necessary.

B. Breathing
   * Rate and rhythm of respirations. Compare to normal rate for age and situation.
   * Chest expansion - symmetrical.
   * Breath sounds - compare both sides and listen for sounds (present, absent, normal, abnormal).
   * Positioning - sniffing position, tripod positions.
   * Work of breathing - retractions, nasal flaring, accessory muscle use, head bobbing, grunting.

C. Circulation
   * Heart rate - compare to normal rate for age and situation.
   * Central/truncal pulses (brachial, femoral, carotid) - strong, weak or absent.
   * Distal/peripheral pulses - present/absent, thready, weak, strong.
   * Color - pink, pale, flushed cyanotic, mottled.
   * Skin temperature - hot, warm, cool.
   * Blood pressure - compare to normal for age of child. Must use appropriate sized cuff.
   * Hydration status - anterior fontanel in infants, mucous membranes, skin turgor, crying tears, urine output history.

D. Disability - Brief Neuro Examination
   * Assess Responsiveness
     A     Alert
     V     Responds to verbal stimuli
     P     Responds to painful stimuli
     U     Unresponsive
   * Assess pupils
   * Assess for transient numbness/tingling.

E. Expose and Examine
   * Expose the patient as appropriate based on age and severity of illness.
   * Initiate measures to prevent heat loss and keep the child from becoming hypothermic.

IV. FOCUSED HISTORY/PHYSICAL ASSESSMENT

A. Tailor assessment to the needs of the patient. Rapidly examine areas specific to the chief complaint.
   * S  Signs & Symptoms as they relate to the chief complaint.
   * A  Allergies to medications, foods, environmental
   * M  Medications: prescribed, over-the-counter, compliance with prescribed dosing regimen, time, date and amount of last dose
   * P  Past Pertinent Medical History
      - Pertinent medical or surgical problems
      - Preexisting diseases/chronic illness
      - Previous hospitalizations
      - Currently under medical care
      - For infants, obtain a neonatal history (gestation, prematurity, congenital anomalies, was infant discharged home at the same time as the mother)
   * L  Last oral intake of liquid/food ingested.
   * E  Events surrounding current problem
      - Onset, duration and precipitating factors
      - Associated factors such as toxic inhalants, drugs, alcohol
      - Injury scenario and mechanism of injury
      - Treatment given by caregiver

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Effective 05/01/98
ILS
B. Responsive Medical Patients
   * Perform rapid assessment based on chief complaint. A full review of systems may not be necessary. If chief complaint is vague, examine all system.

C. Unresponsive Medical Patients
   * Perform rapid assessment: ABCs, quick head-to-toe exam.
   * Emergency care based on signs and symptoms, initial impressions and standard operating procedures.

D. Trauma patient with NO significant mechanism of injury.
   * Focused assessment is based on patient complaint.

E. Trauma patient WITH significant mechanism of injury
   * Perform rapid assessment of all body systems.

V. DETAILED ASSESSMENT

A. Performed to detect non-life-threatening conditions and to provide care for those conditions/injuries. Usually performed enroute. May be performed on scene if transport is delayed.
   * Inspect and palpate each of the major body systems for the following:
     * Deformities
     * Contusions
     * Abrasions
     * Penetrations/punctures
     * Burns
     * Tendermess
     * Lacerations
     * Swelling/edema
     * Instability
     * Crepitus
   * Auscultation of breath and heart sounds as well as blood pressure readings may be required in the field.

VI. ONGOING ASSESSMENT

To effectively maintain awareness of changes in the patient’s condition, repeated assessments are essential and should be performed at least every 5 minutes on the unstable patient, and at least every 15 minutes on the stable patient.

VII. CONSIDERATIONS FOR CHILDREN WITH SPECIAL HEALTHCARE NEEDS (CSHN)

* Be familiar with CSHN in your service community and with both the child as well as their anticipated emergency care needs.
* Refer to child’s emergency care plan formulated by their medical providers, if available. Understanding the child’s baseline will assist in determining the significance of altered physical findings. Parents/caregivers are the best source of information on: medications, baseline vitals, functional level/normal mentation, likely medical complications, equipment operation and troubleshooting, emergency procedures.
* Regardless of underlying condition, assess in a systematic and thorough manner. Use parents/caregivers/home health nurses as medical resources.
* Be prepared for differences in airway anatomy, physical development, cognitive development and possibly existing surgical alterations or mechanical adjuncts. Common home therapies include: respiratory support (oxygen, apnea monitors, pulse oximeters, tracheostomies, mechanical ventilators), nutrition therapy (nasogastric or gastrostomy feeding tubes), intravenous therapy (central venous catheters), urinary catheterization or dialysis (continuous ambulatory peritoneal dialysis), biotelemetry, ostomy care, orthotic devices, communication or mobility devices, or hospice care.
* Communicate with the child in an age appropriate manner. Maintain communication with and remain sensitive to the parents/caregivers and the child.
* The most common emergency encountered with these patients is respiratory related and so familiarity with respiratory emergency interventions/adjuncts/treatment is appropriate.
Code 51

PEDIATRIC CARDIAC ARREST

- Establish unresponsiveness
- Position airway
- Determine breathlessness
- Ventilate with BVM 100% OXYGEN
- Determine pulselessness
- Initiate compressions, and continue as indicated
- Maintain airway
- Quick look/cardiac monitor

Ventricular Fibrillation or Pulseless Ventricular Tachycardia

Defibrillate 2 J/kg
Resume CPR Immediately

Give 5 cycles of CPR (15 : 2)
During CPR
Secure airway and confirm placement
Establish vascular access IV/IO, Code 73
NS @ TKO

Continue CPR
Defibrillate 4 J/kg
Resume CPR immediately

EPINEPHRINE 1:10,000
IV/IO: 0.01mg/kg (0.1ml/kg)
Repeat every 3-5 minutes

Defibrillate 4 J/kg
Resume CPR immediately
Give 5 cycles of CPR (15 : 2)

LIDOCAINE-repeated every 3-5 minutes
IV/IO: 1mg/kg (maximum dose 3mg/kg)

Pulseless Electrical Activity (PEA)/Asystole

Resume CPR immediately
During CPR
Secure airway and confirm placement
Establish vascular access IV/IO
NS @ TKO

EPINEPHRINE 1:10,000
IV/IO: 0.01mg/kg (0.1ml/kg)
Repeat every 3-5 minutes

Identify and treat causes
- Severe hypoxemia
- Severe acidosis
- Severe hypovolemia
- Tension pneumothorax
- Cardiac tamponade
- Profound hypothermia

Fluid bolus 20ml/kg, may repeat as indicated to maximum of 60ml/kg

D25% IV/IO 2ml/kg
D12.5% for infants under 2 months
IV/IO 4ml/kg
NARCAN IV/IO 0.1 mg/kg

Support ABCs
Complete initial assessment
Observe
Keep warm
TRANSPORT

NOTE TO PREHOSPITAL PROVIDERS:
- Acidosis in children is primarily a problem of ventilation and oxygenation.
  1. To make D25% dilute D50% 1:1 with sterile water or normal saline
  2. To make D12.5% dilute D25% 1:1 with sterile water or normal saline
  3. To make D12.5% from D50% follow steps 1 & 2

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LS
PEDIATRIC BRADYCARDIA

Perform chest compressions if despite oxygen and ventilation, heart rate <60/min. with hypoperfusion. Continue compressions as indicated.

