

STATE OF OHIO
EMS BOARD
REGIONAL PHYSICIANS ADVISORY BOARD
EMS GUIDELINES AND PROCEDURES MANUAL
FOR EMERGENCY MEDICAL RESPONDERS

INTRODUCTION

Ohio emergency medical services (EMS) providers strive every day to deliver the highest standard of emergency medical services to the people of Ohio. On behalf of the State Board of Emergency Medical Services, the Regional Physician Advisory Board was charged with drafting proposed guidelines that EMS agencies could use in setting that standard.

Please note that the proposed guidelines are not mandatory for Ohio EMS agencies. The guidelines and procedures manual is meant to assist in the development of local protocols. It is the Board's hope that individual regions or agencies will review these guidelines with their medical directors and legal counsel when drafting their own individualized protocols. The guidelines were updated in 2012 and will be periodically reviewed by the Regional Physician Advisory Board in order to maintain the most current information available.

These guidelines are an annex to the current version of the State of Ohio EMS Guidelines document. They can be used by emergency medical responders (EMRs) who initiate care until the patient is transferred to the care of a higher level of EMS professional or medical professional in the prehospital setting. A higher level of emergency medical services should be dispatched immediately to activate a response by a higher level of EMS professional. Medical direction can at any time and for any reason and should be contacted as soon as possible for deterioration in patient condition.

Reviewed & Approved by:
Regional Physician Advisory Board Chairs
Medical Oversight Committee
State EMS Board

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OPERATIONAL PROTOCOLS

General Patient Care Guidelines

The following measures should be exercised with all patients under the care of an emergency medical responder (EMR).

1. Assess the safety of the scene. Scene safety must be secured prior to initiation of patient care. All appropriate personal protective equipment should be worn prior to contact with the patient (**B**ody **S**ubstance **I**solation).
2. Assess the airway and respiratory status. Open the airway if necessary, and maintain and protect the airway.
3. Activate 911 (or an EMT, AEMT, or Paramedic unit) response.
4. Administer high flow oxygen via non-rebreather face mask. Patients who are on home oxygen can be maintained on the same flow rate and oxygen delivery device they are prescribed if they have no respiratory complaints or observed respiratory difficulty. Patients with extreme respiratory distress, poor or labored respiratory effort, absent respirations, decreased mental status, or cyanosis should be ventilated with 100% oxygen via bag valve mask. Be prepared to log roll the patient if emesis occurs.
5. Remove any clothing necessary to have rapid access to the chest for examination. Remove all restrictive, wet, or contaminated clothing. Expose all injured sites fully and avoid excessive heat loss.
6. Obtain a complete set of vital signs and repeat them at least every fifteen minutes. Multiple trauma victims and patients with chest pain, shortness of breath, altered mental status, hypotension, or shock should have vital signs repeated at least every five minutes. Assess the patient's circulation by noting capillary refill, skin color, and skin temperature.
7. Assess the patient's mental status and level of consciousness. The AVPU system is recommended and the patient's highest level of response should be documented.
8. Inspect and palpate for **D**eforities, **O**pen injuries, **T**enderness, and **S**welling.
9. Place the patient in a position of comfort unless spinal immobilization is indicated.
10. Obtain a patient history from the patient and family members. The "SAMPLE" history is recommended. Provide reassurance to the patient.
11. Perform a secondary patient assessment with a complete physical examination. Document all abnormal physical findings and areas of complaint.
12. Provide a full report of the patient's chief complaint, subjective and physical findings, and care provided to the patient to the EMS unit responding to the scene. Document the name of the responding EMS unit, the time of transfer, and the patient condition at the time of transfer.