- Support ABCs
- Observe
- Keep warm
- TRANSPORT

Establish vascular access IV/IO NS @ TKO

EPINEPHRINE 1:10,000
IV/IO: 0.01mg/kg (0.1ml/kg)
May repeat every 3-5 minutes

ATROPINE
IV/IO: 0.02mg/kg
- Minimum dose: 0.1mg
- Maximum single dose: child- 0.5mg, adolescent-1mg
- May be repeated once in 5 minutes

Severe cardiorespiratory compromise

- Secure airway as appropriate
- Support ventilation with BVM as indicated
- Pulse oximetry

Perform chest compressions if despite oxygen and ventilation, heart rate <60/min. with hypoperfusion. Continue compressions as indicated.

NOTE TO PREHOSPITAL PROVIDERS:
- Hypoglycemia has been known to cause bradycardia in infants. Refer to PEDIATRIC ALTERED LEVEL OF CONSCIOUSNESS CODE 60
- Special conditions may apply in the presence of severe hypothermia. Refer to PEDIATRIC COLD EMERGENCIES CODE 63, as needed
- Limited pediatric data on efficacy of external pacing.

Improved cardiac status

Continued severe cardiac compromise

- Refer to PEDIATRIC CARDIAC ARREST CODE 51
Code 53
PEDiatric Tachycardia WITh POOR PerfUSION

• Assess ABCs
• Administer 100% OXYGEN
• Assess for severe cardiorespiratory compromise:
  • Respiratory distress
  • Truncal cyanosis and coolness
  • Weak, thready, or absent peripheral pulses
  • Hypotension/no palpable blood pressure
  • Decreasing consciousness
• Cardiac monitor

Pulse present? YES

Initiate CPR and Refer to APPROPRIATE PEDIATRIC CODE

NO

Evaluate Rhythm

Probable Sinus Tachycardia
• P waves present and normal
• Infant rate usually <220 bpm
• Child rate usually <180 bpm
Identify and treat possible causes:
• Fever
• Shock
• Pain
• Hypovolemia
• Hypoxia
• Drug Ingestion
• Pneumothorax
• Cardiac tamponade

Probable Supraventricular Tachycardia
• P waves absent or abnormal
• Abrupt rate change to and from normal
• Infant rate usually >220 bpm
• Child rate usually >180 bpm

Vascular access established or RAPIDLY available?

Treat as presumptive Ventricular Tachycardia

Probable Narrow Complex Tachycardia (QRS duration ≤ 0.08 sec)

Vascular access established or RAPIDLY available?

Consider ALS Mutual Aid

NOTE TO PREHOSPITAL PROVIDERS:
• Vagal maneuvers may precipitate asystole and therefore should be employed with caution and only under the direction of Medical Control in a cardiac monitored child with IV access

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ILS
PEDIATRIC TACHYCARDIA WITH ADEQUATE PERFUSION

- Assess ABCs
- Administer 100% OXYGEN
- Assess for signs of adequate perfusion:
  - No respiratory distress
  - Extremities warm and pink
  - Strong peripheral pulses
  - Conscious and alert
- Cardiac monitor

Evaluate Rhythm

Narrow Complex Tachycardia (QRS duration ≤ 0.08 sec)

Probable Sinus Tachycardia
- P waves present and normal
- Infant rate usually <220 bpm
- Child rate usually <180 bpm

Probable Supraventricular Tachycardia
- P waves absent or abnormal
- Abrupt rate change to and from normal
- Infant rate usually >220 bpm
- Child rate usually >180 bpm

Establish vascular access

Consider ALS Mutual Aid

Support ABCs
- Observe
- Keep warm
- TRANSPORT

Wide Complex Tachycardia (QRS duration ≥ 0.08 sec)

Treat as presumptive Ventricular Tachycardia

Support ABCs
- Observe
- Keep warm
- TRANSPORT

NOTE TO PREHOSPITAL PROVIDERS:
- Vagal maneuvers may precipitate asystole and therefore should be employed with caution and only when authorized by Medical Control in a cardiac monitored child with IV access

Reviewed 01/01/12
Effective 05/01/98
ILS
Code 55

PEDIATRIC RESPIRATORY DISTRESS

- Assess ABCs
- Administer 100% OXYGEN
- Complete initial assessment. Assess for:

**Reactive Airway Disease**
- wheezing
- grunting
- retractions
- tachypnea
- diminished respirations
- decreased breath sounds
- tachycardia/bradycardia
- decreasing consciousness

**Partial Airway Obstruction**
- suspected foreign body, obstruction or epiglottitis
- stridor
- choking
- drooling
- hoarseness
- retractions
- tripod position

- Avoid any agitation
- Position of comfort
- Assess tolerance of OXYGEN administration
- Per Medical Control, consider nebulized ALBUTEROL (Ventolin) 2.5mg
- Do not attempt intubation, glottic visualization, or IV access

**Reactive (Lower) Airway Disease**
- Position of comfort
- Nebulized ALBUTEROL (Ventolin) 2.5mg
- Pulse oximetry
- Cardiac monitor

**Partial (Upper) Airway Obstruction**
- Avoid any agitation
- Position of comfort
- Assess tolerance of OXYGEN administration
- Per Medical Control, consider nebulized ALBUTEROL (Ventolin) 2.5mg
- Do not attempt intubation, glottic visualization, or IV access

- Support ABCs
- Observe
- Keep warm
- TRANSPORT

Referred to PEDIATRIC RESPIRATORY ARREST CODE 56 as needed

Reviewed 01/01/12
Effective 05/01/98

ILS
Code 56
PEDIATRIC RESPIRATORY ARREST

Assess Airway

• Perform airway maneuver, maintaining in-line C-spine stabilization.
  • jaw thrust or chin lift/head tilt
  • suction
  • oropharyngeal airway
  • C-spine immobilization as indicated

Breathing resumed

• Administer 100% OXYGEN
• Support ventilation with BVM as indicated
• Secure airway as appropriate
• Establish vascular access IV/IO NS @ TKO
• Consider NALOXONE (Narcan) IV/IO/IM if respiratory rate <12: per length based Pediatric Tape
• Consider blood glucose test and administration of:
  • D25% IV/IO: 2ml/kg
  OR
  • D12.5% IV/IO for infants under 2 months*
    IV/IO 4ml/kg

Hypoperfusion**

Refer to PEDIATRIC SHOCK CODE 57 or PEDIATRIC CARDIAC ARREST CODE 51

Normal Perfusion**

• Support ABCs
• Complete initial assessment
• Cardiac monitor
• Pulse oximetry
• Observe
• Keep warm
• TRANSPORT

Chest Rise

Adequate

• Administer 100% OXYGEN
• Support ventilation with BVM
• Age appropriate rate

Chest Rise

Inadequate

• Direct laryngoscopy, foreign body removal with Magill forceps if indicated
• Secure airway as appropriate
• Consider needle cricothyrotomy

Relieve Upper Airway Obstruction

**Refer to PEDIATRIC ASSESSMENT AND TRAUMA SCORE CODE 28

NOTE TO PREHOSPITAL PROVIDERS:
Respiratory arrest may be a presenting sign of a toxic ingestion or metabolic disorder.