“S A M P L E” History

S.....Signs and symptoms

O.....Onset

P..... Provocation

Q.....Quality

R..... Region and Radiation

S..... Severity

T..... Time

A.....Allergies

M..... Medications

P.....Past Medical History

L.....Last oral intake

E.....Events preceding the chief complaint and onset of symptoms

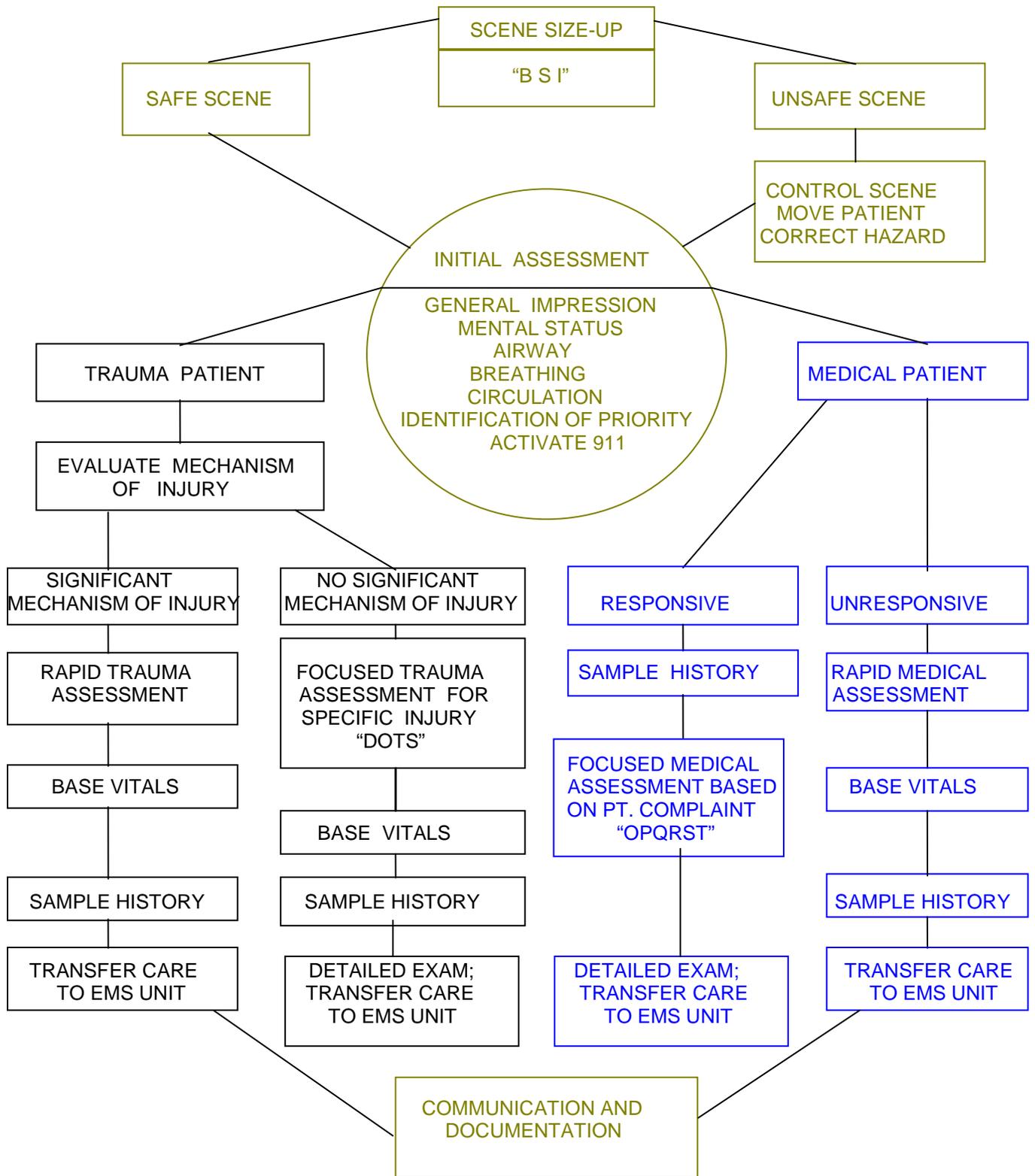
MENTAL STATUS

The “AVPU” system is recommended for the assessment of a patient’s mental status. The highest level of response should be noted. The patient may respond to a stimulus verbally or physically (eye opening, movement).

“AVPU”

- A.....ALERT - Conscious and talking
- V.....VERBAL - Responds to a loud verbal stimulus
- P.....PAINFUL - Responds to a painful stimulus
(sternal rub or gentle pinch to an extremity)
- U.....UNRESPONSIVE - No response to verbal stimulus

GENERAL PATIENT CARE GUIDELINES



Additional EMR Patient Care Guidelines for Specific Chief Complaints

Abdominal Pain: Palpate the abdomen. Note and document the sites of tenderness and the presence or absence of distention or rigidity.

Airway Management: The patient's pulse oximetry can be assessed and documented during the patient's initial assessment. Oxygen can be administered via nasal cannula, non-rebreather masks, or mouth-to-barrier devices. Active or supportive patient ventilation can be performed via bag valve mask or flow-restricted oxygen-powered devices. Pulse oximetry measurements should also be obtained after the application of oxygen, changes in the percentage of oxygen administered, the initiation of active ventilator support with a bag valve mask or flow-restricted oxygen-powered device, or change in a patient's clinical condition. The use of capnography as an airway assessment tool is permitted and is actually preferable for the patient that requires active ventilator support or assistance.

Airway Obstruction: Visible obstructions of the airway may be removed manually. Blind sweeps should never be performed in pediatric patients.

Complete airway obstruction: Attempts to dislodge a foreign body that is causing a complete airway obstruction can be made for up to one minute followed by immediate activation of the emergency response system. For persistent complete airway obstruction, attempts to dislodge the foreign body should resume until the EMS unit arrives and assumes care. Back blows and chest thrusts may be used to dislodge a foreign body that is causing a complete airway obstruction in adults and children over the age of 1 year, and abdominal and/or chest thrusts may be used in children under the age of 1 year.

Partial airway obstruction: The patient should be allowed to be in a position of comfort, usually in the tripod position, and oxygen should be applied. The emergency response system should be activated immediately, and the EMR should apply a pulse oximeter and/or capnograph and monitor the patient for airway compromise, altered mental status, and potential progression to a complete airway obstruction.