*1. To make D25% dilute D50 % 1:1 with sterile water or normal saline.
2. To make D12.5% dilute D25% 1:1 with sterile water or normal saline.
3. To make D12.5% from D50% follow steps 1 & 2

Revised 01/01/12
Effective 05/01/98

ILS
Code 57

PEDIATRIC SHOCK

• Assess ABCs
• Secure airway as appropriate
• Administer 100% OXYGEN
• Complete initial assessment
• Cardiac monitor
• Supine position

DETERMINE ETIOLOGY OF SHOCK

DISTRIBUTIVE SHOCK
(Suspected sepsis/anaphylaxis)
• Establish vascular access IV/IO NS @ TKO
• Administer fluid bolus 20ml/kg
• If suspected allergic reaction, refer to PEDIATRIC ALLERGIC REACTION/ANAPHYLAXIS CODE 58

If no response to initial fluid bolus and history of fever/infection, repeat fluid boluses of 20ml/kg as indicated to a maximum of 60ml/kg.

CARDIOGENIC SHOCK
(History congenital heart disease/cardiac surgery/rhythm disturbance/post-cardiac arrest)
• Establish vascular access IV/IO NS @ TKO
• Identify any cardiac rhythm disturbance and refer to appropriate DYSRHYTHMIA CODE
• Per medical control, consider fluid bolus and/or DOPAMINE* per length based Pediatric Tape or Chart.

HYPOVOLEMIC SHOCK
(Suspected dehydration/volume loss/hemorrhagic shock)
• Establish vascular access IV/IO NS @ TKO
• Administer fluid bolus 20ml/kg
• If no response to initial fluid bolus, repeat at 20ml/kg as indicated to maximum of 60ml/kg.

• Support ABCs
• Pulse oximetry
• Observe
• Keep warm
• TRANSPORT

NOTE TO PREHOSPITAL PROVIDERS:
• Caution - Fluids may need to be restricted in Cardiogenic Shock.
• DOPAMINE must be administered per mini drip tubing.

Effective 01/01/12
ILS
Code 58

PEDIATRIC ALLERGIC
REACTION/ANAPHYLAXIS

- Assess ABCs
- Secure airway as indicated
- Support ventilation with BVM as indicated
- Administer 100% **OXYGEN**
- Complete initial assessment

**NOTE TO PREHOSPITAL PROVIDERS:**
- If prolonged transport, per medical control consider **DIPHENHYDRAMINE** (Benadryl) IV 1mg/kg
- Simple hives do not require any additional field treatment.
- **Avoid IV initiation or medication administration into same extremity as bite or allergen site.**
- For prolonged geographical transport, consider ALS Mutual Aid

Local Reaction

Mild Respiratory Distress

Severe Cardiorespiratory Compromise

- **EPINEPHRINE** 1:1000 @ 0.01mg/kg IM
  - Do not exceed 0.3mg (or 0.3ml)
  - May administer patient’s **EPINEPHRINE Pen**, if available

- Nebulized **ALBUTEROL** (Ventolin) 2.5mg
  - Reassess
  - Pulse oximetry

- Support ABCs
- Observe
- Keep warm
- TRANSPORT

- **EPINEPHRINE** 1:1000 @ 0.01mg/kg IM
  - Do not exceed 0.3mg (or 0.3ml)
  - May administer patient’s **EPINEPHRINE Pen**, if available

- Establish vascular access IV/IO NS @ TKO

- **EPINEPHRINE** 1:10,000 IV/IO
  - as indicated per length based Pediatric tape
  - Administer fluid bolus 20ml/kg. Repeat as indicated to a maximum of 60ml/kg
  - Cardiac monitor and pulse oximetry
  - Reassess
  - Administer continuous nebulized **ALBUTEROL** (Ventolin) for severe wheezing.

Apply ice/cold pack to site*
NOTE TO PREHOSPITAL PROVIDERS:
• Refer to PEDIATRIC RESPIRATORY ARREST CODE 56 as indicated
• NALOXONE (Narcan) should be used only for suspected ACUTE narcotic exposure.

AT THE DISCRETION OF PHYSICIAN/ECRN:
* For prolonged transport, may consider ALS Mutual Aid

Seizure Activity

Glucose <60 or unknown

Consider ALS Mutual Aid

• D25% IV/IO 2ml/kg
• D12.5% IV/IO for infants under 2 months*
  IV/IO 4ml/kg
  OR
• Consider GLUCOSE PASTE to gums if venous access unavailable and gag reflex intact

Glucose >60

• Support ABCs
• Observe
• Keep warm
• TRANSPORT

• Attempt vascular access IV/IO NS @ TKO
• Test blood glucose
• Cardiac monitor
• Pulse oximetry
• Protect from injury
• Vomiting and aspiration precautions

• Assess ABCs
• Administer 100% OXYGEN
• Complete initial assessment

*1. To make D25% dilute D50% 1:1 with sterile water or normal saline
2. To make D12.5% dilute D25% 1:1 with sterile water or normal saline
3. To make D12.5% from D50% follow steps 1 & 2

Revised 01/01/12
Effective 05/01/98
ILS

Code 59
PEDIATRIC SEIZURES
**Assess ABCs**
- Immobilize spine as indicated
- Administer 100% **OXYGEN**
- Support ventilation with BVM as indicated
- Complete initial assessment
- Test blood glucose
- Consider other causes of altered mentation and refer to indicated protocol(s).
- Cardiac monitor
- Pulse Oximetry
- Seizure Precautions

**Establish vascular access IV/IO NS @ TKO**
- **D25%** IV/IO 2ml/kg
- **D12.5%** IV/IO 4ml/kg for infants under 2 months*
  OR
  • **GLUCAGON** IM 0.02-0.03mg/kg/dose maximum 1mg/dose
  OR
  • Consider **GLUCOSE PASTE** to gums if venous access unavailable and gag reflex intact

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**Glucose >60 mg/dl**
- Reassess respiratory effort

**Glucose ≤ 60 mg/dl, or unknown**
- Insert vascular access IV/IO NS @ TKO
- **D25%** IV/IO 2ml/kg
- **D12.5%** IV/IO 4ml/kg for infants under 2 months*
  OR
  • **GLUCAGON** IM 0.02-0.03mg/kg/dose maximum 1mg/dose
  OR
  • Consider **GLUCOSE PASTE** to gums if venous access unavailable and gag reflex intact

**Inadequate respiratory effort**
- Secure airway as appropriate
  - **NALOXONE** (Narcan) 0.1mg/kg IV/IO/IM if respiratory rate<12

**Adequate respiratory effort**
- Support ABCs
- Observe
- Keep warm
- TRANSPORT

---

**NOTE TO PREHOSPITAL PROVIDERS:**
- **NALOXONE** (Narcan) should be used only for suspected **ACUTE** narcotic exposure.

*1. To make **D25%** dilute **D50%** 1:1 with sterile water or normal saline.
2. To make **D12.5%** dilute **D25%** 1:1 with sterile water or normal saline.
3. To make **D12.5%** from **D50%** follow steps 1 & 2
• Assess scene safety as indicated:
  • Appropriate body substance isolation
  • Refer to appropriate HAZMAT CODE
  • Stop exposure
• Assess ABCs
• Secure airway as appropriate
  • Intubate for GCS ≤ 8
• Support ventilation with BVM as indicated
• Administer 100% OXYGEN
• Cardiac monitor
• Pulse oximetry
• Establish vascular access IV/IO NS @ TKO
• Complete initial assessment

• Initial interventions per Medical Control as indicated for identified exposure
  • Support ABCs
  • Observe
  • Bring container(s) of drug or substance to the ED
  • TRANSPORT

NOTE TO PREHOSPITAL PROVIDERS:
• Anticipate vomiting, respiratory arrest, seizure, dysrhythmias and refer to indicated protocols.
• Do not induce vomiting.
EXPOSURE TO OR INGESTION OF NARCOTICS OR UNKNOWN SUBSTANCES

For altered level of consciousness consider per length based Pediatric Tape:

- **NALOXONE** (Narcan) 0.1mg/kg IV/IO/IM if respiratory rate <12
- If seizures occur, refer to PEDIATRIC SEIZURES CODE 59 as indicated
- **GLUCOSE**
- **DO NOT INDUCE VOMITING.**

POTENTIAL EXPOSURES

- Burning overstuffed furniture = Cyanide
- Old burning buildings = Lead fumes and Carbon monoxide
- Pepto-bismol = Aspirin
- Pesticides = Organophosphates & Carbamates
- Common poisonous plants:
  - Dieffenbachia
  - Foxglove
  - Holly leaves and berries
  - Lilly of the Valley
  - Nightshade
  - Philodendron
  - Rhubarb leaves
  - Tobacco
- Smells:
  - Almond = Cyanide
  - Fruit = Alcohol
  - Garlic = Arsenic, parathion, DMSO
  - Mothballs = Camphor
  - Natural gas = Carbon monoxide
  - Rotten eggs = Hydrogen sulfide
  - Silver polish = Cyanide
  - Stove gas = Think CO (CO and methane are odorless)
  - Wintergreen = Methyl salicylate
PEDIATRIC HEAT EMERGENCIES

- Profound weakness and fatigue
- Vomiting, diarrhea
- Hypoperfusion
- Muscle cramps

Assess ABCs
- Administer 100% OXYGEN
- Complete initial assessment. Assess for:
  - Hot, dry, flushed or ashen skin
  - Tachycardia
  - Tachypnea
  - Diaphoresis
  - Decreasing consciousness

Assess scene for environmental risks
- Place in a cool environment
- Remove clothing as appropriate
- Cardiac Monitor

**NOTE TO PREHOSPITAL PROVIDERS:**
Cooling Techniques
- Apply cool pack to head, neck, axillae, groin, behind knees and to lateral chest.
- Tepid water per sponge/spray
- Manually fan body to evaporate and cool
- Stop cooling if shivering occurs.

- Give cool liquids PO
- Per Medical Control, consider vascular access IV NS @ TKO
- Support ABCs
  - Observe
  - TRANSPORT

Normal Level of Consciousness & Diaphoresis

Systolic BP ≥ 100

Hypoperfusion* or Presence of Nausea/Vomiting

- Establish vascular access IV/IO NS @ TKO
- Fluid bolus with 20ml/kg
- Repeat if no improvement to maximum of 60ml/kg

**Initiate cooling
- Refer to PEDIATRIC SEIZURES CODE 59 as needed

Decreased Consciousness, Dry Skin

Adequate Respiratory Effort

- Support ABCs
- Observe
- TRANSPORT

Inadequate Respiratory Effort

- Secure airway as appropriate
- Support ventilation with BVM

**Ref to PEDIATRIC ASSESSMENT AND TRAUMA SCORE CODE 28

Effective 01/01/12
ILS
Frostbite
Move patient to a warm environment as soon as possible

Cover patient and prevent re-exposure.

TRANSPORT

Systemic Hypothermia
Mild/Moderate 86-93.2 F (30-34 C):
- Conscious
- OR
- altered sensorium with shivering

OXYGEN 12-15 L/mask

Rewarm patient:
- Place patient in a warm environment.
- Remove wet clothing.
- Apply hot packs wrapped in towels to axilla, groin, neck, thorax.
- Wrap patient in blankets.

TRANSPORT

IV NS TKO (Attempt to warm IV bag and tubing with hot packs)

Severe Hypothermia
86 F or less (<30 C):
- HANDLE PATIENT VERY GENTLY TO AVOID PRECIPITATING V-FIB.
- Patient may appear uncoordinated with poor muscle control, or stiff simulating rigor mortis.
- There will be NO SHIVERING.
- Level of consciousness may be confused, lethargic and/or withdrawn
- Coma

TRIPLE ZERO CANNOT BE CONFIRMED FROM THE FIELD ON THESE PATIENTS

TRANSPORT

OXYGEN 100%
Do not hyperventilate

IV NS TKO (Attempt to warm IV bag and tubing with hot packs)

AT DISCRETION OF A PHYSICIAN OR ECRN:
ALS MUTUAL AID

NOTE TO PREHOSPITAL PROVIDERS:
• Assess pulse for 30-45 seconds before beginning CPR.
DO NOT GIVE ANY DRUGS!
• May attempt defibrillation X 1 at 2 Joules/kg if V-fib.
• Refer to PEDIATRIC CARDIAC ARREST CODE 51.
**Code 64**

**PEdiATRIC DROWNING**

- Assess airway, ventilation, and respiratory effort
- Assess for hypothermia:
  - Refer to PEDIATRIC COLD EMERGENCIES CODE 63

**Adequate ventilation and respiratory effort**

- Administer 100% OXYGEN
- Immobilize spine as indicated

**Inadequate ventilation and respiratory effort**

- Perform airway maneuver, maintaining in-line C-spine stabilization:
  - Jaw thrust
  - Suction
- Relieve upper airway obstruction as indicated
- Support ventilation with BVM and 100% OXYGEN
- Spinal immobilization if indicated

Reassess airway patency

- Patent
- Obstructed

**Establish vascular access IV/IO NS @ TKO**
- Cardiac monitor
- Pulse Oximetry
- Refer to:
  - PEDIATRIC SEIZURES CODE 59
  - APPROPRIATE PEDIATRIC DYSRHYTHMIA CODE

- Support ABCs
- Keep warm
- Observe
- TRANSPORT

Refer to:
- PEDIATRIC RESPIRATORY ARREST CODE 56
- PEDIATRIC CARDIAC ARREST CODE 51
  - as needed

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Effective 05/01/98
ILS
REGION 7

STANDING MEDICAL ORDERS

PROTOCOLS FOR SPECIAL SITUATIONS

Reviewed 01/01/12
Effective 05/01/98
ILS
TRANSPORT, regardless of extent of injuries.