Altered Level of Consciousness: If the onset was not witnessed or the etiology is unknown, apply oxygen. If the patient is not breathing adequately, provide mouth-to-mouth ventilation with a barrier device or administer 100% oxygen via a bag valve mask. Consider the possibility of trauma and apply spinal immobilization if clinically indicated.

Anaphylaxis: Upon the patient's request and with a written protocol provided by the EMS medical director, assist with the administration of the patient's prescribed epinephrine auto-injector. If ordered by verbal on-line medical direction, EMS-provided epinephrine may be administered.

Burns: Remove the patient from the burn source after scene safety has been secured. Examine the patient for evidence of inhalation injury (burns to the face or neck, singed nasal hairs, cough, stridor, soot in the sputum) and inform the responding EMT unit of your physical findings. Estimate the extent (percentage of total body surface area (TBSA) burned) and the depth (degree) of the burn. Consider dispatching the HAZMAT team if radiation or chemicals are involved.

Thermal Burns: Cover the burns with a dry bulky dressing if a large percentage of the total body surface area is involved. Otherwise, cool the site with sterile saline or water. If the patient starts to shiver, stop the cooling process.

Chemical Burns: Remove the patient's clothing and flush the skin. Leave contaminated clothing at the scene. Determine the chemicals involved and contact the appropriate agency for chemical information. Cover the patient over and under prior to transferring to the squad. The patient should be transported by personnel who are not involved in the decontamination process.

Radiation Burns: Treat as thermal burns unless the burn is contaminated with radioactive material. If the burn has radioactive contamination, treat it as a chemical burn.

Electrical Burns: Turn off the electrical source and do not attempt to remove the patient from the scene until the electricity is confirmed to be shut off. Treat as a thermal burn and document visible entrance and exit wounds.

Cardiac Arrest: Establish unresponsiveness, activate the emergency response system, and initiate CPR. If available, apply an AED and follow the AED guidelines.

Additional CPR Guidelines for the Pediatric Patient: If the patient has a pulse and is not breathing or only

gasping, give one breath every three minutes and recheck the pulse every 2 minutes. Assist ventilation with bag-valve-mask while administering 100% oxygen or provide mouth to mouth ventilation using barrier device. If the patient does not have a pulse, immediately provide quality CPR for two minutes, apply the AED, analyze the rhythm, and deliver a shock if indicated. If the patient remains unresponsive, resume quality CPR for two minutes and analyze the rhythm after each two minute cycle of CPR until the patient starts to move or advanced life support (ALS) providers assume care.

Cardiac Chest Pain: If the patient's systolic blood pressure is above 110, you may permit the patient to administer nitroglycerin to himself if he has the medication that has been prescribed to him. Repeat vital signs after the patient has taken the medication and document the clinical effect. Allow the patient to retain the possession of his medication and inform the EMT unit of this along with the medication administration time and clinical results.

Childbirth/Obstetrical Emergencies: Dispatch 911 immediately. An EMR may assist in the management of emergency childbirth. Unless delivery is imminent, place the patient on her left side. Imminent delivery is when the baby's head is visible in the vaginal opening during a contraction (crowning). A visual inspection of the perineal area should only be done when contractions are less than five minutes apart or if there is bleeding or fluid discharge. A mother in active labor should be placed on a cot or on the floor to prevent the newborn from falling after delivery. During delivery, gentle pressure with one open hand on the baby's head should be applied to prevent an explosive delivery. Immediately after the head is delivered, check the neck for the umbilical cord. If the cord is wrapped around the neck, gently pull it over the baby's head. Frequent suctioning of the head and mouth is imperative during and after delivery. Keep the baby warm and dry allowing the placenta to deliver spontaneously. If there is a breech presentation, create an airway for the newborn by pushing the birth canal away from the infant's mouth with two fingers. If there is a prolapsed cord, do not pull or push on it. Place the mother in a knee chest position to reduce the pressure on the umbilical cord.

Diabetic Emergencies: If the patient is conscious and has an intact airway, sugar, candy, or beverages that contain glucose (i.e. orange juice) can be administered orally. If the patient's mental status is decreased, roll the patient on his side to prevent aspiration and sprinkle a small amount of granulated sugar under the tongue.

Eye Injuries: Do not allow an eye injury to distract you from the basics of trauma care. Do not remove any foreign body embedded in the eye or the orbit. Stabilize any large protruding foreign bodies. If blunt trauma occurs to the eye, examine the globe briefly for lacerations as the eyelid may become tightly swollen later. Scleral rupture may lie beneath an intact conjunctiva. Do not exert pressure on the globe of the eye when performing the exam or when covering it for transport. A light sterile wet dressing may be used to cover the eye and direct pressure must be avoided when covering the eye with a protective shield (metal patch, drinking cup). Covering both eyes when only one eye is injured may help to minimize trauma to the injured eye. If the eye injury is non-penetrating and due to a chemical exposure or burn, flush the eye continuously with water or sterile saline. Transport the patient in an upright sitting position unless contraindicated by the presence of other injuries.