Treat obvious injuries. Refer to PEDIATRIC TRAUMA CODE 27

Note:
- Environmental surroundings
- Child's interaction with parents
- Physical assessment findings
- Discrepancies in child and parent history and injuries

TRANSPORT, regardless of extent of injuries.

Transport agreed upon by parent/caregiver

- Support ABCs
- Observe
- TRANSPORT
- Document all findings

Transport refused by parent/caregiver

- Assess scene safety
- If possible, remain at site
- Call police/Medical Control and request protective custody
- Do not confront caregivers

Report Suspicions to ED physician, ED charge nurse AND DCFS (1-800-25-ABUSE) (1-800-252-2873)
NOTE TO PREHOSPITAL PERSONNEL:

1. You are required by law to report your suspicions.

2. Suspect battered or abused child if any of the following is found:
   - A discrepancy exists between history of injury and physical exam.
   - Caregiver provides a changing or inconsistent history.
   - There is a prolonged interval between injury and the seeking of medical help.
   - Child has a history of repeated trauma.
   - Caregiver responds inappropriately or does not comply with medical advice.
   - Suspicious injuries are present, such as:
     - Injuries of soft tissue areas, including the face, neck and abdomen
     - Injuries of body areas that are normally shielded, including the back and chest
     - Fractures of long bones in children under 3 years of age
     - Old scars, or injuries in different stages of healing
     - Bizarre injuries, such as bites, cigarette burns, rope marks, imprint of belt or other object
     - Trauma of genital or perianal areas
     - Sharply demarcated burns in unusual areas
     - Scalds that suggest child was dipped into hot water

3. The following are some common forms of neglect:
   - Environment is dangerous to the child (e.g. weapons within reach, playing near open windows without screen/guards, perilously unsanitary conditions, etc.).
   - Caretaker has not provided, or refuses to permit medical treatment of child’s acute or chronic life-threatening illness, or of chronic illness, or fails to seek necessary and timely medical care for child.
   - Abandonment
   - Caretaker appears to be incapacitated (e.g. extreme drug/alcohol intoxication, disabling psychiatric symptoms, prostrating illness) and cannot meet child’s care requirements.
   - Child appears inadequately fed (e.g. seriously underweight, emaciated, or dehydrated) inadequately clothed, or inadequately sheltered.
   - Child is found to be intoxicated or under the influence of an illicit substance(s).
I. PURPOSE/DEFINITION

Given the magnitude of the problems of abuse and violence in our society, early detection of domestic violence victims, appropriate legal and social service referrals and the delivery of timely medical care are essential.

Domestic violence is a pattern of coercive behavior engaged in by someone who is or who was in an intimate or family relationship with the recipient. These behaviors may include: repeated battering, psychological abuse, sexual assault or social isolation such as restricted access to money, friends, transportation, health care or employment. Typically, the victims are female, but it must be recognized that males can be victims of abuses as well.

II. DOMESTIC VIOLENCE INDICATORS

While sometimes the specific history of abuse is offered, many times the victim of abuse, (either out of fear or because of the coercive nature of the relationship or out of desire to protect the abuser) will not volunteer a true history but instead ascribe injuries to another cause. Therefore, an appropriate review must be undertaken with respect to patients presenting with injuries:

• That do not seem to correspond with the explanation offered.
• That are of varying ages.
• That have the contour of objects commonly used to inflict injury (hand, belt, rope, chain, teeth, cigarette).
• During pregnancy.

Other factors include:

• Partner accompanies patient and answers all questions directed to patient.
• Patient reluctant to speak in front of partner.
• Denial or minimalization of injury by partner or patient.
• Intensive, irrational jealousy or possessiveness expressed by partner.

Physical injuries commonly associated with domestic violence:

• Central injuries, specifically to the face, head, neck, chest, breasts, abdomen, or genital areas.
• Contusions, lacerations, abrasions, stab wounds, burns, human bites, fractures (particularly of the nose and orbits) and spiral wrist fractures
• Complaints of acute or chronic pain without tissue injury
• Signs of sexual assault
• Injuries of vaginal bleeding during pregnancy, spontaneous or threatened miscarriage
• Direct impact of domestic violence on pregnancy may include:
III. APPOACHES FOR INTERVIEWING THE PATIENT

The goals of the physical examination are to identify injuries requiring further medical intervention and to make observations and collect evidence that may corroborate the patient’s report of abuse. A thorough physical examination is essential to uncover hidden injuries or compensated trauma. If the patient reports sexual assault, the sexual assault protocol should be followed:

* Always interview the patient in a private place, away from anyone accompanying them to the ED. Questioning the patient in front of the batterer may place the patient and any children in danger.

* You may be the first person or professional to acknowledge the abuse. It is important that you convey your concerns about what has happened to the patient to the Emergency Physician and Nurse.

* When interviewing, do not ask the patients if they were battered or abused (many battered persons do not consider themselves in this light). Instead you can ask the patient:

   “Have you had a fight with someone?”
   “Did anyone hurt you?”
   “Many times we have seen these types of injuries in patients who are hurt by someone else, did someone hurt you?”
   “I am concerned that someone may be hurting you or scaring you, can you tell me what happened?”

* Most battered persons feel very shamed and humiliated about what has happened to them. It is important to acknowledge that you understand how difficult it is to talk about what has happened.

* Many battered persons will minimize the abuse or blame themselves for what happened. It is important that you repeatedly reinforce that no one deserves to be hurt no matter what they may or may not have done.

* Questions/attitude Not to Ask/Express:

   - What keeps you with a person like that?
   - Do you get something out of the violence?
   - What did you do at the moment that caused them to hit you?
   - What could you have done to avoid or defuse the situation?

IV. PRACTICE

* Treat obvious injuries; transport.

* Report your suspicion and supporting findings to the Emergency Department Physician and on the prehospital report form.

* Document the name of the physician and/or nurse to whom you reported your suspicion on the prehospital report form.

* If the patient refuses transport, make appropriate referral and document on run sheet.

* Document your findings on the prehospital report form:

   - Presenting condition
   - Any suspicious indicators
   - Any suspicious commentary made by the patient on interviewing the patient.
   - Physical exam including any evidence of abuse.
   - Treatment rendered

Report Suspicions of Geriatric Abuse to ED physician, ED charge nurse AND the DEPARTMENT ON AGING (1-800-252-8966)
Personnel, whether operating at a Basic, Intermediate, or Advance Life Support levels, are required to immediately initiate CPR whenever clinical signs of death exist.