Heat Exposure: Heat stroke is the most serious type of heat exposure illness. It is caused by prolonged exposure to heat, inadequate fluid replacement, and dysfunctional thermoregulatory function. Victims of heat stroke experience inadequate perspiration with body temperatures 105°F or greater. The skin is usually hot and dry. Altered mental status, coma, or seizures may occur. Cardiovascular collapse is the usual cause of death. Heat exhaustion is a moderate type of heat exposure illness that is associated with dehydration and overexertion. The skin is cooler and the core temperature is below 105°F. Syncope with orthostatic hypotension may occur. Heat cramps is the mildest type of heat exposure illness and is caused by dehydration, overexertion, and electrolyte imbalances. The skin is moist and muscles cramps occur, particularly in the large muscle groups. Apply cool packs to the axilla, groin, and neck. A wet sheet can be placed over the patient with cool air introduced into the environment (open window, fan, air conditioning). Avoid shivering in all cases. If the patient is conscious and the airway is intact, non-alcoholic beverages can be administered orally.

Hemorrhage Control: Hemorrhage control can be achieved by application of manual pressure or by a method approved by the EMR's medical director.

Hypothermia/Frostbite: Remove all wet clothing and rewarm the affected areas slowly.

Pediatrics: Manage the airway aggressively as most serious conditions in the pediatric patient population are caused by hypoxia or respiratory failure. Heat loss occurs rapidly in the pediatric patient and maintenance of patient warmth is imperative. AED use is contraindicated in children under 1 year of age.

Poisoning: Determine and document the type and amount of the exposure and when the exposure occurred.

Psychiatric Emergencies: Dispatch the law enforcement agencies in addition to an EMS unit. Attempt to develop a verbal rapport with the patient. Avoid or defer actions that may cause patient agitation.

Respiratory Distress: In addition to the following, see the Airway Management guidelines. The EMR may permit the patient to self-administer a bronchodilator metered dose inhaler to himself if he has the medication that has been prescribed to him. Repeat the vital signs after the patient has taken the medication and document the clinical effect. Allow the patient to retain possession of his medication and inform the responding EMS unit of this along with the medication administration time and clinical results.

Seizures: Protect and support the patient as most seizures last less than one minute and have usually ceased by the time the responding EMS unit will arrive. The patient may experience a postictal state following a seizure. Place in a coma position (lying on one side with the head lowered 15 to 30 degrees). Suction the mouth if the equipment is available. If possible, clear the mouth of foreign bodies. Do not place your fingers or foreign objects between the teeth.

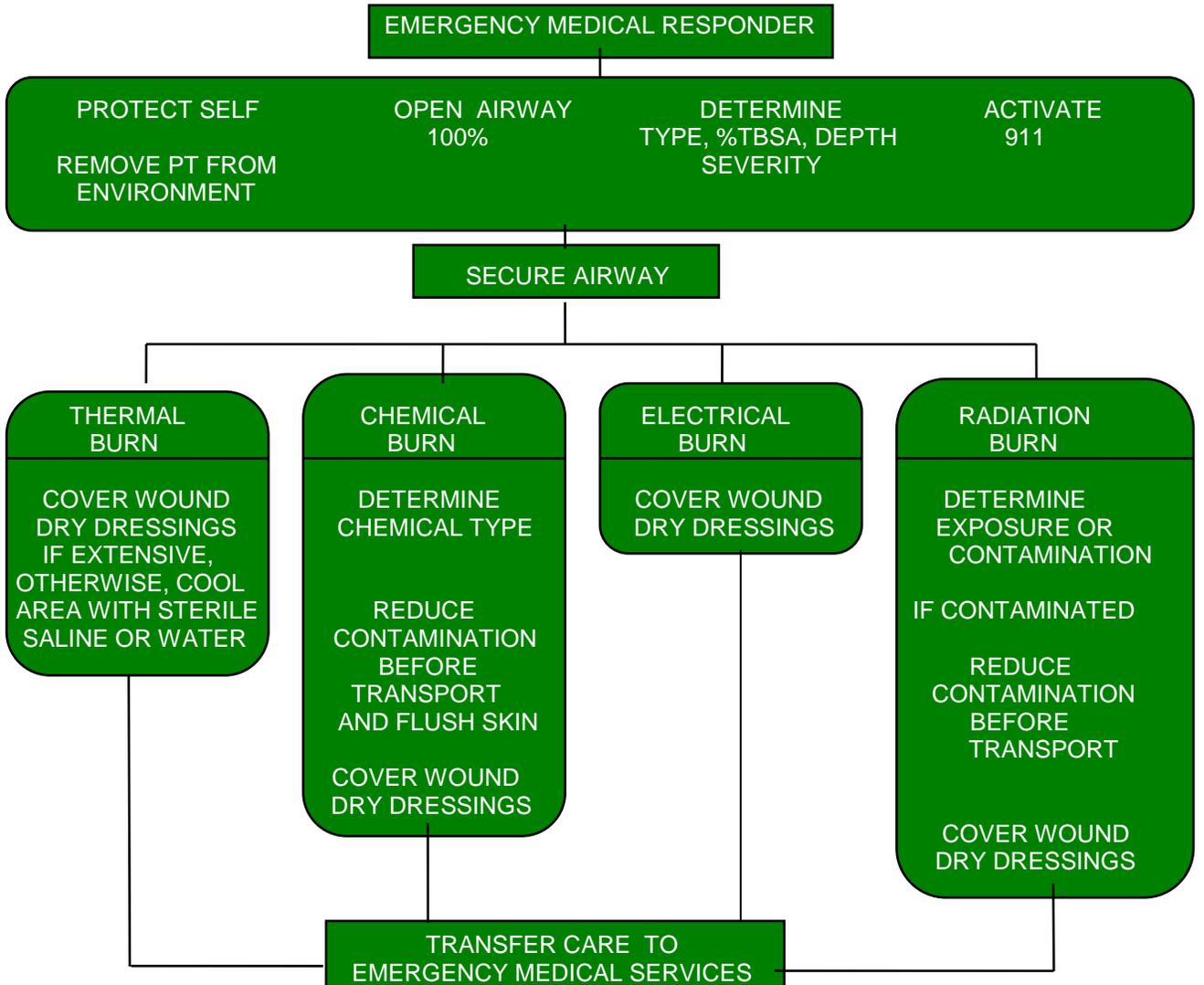
Shock: Place the patient flat and facing up with the legs elevated 8 to 12 inches if possible. Do not elevate the legs if extremity or pelvic fractures are suspected.

Hypovolemic Shock: Control external bleeding with a dressing and direct pressure. Immobilize and splint all obvious extremity deformities.

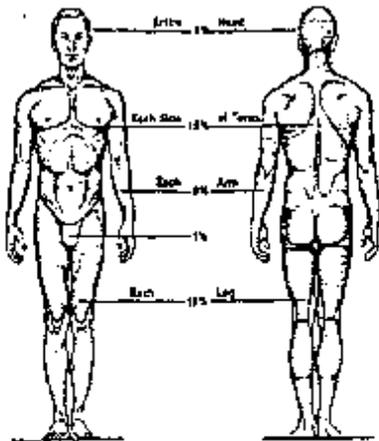
Anaphylactic Shock: Apply ice to hives. Remove the source of the anaphylactic reaction from the patient's environment if possible. If an insect stinger remains in the skin, remove it by scraping the surface of the skin with a firm straight edge (i.e. credit card). If the patient has self-administered or received an epinephrine auto-injector prior to your arrival, document this and keep the used auto-injector with the patient. An EMR may assist a patient with the administration of an epinephrine auto-injector that has been prescribed to the patient if the EMR has a protocol provided by the medical director of the EMR's EMS agency. In addition, an EMR may assist with the administration of an EMS-provided epinephrine auto-injector to patient when verbal medical direction is provided. Repeat the vital signs after the patient has received the medication and document the clinical effect. Inform the responding EMS unit that the patient has the medication or empty cartridge in his possession along with the medication administration time and clinical results.

Trauma: Apply spinal immobilization. Flail segments in the chest wall should be stabilized with a thick, bulky pad of dressings, a pillow, or a blanket. Control external bleeding with a dressing and direct pressure. Immobilize and splint all obvious extremity deformities.

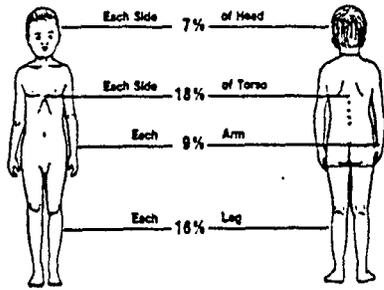
BURNS



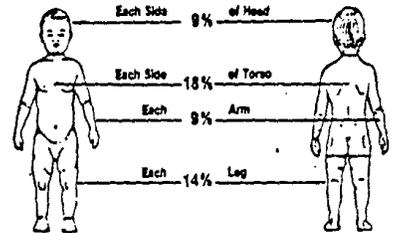
RULE OF NINES



Percentage of Adult Body Surface



Percentage of Child Body Surface



Percentage of Infant Body Surface

1% is equal to the surface of the palm of the patient's hand. If unsure of %, describe injured area.

SERIOUSNESS OF BURNS

MINOR
 1st degree < 70%
 2nd degree < 10%
 +3rd degree < 2%

+ Only if hands, face, feet or genitalia are NOT involved.

MODERATE
 1st degree > 70%
 +2nd degree 10-30%

CRITICAL
 2nd degree > 30%
 3rd degree > 2%
 Any burns with trauma.
 Any burns with head, face,
 feet, genitalia involved.

Automated External Defibrillator (AED) Guidelines

Patients who experience a sudden collapse and become unresponsive may be in cardiac arrest. Multiple studies have demonstrated that ventricular fibrillation or ventricular tachycardia are the abnormal cardiac rhythms associated with this condition. Ventricular fibrillation or tachycardia are treated with an electrical shock (defibrillation) to convert the heart's conduction back into a normal sinus rhythm.