THERE ARE ONLY TWO (2) EXCEPTIONS TO THIS REQUIREMENT:

A. Triple Zero: Signs of Explicit Biological Death Exists
   The use of the term “Triple Zero” helps to alleviate the possibility of hysteria from family and/or bystanders due to any radio communications they may overhear and clearly alerts the hospital telemetry personnel to the likelihood of the patient arriving DOA.

   1. The field unit will notify the hospital over telemetry, “We have a TRIPLE ZERO.” This indicates that they have a patient who is pulseless, non-breathing, and exhibits one or more of the following long-term indications of death:
      
      a. Profound dependent lividity
      b. Rigor mortis without profound hypothermia
      c. Patient who has suffered decapitation
      d. Skin deterioration or decomposition
      e. Mummification or dehydration, especially in infants
      f. Putrefaction

   2. Transmit a rhythm strip via telemetry, and give the appropriate hospital the known patient history. (Rhythm strip may be omitted for b through f.)
   3. The hospital will confirm the Triple Zero and will give orders to transport providing it is not a county medical examiner’s case.
   4. The confirmation of a Triple Zero is not to be construed as a pronouncement of death.
   5. Transport of Triple Zero - Situations may arise where prolonged delays resulting from dispensations of obviously dead patients would tie up an ALS vehicle for unreasonable lengths of time. If the paramedics encounter a patient whom they confirm to be a Triple Zero over telemetry, they may transfer responsibility for transportation of that patient to another ambulance service, either ALS, ILS or BLS, the appropriate police department, or an agency who is reasonably appropriate for the circumstance, who may transport the patient to a hospital to have death pronounced by an individual legally authorized to do so.

B. DNR (Do Not Resuscitate) - See System Policy

C. Except in the conditions listed above, CPR is to be initiated immediately and continued until one (1) of the following occurs:

   1. Effective spontaneous circulation and ventilation have been restored.
   2. Resuscitation efforts have been transferred to other persons of at least equal skill, training and experience.
   3. The rescuers are exhausted and physically unable to continue resuscitation.
   4. A direct order from on-line medical control is given to discontinue CPR.

D. A system hospital is to be contacted over telemetry in ALL cases of cardiac arrest, whether or not the patient has signs of clinical death, meets the criteria for Triple Zero (Biological Death) or has a “Do Not Resuscitate” order.

In cases where the patient’s status is unclear and the appropriateness of CONTINUED CPR is questioned, paramedics should call the appropriate system hospital AFTER initiation of CPR.
Maintain situational awareness and scene safety. Introduce yourself to the patient, and attempt to gain their confidence in a non-threatening manner. If the patient refuses assistance, attempt to determine their mental status. This includes determining their orientation and the presence of anything that could produce an altered mental status, such as drug/alcohol intoxication or withdrawal, trauma (head injury), hypoxia, hypotension, hypoglycemia, stroke, infections, psychological emergencies (i.e. homicidal, suicidal, psychosis, etc.) or dementia (i.e. acute or chronic organic brain syndromes).

If the mental status is judged to be abnormal, prehospital personnel must carry out treatment and transport in the patient’s best interest.

In any form of intervention, prehospital personnel must ALWAYS CONSIDER THEIR OWN SAFETY FIRST!

1. Again attempt to verbally reassure the patient and seek their willing cooperation.
2. If it is necessary to physically restrain a patient, perform all the following:
   A. Prepare all the necessary equipment.
   B. Use police and/or fire personnel if needed. If available, have one person assigned to each extremity and one to hold equipment.
   C. Apply the restraints as loosely as possible to maintain a safe situation, but prevent neurovascular compromise and undue patient discomfort. Apply restraints over clothing when possible.
   D. Never place restraints over a patient’s chest or on the abdomen of a pregnant patient.
   E. Perform routine and specific medical care as indicated by the patient’s condition. Routinely document the neurovascular status of the patient’s extremities distal to the restraints.
   F. Notify the receiving hospital of the situation, and request security assistance upon arrival.
   G. Continue to attempt to verbally reassure the patient and seek their cooperation. Inform the patient’s family of the reasons for the use of restraints.
   H. Thoroughly document the situation including the reasons for using restraints and how they were applied.
   I. At no time will towels, washcloths or other devices be placed over the mouth and/or nose of a restrained patient for any reason.
   J. Never restrain a patient in the prone position.
   K. For reasons of medical safety, any patient who is under police hold and requires handcuffs, must have a police officer accompany the patient in the back of the ambulance while enroute to the hospital or provide the transporting EMS personnel with keys to the handcuffs.

NOTE TO PREHOSPITAL PROVIDERS:
Once restrained, continue to be conscious of the patient’s airway and other medical needs.
Refusals of Care

Begin evaluation and care

The patient refuses care

Altered Mental Status? (Drugs, Alcohol, Head Trauma, Mental Retardation, etc.)

Yes

DENY REFUSAL
Refer to APPROPRIATE CODE

No

Altered medical decision making capacity? Age <18? (Unless emancipated {married, pregnant, etc.} or parent/guardian present)

Yes

No

1. Document situation in all cases of refusal and contact medical control as per System Policy.
2. Initiate documentation on a refusal form.
3. If multiple patients, may use Multiple Release Form.
4. The narrative portion of the patient care report for refusals of care must include:
   - Evidence of decision making capacity such as:
     - the patient is alert, oriented and understands and answers questions appropriately
   - A physical assessment
   - The specific potential consequences told to the patient of not receiving medical care/evaluation
   - The alternatives to care (contacting private physician immediately, etc.)
   - Signature of patient, legal guardian or Durable Power of Attorney for Healthcare
     - a spouse is not a legal guardian unless appointed by the Court
5. If a patient wishes to refuse treatment and will not sign the refusal form, document the situation on the prehospital patient care report.
6. All personnel who witness the event should sign the prehospital patient care report.

Contact Medical Control with any questions.
Code 70

NITROUS OXIDE ADMINISTRATION

Not Applicable for EMT-Intermediate
Code 71

EXTERNAL JUGULAR VEIN CANNULATION

Not Applicable for EMT-Intermediate

Reviewed 01/01/12
Effective 05/01/98
ILS
DECOMPRESSION OF TENSION PNEUMOTHORAX

– Assure the patient is receiving high-flow oxygen.
– Identify the side of the chest needing decompression (this is the side with decreased breath sounds.)
– Prep the site (second intercostal space in the midclavicular line or 4th intercostal space mid axillary line) with a cleansing prep.
– Introduce the needle into the second intercostal space, directing it perpendicularly over the superior aspect of the 3rd rib or 4th intercostal space mid axillary line.
– Insert the needle until a rush of air exits
– Remove the needle, leaving the catheter in place.
– Secure the catheter to the chest wall.
– Reassess breath sounds.
PEDIATRIC MANUAL
INTRAOSSEOUS NEEDLE INSERTION

• Equipment
  – IV fluid and tubing
  – Intraosseous needle
  – Cleansing prep
  – Tape, 4x4 gauze
  – 10ml syringe
  – Sterile gloves
  – 60ml syringe