Following confirmation of unresponsiveness of the patient, the American Heart Association recommends the initiation of quality CPR and activation of the ACLS system, typically via 9-1-1, immediately at the time of a cardiac arrest. Current recommendations for the compression-to-ventilation ratio for CPR is 30:2 with compressions performed rapidly. As soon as it is available, an AED should be applied, and if a shock is advised, the patient should be immediately be defibrillated once with 120J-150J biphasic (or 360 J monophasic) If a victim is unresponsive, five cycles of CPR (approximately two minutes) should be administered before stopping CPR and analysis of the victim's cardiac rhythm by the AED. If a shock is indicated, one shock should be delivered by the AED and the rescuer should resume five cycles of CPR immediately if the victim remains unresponsive. The rescuer should not delay CPR to check for a pulse or signs of circulation.

Automated external defibrillators (AEDs) were designed for use by laypersons and individuals that have not be trained or certified in the interpretation of cardiac rhythms displayed on a monitor. An AED should never be applied to a patient who is conscious or to a patient who has a pulse. An AED can be set in a fully automatic or semi-automatic mode. When applied to the patient, the AED will analyze and interpret the patient's cardiac rhythm. In the automatic mode, the AED will automatically deliver a shock to the patient if indicated. In the semi-automatic mode, the AED will advise the user (via a lighted written message or a computerized voice) if a shock is advised based on its analysis of the cardiac rhythm. The user must then push an indicated button to deliver a shock to the patient. Following defibrillation, the AED will prompt the rescuer when to stop CPR so the device can analyze the rhythm again and determine whether or not another shock is necessary.

The AED has two adhesive conductive pads that should be applied directly to the patient's chest after it is exposed and the patient is placed in the supine position. The sternal (STERNUM) pad should be placed over the sternum and the apical (APEX) should be placed on the left side of the chest over the lower half of the rib cage. The lead wires from the conductive pads should be inserted into the designated connection on the AED and the AED should be turned on. Make sure that the lead wires are connected firmly to both the conductive pads and to the AED. Stand clear and insure that other bystanders are standing clear of the patient and the conductive pads during delivery of a shock.

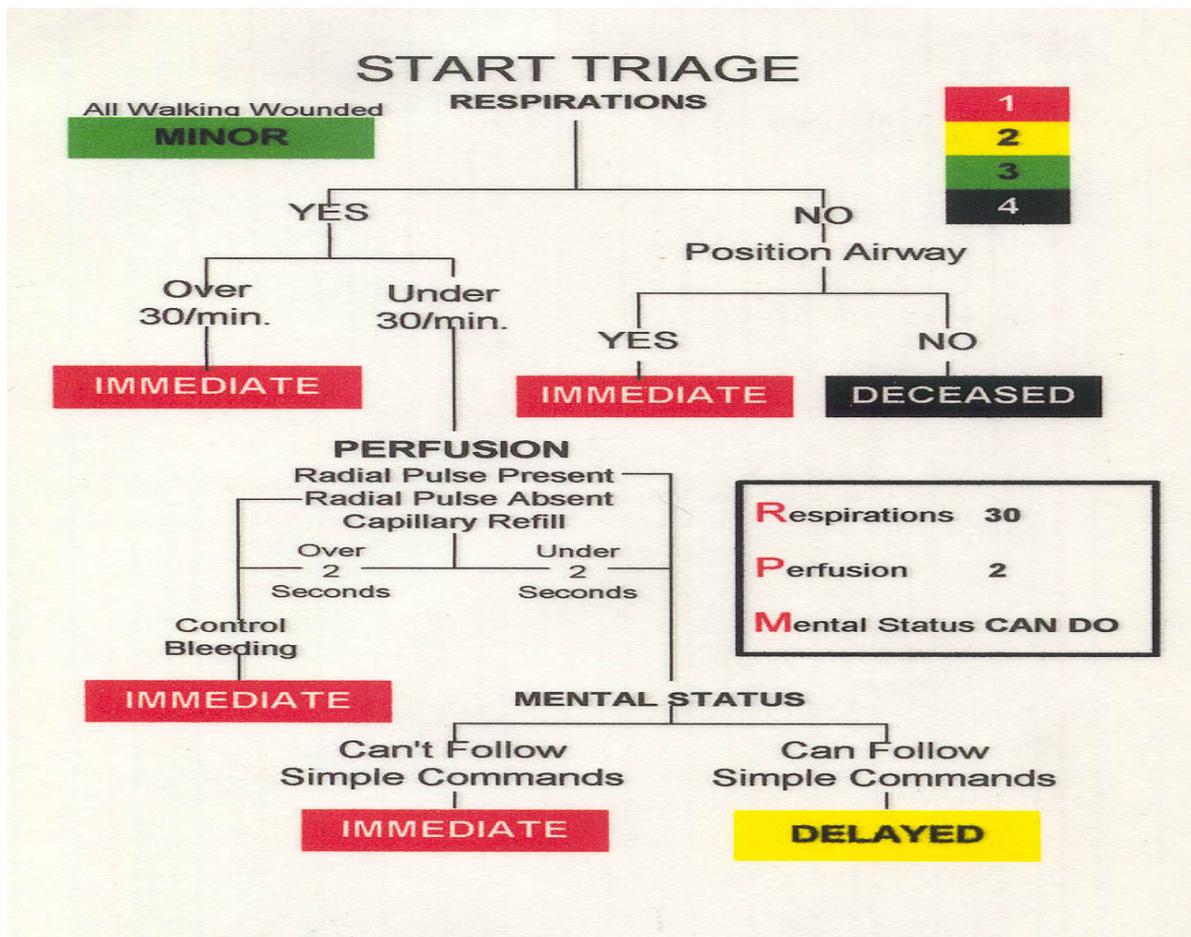
A shock should never be delivered to a patient with an AED applied when the AED or its wires are moving or if the patient is in a moving vehicle. Motion produces artifact that can be misinterpreted by the AED as ventricular tachycardia or ventricular fibrillation. The AED should be turned off and removed from the patient immediately if the patient regains consciousness or regains a pulse. AED use is contraindicated for patients under the age of 1 year of age. Pediatric AED pads or energy levels should never be used on an adult. Ideally, pediatric AED pads and energy levels should be used for victims between the ages of 1 and 8. If pediatric AED pads are not available, it is acceptable to use adult AED pads and energy levels on these patients.