• Procedure
  – Prepare equipment.
  – Identify landmarks: anteromedial aspect of the proximal tibia, 1-3cm below the tibial tuberosity. (Distal femur or distal tibia may also be used.)
  – Prep the site with cleansing prep
  – Using a twisting motion, introduce the needle at a 90-degree angle, directing away from the knee. There will be a “pop” as the needle enters the marrow.
  – Remove the stylet (discard in sharps box) and aspirate with a 10ml syringe to confirm needle placement.
  – Remove the syringe, attach IV fluids to be given. Flush with 5ml of Normal Saline.
  – Secure the needle.
  – Bolus fluid by hand, using 60ml syringe.
Indications:
- See appropriate SMOs

Contraindications:
- Infection at the site selected for insertion (choose alternate site)
- Fracture of the bone selected for IO infusion (choose alternate site)
- Excessive tissue preventing identification of landmarks (choose alternate site)
- Previous significant orthopedic procedures, such as a prosthesis (choose alternate site)
- Previous IO insertion attempt to this site within the last 24 hours (choose alternate site)

“Power driver” Insertion Steps:
1. BSI.
2. Aseptic technique.
3. Locate insertion site (Approved sites: proximal tibia or proximal humerus).
4. Prepare insertion site.
5. Prepare infusion system.
6. Ensure that the driver and needle set are securely seated.
7. Remove and discard the needle set safety cap from the IO needle set installed on the power driver.
8. Insert.
   **Important:** Do not touch the needle set with your hand or fingers.
   **Important:** Control the patient’s movement prior to and during the needle set insertion.
   a. Position driver at insertion site with the needle set at a 90-degree angle to the bone.
      - Gently power or press needle set until needle set tip touches bone.
   b. Ensure at least 5 mm of the catheter is visible.
   c. Penetrate bone cortex by squeezing the driver’s trigger and applying gentle, steady downward pressure.
   d. Release driver’s trigger and stop insertion process when:
      1. A sudden “give” or “pop” is felt upon entry into the medullary space.
      2. A desired depth is obtained.
   **Important:** Use gentle-steady pressure. Do not use excessive force. Allow the catheter tip rotation and gentle downward pressure to provide the penetrating action. Note: If the driver stalls and will not penetrate the bone you may be applying too much downward pressure.
“Power driver” Insertion Steps continued:

- Remove power driver and stylet.
- Confirm catheter stability.
- Attach primed extension set to catheter hub’s luer lock.
  Do not attach a syringe directly to the catheter hub.

12. Flush the adult catheter with 10ml of Normal Saline. Flush the pediatric catheter with 5ml of Normal Saline.

  **Important:** Prior to flush consider the aspiration of a small amount of blood to confirm placement.
  * No Flush = No Flow  Failure to appropriately flush the IO catheter may result in limited or no flow.
  * Once IO catheter has been flushed, administer fluids or medications as indicated.

  **Note:** Frequently monitor the insertion site for extravasation.
PERCUTANEOUS TRANSTRACHEAL VENTILATION
(NEEDLE CRICOTHYROTOMY)

- Attempt to ventilate the patient with BVM
- Attach an empty syringe to a large gauge angiocath
- Locate the thyroid notch, the cricothyroid notch, and the cricoid cartilage.
- Cleanse area with cleansing prep
- Grasp the thyroid cartilage firmly in the nondominant hand.
- While aspirating, puncture the cricoid membrane with the angiocath, directing it caudally, at a 45-degree angle. (The plunger of the syringe will move freely when the needle has entered the trachea.)
- Remove the needle from the catheter and advance the catheter into the trachea.
- Reattach the syringe to the catheter and aspirate again to insure correct placement.
- Attach the plastic adapter from a #3 ET tube to the catheter.
- Attach ambu bag to the adapter and ventilate the patient.
- Ventilate with 2-3 seconds of inspiration followed by passive exhalation.
- Auscultate bilateral axillae and epigastrium.
Assure that the patient is being adequately oxygenated/ventilated prior to intubation.
• Have suction ready
• Continuous pulse oximetry and cardiac monitoring
• Select and prepare proper ET tube:
  – ET tube size is determined by comparison of the patient’s nares or little finger
    (refer to the Length Based Pediatric Tape for Pediatric population)
• Insert stylet
• Check ET tube for cuff leakage
• Lubricate tube
• Prepare laryngoscope:
  – Select proper blade
  – Check light
• Place patient in “sniffing position,” unless contraindicated
• Preoxygenate patient with 100% O2 via BVM
• Insert laryngoscope:
  – Hold in left hand, insert blade into right side of mouth, sweep tongue to the left
• Visualize vocal cords:
  – **Straight blade**: Direct blade below epiglottis and lift handle up and away from you
  – **Curved blade**: Direct blade into vallecula and lift handle up and away from you
• **DO NOT USE TEETH AS A FULCRUM**
• Using right hand, insert tube between vocal cords
• Remove stylet, if used
• Check tube placement by:
  - Auscultation of both axillae and epigastrium
  - Pulse oximetry reading
  - Use of appropriate CO2 detector
• Inflate cuff with 5-10ml of air, if appropriate
• Secure tube appropriately
• Reassess tube placement while ventilating patient

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Code 75a

MEDICATION ASSISTED INTUBATION

Not Applicable for EMT-Intermediate

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ILS
Code 75b

FAILED ADULT AIRWAY

Able to intubate with an ET tube

Yes → Intubate

No →

Able to ventilate with BVM?

Yes → BVM

No →

Insert a King tube

Able to ventilate with the King tube

Yes → Ventilate

No →

Perform Percutaneous Transtracheal Ventilation (Needle Cricothyrotomy)

Refer to Code 74

Ventilate

Initiate Rapid Transport

Update hospital on airway status

Reviewed 01/01/12
Effective 05/01/10
ILS
Code 76

CONTINUOUS POSITIVE AIRWAY PRESSURE ADMINISTRATION

- Observe body substance isolation at all times
- Oxygenate the patient with 15 liters via non-rebreather mask while setting up CPAP
- Connect fixed generator to portable oxygen regulator
- Open CPAP disposable package and attach patient corrugated tubing to bottom of generator and add filter to side of generator
- Attach other end of patient tubing to bottom of mask
- Attach 10cm isobaric peep valve to front of mask
- Connect head strap to top of one side of mask
- Turn oxygen tank on
- Encourage patient to place mask over mouth and nose, then firmly attach mask using final connection on side of mask
- When patient has been placed in the ambulance, “quick connect” generator to on-board oxygen
- Monitor patient’s level of consciousness and vital signs continuously. If patient develops decreased mental status or decreased blood pressure—**DISCONTINUE CPAP**.
- Continuous cardiac monitoring and pulse oximetry required

Note: If aerosol medication treatment is indicated, cut the patient’s corrugated tubing at first smooth part closest to the patient’s face. Place a “t” connector between the tubing and follow **ALBUTEROL** administration protocol.