Multiple Casualty Incidents

A multiple casualty incident occurs when an incident results in multiple victims requiring medical assistance. A disaster is defined as any event where the response needs exceed the response resource capabilities. Triage is required when the needs of the victims exceed the immediately available medical resources. Triage should be initiated in a disaster situation and considered in a multiple casualty incident.

The Ohio EMS Board has adopted the START (Simple Triage And Rapid Transport) triage system, and this is the triage system that has been incorporated into the State of Ohio emergency response plans. It is strongly recommended that the emergency medical responder be oriented and proficient in the triage system utilized by the EMS service that is responsible for responding to the potential multiple casualty incident site.

START Triage



ADMINISTRATIVE PROTOCOLS

AEROMEDICAL TRANSPORT

- 1) Rotor wing air medical services may be requested directly to the scene by:
 - a) an on-scene EMS organization
 - b) hospitals and healthcare facilities
- 2) A request for rotor wing air medical service response may be initiated when one or more of the following conditions exists:
 - a) The patient's airway, breathing, or hemorrhage/circulation cannot be controlled by conventional means and the estimated arrival time of the air medical service is less than the time required for ground transport to the nearest hospital.

OR

- b) Air transport to a medical facility/the most appropriate trauma center will occur in a shorter time than ground transport to a medical facility/them most appropriate trauma center.
 - a. Time estimation should be made from the time the patient is ready for transport to arrival at the medical facility/the most appropriate trauma center. This should include aircraft response to the scene.

Destinations

- a) An appropriate medical facility/the most appropriate trauma center based upon, but not limited to the following factors:
 - i) Time to definitive care
 - ii) Capabilities of receiving hospitals
 - iii) Patient wishes and family continuity
 - iv) Maximizing utilization of resources

COMMUNICATIONS

A member of the prehospital care team must contact Medical Control at the earliest time conducive to good patient care. This may be a brief early notification or “heads up”. It may mean that the hospital is contacted from the scene if assistance is needed in the patient's immediate care or permission is required for part of the patient care deemed necessary by the EMS professional in charge.

When possible, the member of the team most knowledgeable about the patient should be the one calling in the report.

Although all EMS professionals have been trained to give a full, complete report, this is often not necessary and may interfere with the physician's duties in the Emergency Department. Reports should be as complete but concise as possible to allow the physician to understand the patient's condition. It is not an insult for the physician to ask questions after the report is given. This is often more efficient than giving a thorough report consisting mostly of irrelevant information.

If multiple victims are present on the scene, it is advisable to contact Medical Control with a preliminary report. This should be an overview of the scene, including the number of victims, seriousness of the injuries, estimated on-scene and transport times to the control hospital or possible other nearby facilities. This allows preparation for receiving the victims and facilitates good patient care.

When contacting the receiving facility or medical direction, the patient report it should begin with the identification of the squad calling, and the highest level of care which is able to be provided to the patient (i.e., EMT, AEMT, or Paramedic), and the nature of the call (the physician or nurse to whom you need to speak directly).

CODE THREE PATIENTS – MOST SERIOUSLY ILL

This category is for the most seriously ill or injured patients.

1. Type of Squad: EMT, AEMT, Paramedic
2. Age and Sex of Patient:
3. Type of Situation: Injury and/or Illness
4. Specific Complaint: Short and to the point (i.e., chest pain, skull fracture)
5. Mechanism: MVA / MCA / Fall
6. Vital Signs: B/P / Pulse / Resp. / LOC / EKG
7. Patient Care: Airway Management, Circulatory Support, Drug Therapy
8. General Impression: Stable / Unstable
9. ETA to Medical Facility

CODE TWO PATIENTS – SIGNIFICANTLY ILL

This category is for individuals who have significant signs or symptoms of illness or injury and are currently are stable.