If port is available for Albuterol administration, follow manufacturers guidelines.
MEDICATION ADMINISTRATION - IV PUSH

- Observe body substance isolation at all times
- Confirm patient is not allergic to the medication
- Inspect medication
  - Identify concentration
  - Inspect for contamination
  - Check expiration date
- Assemble preload syringe
- Eject any air from syringe
- Assure IV is patent
- Cleanse IV port with cleansing prep
- Insert needle into IV port or attach syringe utilizing needless system
- Pinch line above port
- Inject correct amount of medication
- Withdraw needle or remove syringe and flush tubing
- Properly dispose of needle and syringe
- Observe patient for medication effect
- Reassess vital signs after medication administration and document on prehospital patient care report
MEDICATION ADMINISTRATION - IV DRIP

- Observe body substance isolation at all times
- Confirm patient is not allergic to medication
- Inspect medication ordered
  - Identify concentration
  - Inspect for contamination
  - Check expiration date
- Withdraw proper amount of medication into syringe
- Eject any air from syringe
- Select appropriate secondary IV bag port and cleanse with alcohol swab
- Inject correct amount of medication into IV bag
- Withdraw needle and mix bag without shaking
- Assure that primary IV is patent
- Select appropriate primary injection port and cleanse with alcohol swab
- Insert secondary IV line needle or attach secondary line utilizing needless system into primary IV port
- Set secondary line infusion at prescribed rate
- Label secondary IV bag appropriately:
  - EMT's name
  - Medication name and concentration
  - Date
  - Dosage rate
- Properly dispose of needle and syringe
- Observe patient for medication effect
- Reassess vital signs after medication administration and document on prehospital patient care report
• Observe body substance isolation at all times
• Confirm patient is not allergic to medication
• Select medication ordered
• Inspect medication
  – Identify concentration
  – Inspect for contamination
  – Check expiration date
• Explain procedure to patient
• Withdraw correct amount of medication into syringe
• Eject any air from syringe
• Select appropriate site and cleanse with cleansing prep:
  – Commonly used sites are the deltoid muscle and the upper outer quadrant of the gluteus muscle
• Stretch the skin over the site with your fingers
• Advise the patient that there will be a “stick”
• Insert the needle into the muscle at a 90 degree angle
• Aspirate to assure that there is no blood return
• Inject the drug slowly
• Withdraw the needle and apply pressure to the site
• Properly dispose of needle and syringe
• Observe patient for medication effect
• Reassess vital signs after medication administration and document on prehospital patient care report
MEDICATION ADMINISTRATION - NEBULIZED INHALATION

- Observe body substance isolation at all times
- Confirm patient is not allergic to medication
- Explain procedure to patient
- Take baseline vital signs and peak flow measurement
- Check medication
  - Identify concentration
  - Inspect for contamination
  - Check expiration date
- Assemble nebulizer device
- Dispense proper dose of medication and saline
- Connect device to oxygen at 6-12 L/min
- Position patient in sitting position
- Have patient breathe through mouthpiece of nebulizer
- Observe patient for medication effects and repeat peak flow measurement
- Reassess vital signs after medication administration and document on prehospital patient care report
Code 81

TRANSCUTANEOUS CARDIAC PACING

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ILS
DEFIBRILLATION

- Place the patient in a safe environment, away from pooled water and metal surfaces.
- Apply monitor-defibrillator electrode pads to patient chest or appropriate conductive medium to paddles.
- Turn on defibrillator.
- Set energy level.
- Charge capacitor.
- Ensure proper placement of electrodes on chest: (Apical and high right parasternal).
- If using hand-held paddles, apply firm pressure on them.
- Assure that no personnel are in direct or indirect contact with the patient (Call “clear”).
- Deliver shock by depressing both discharge buttons simultaneously.
- Reassess patient.
Code 83

SYNCHRONIZED CARDIOVERSION

Not Applicable for EMT-Intermediate
FINISH DELIVERING THE INFANT

• Clear Airway
• Clamp and cut the cord
• Avoid manipulation or stimulation
• If the infant is limp:
  • 100% OXYGEN should be blown by infant’s face
  • Intubate immediately
  • Attach suction tube to Meconium aspirator, leave suction off
  • Place Meconium aspirator to the end of the ET tube
  • Turn on suction
  • Withdraw the ET tube while suctioning
• Attempt to ventilate with BVM
• If unable to ventilate, repeat the process with a new ET tube and meconium aspirator
• If unable to ventilate, follow CODE 48
INTRANASAL ADMINISTRATION

- Observe body substance isolation at all times
- Assess ABC’s and support ventilation as needed
- Inspect medication
  - Identify concentration
  - Inspect for contamination
  - Check expiration date

For suspected Opiate overdose,
- Remove the medication atomization device (MAD) tip from the syringe
- Draw up NALOXONE (Narcan) 2ml (1mg/ml) and replace the MAD Intranasal Atomizer tip (OR place the MAD tip on a luer-lock prefilled syringe)
- Tilt the patients head back, if possible
- Place atomizer in the nare opening and advance it until the cone tip is sealed against the opening.
- Depress the plunger and administer 1ml briskly in each nostril
- Remove the device
- Monitor the patient for desirable and undesirable effects
- Continue to support respirations as needed

Important note: If a patient fails to awaken after intranasal Narcan, they may still respond to intravenous administration.

For hypoglycemia (blood sugar < 60) and altered level of consciousness when an IV is not able to be established,
- Reconstitute GLUCAGON 1mg in 1ml sterile water
- Remove the medication atomization device (MAD) tip from the syringe
- Draw up the reconstituted GLUCAGON (1mg/ml) and replace the MAD Intranasal Atomizer to syringe
- Tilt the patient’s head back, if possible
- Place atomizer in the nare opening and advance it until the cone tip is sealed against the opening.
- Depress the plunger and administer 0.5 ml briskly in each nostril
- Remove the device
- Continue to monitor closely for desirable and undesirable effects

Effective: 01/01/12
ILS
Code 86
CONCEALED CARRY / FIREARM

PATIENT CARE

All legal efforts should be utilized to avoid having to transport the weapon to the Emergency Department. However, if the Patient’s condition requires immediate transportation, then transportation should not be delayed unless there is an imminent life threat to the providers. If the patient is stable, and Police are in route, transportation may be delayed to relinquish the weapon to the Police Officer.

SAFETY

Scene safety remains the top priority for EMS responders. If the EMS responders feel that there is a valid life threat to themselves, then retreat to a safe zone is indicated. Stage in a safe location to be able to re-enter the scene when secured by Law Enforcement.

When you must transport the weapon, it must be secured to prevent accidental discharge.

NOTIFICATION TO THE EMERGENCY DEPARTMENT

When transporting the weapon on the Ambulance, the provider will contact the Emergency Department early. The report needs to contain the verbiage “I have a CODE 86”. This informs the Emergency Department that there is a secured weapon on the ambulance and will require someone from the Hospital to take custody of the weapon upon arrival.

TRANSFERRING THE WEAPON AT THE HOSPITAL

Upon arrival, relinquish the weapon to the Hospital’s designee as soon as possible. Do not leave the weapon un-attended at any time.

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