1. Type of Squad: EMT, AEMT, Paramedic
2. Age and Sex of Patient:
3. Type of Situation: Injury and/or Illness
4. Specific Complaint: Short and to the point (i.e., 10% 2nd degree burn to leg)
5. Mechanism: MVA / MCA / Fall
6. Vital Signs: B/P / Pulse / Resp. / LOC / EKG
7. ETA to Medical Facility

COMMUNICATIONS (cont'd)

CODE ONE PATIENTS—MINOR ILLNESSES

This category covers all minor illness or injury circumstances and the patient is in no danger of developing any significant signs or symptoms.

1. Type of Squad: EMT, AEMT, Paramedic
2. Age and Sex of Patient:
3. Type of Situation: Injury and/or Illness
4. Specific Complaint: Short and to the point (i.e., abdominal pain for the last two weeks)

Code I (non-transport) for minors

If after evaluation of a minor, the EMS professional and medical control agree that the patient is a Code I, that minor can be left in the care of a responsible adult that is not the parent or legal guardian. The responsible adult may be a family friend, neighbor, school bus driver, teacher, school official, police officer, social worker, or other person at the discretion of medical control and the EMS professional.

Once the above information is given, wait for further requests and/or orders from Medical Control.

If the patient requires special care; (i.e., security; interpreter; additional people for lifting, isolation for infection, vermin infestation, or hazardous material) this information should also be relayed.

TYPES OF PATIENTS ACCORDING TO TRIAGE PRIORITY
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CODE THREE PATIENTS

Airway and/or Breathing Difficulty	Unconsciousness
Cardiac Arrest	Severe Head Injury
Circulation Difficulty (Bleeding and/or Shock)	Severe Burns
Open Chest and Abdominal Injury	Severe Poisoning
Complicated Childbirth	Status Epilepticus
Chest Pain	Altered LOC
	Multiple Fractures

CODE TWO PATIENTS

Cervical Spine Injury	Normal Childbirth
Acute Abdominal Pain	Violent and/or Combative Patient
Moderate Burns	Psychiatric

CODE ONE PATIENTS

Minor Injury
Minor Illness

BACKGROUND

In 1999, the Ohio Department of Health successfully established a Do-Not-Resuscitate Comfort Care (DNR Comfort Care) Protocol within the Ohio Revised Code. In the past, do-not-resuscitate (DNR) orders could not be honored without contacting medical direction when EMS or the 911 system was activated. The DNR Comfort Care Protocol will permit EMS to honor DNR orders without immediately contacting medical direction and provides guidelines for the prehospital management of these patients.

A DNR Comfort Care patient has completed a living will or has been issued a DNR order. The DNR Comfort Care protocol can be performed immediately by EMS for these patients. There is a subset of patients who are DNR Comfort Care-Arrest patients. This protocol is to be activated only in the event of a cardiac or respiratory arrest for these patients. EMS should follow the State of Ohio EMS Guidelines for these cases unless they present as a cardiac or respiratory arrest. In the event of a cardiac or respiratory arrest in a DNR Comfort Care-Arrest patient, the patient care should then be diverted to the Do Not Resuscitate (Comfort Care) Protocol. For the purposes of this protocol, a cardiac arrest is defined as the absence of a palpable pulse, and a respiratory arrest is defined as the absence of spontaneous respirations or presence of agonal respirations. The patient's DNR order or DNR identification should be checked very carefully to distinguish between the DNR Comfort Care and the DNR Comfort Care-Arrest classifications.

A DNR Comfort Care designation does not imply that the patient does not want to be treated for illnesses or injuries unrelated to a terminal disease process. For example, if the patient sustained a bee sting and was developing anaphylaxis, EMS providers should follow the anaphylaxis protocol. Medical direction should be contacted as soon as possible for further guidance and potential temporary revocation of the DNR Comfort Care order.

A reasonable effort should be made to positively identify the patient with DNR orders, but it is not required for the performance of this protocol. Patients of health care facilities do not require verification of identity when the DNR order is present on the patient chart. Acceptable methods of patient identification verification include a driver's license, passport, picture ID, institution identification band, or personal identification by a family member, caregiver, friend, or health care worker.

A patient's DNR Comfort Care or DNR Comfort Care-Arrest status can be confirmed by one of the following:

1. A DNR Comfort Care card or form completed for the patient.
2. A completed State of Ohio living will (declaration) form that states that the patient does not want CPR (in the case of a patient who has been determined by two doctors to be in a terminal or permanently unconscious state).
3. A DNR Comfort Care necklace or bracelet bearing the DNR Comfort Care official logo.



4. A DNR order signed by the patient's attending physician or, when authorized by section 2133.211 of the Ohio Revised Code, a certified nurse practitioner (CNP) or clinical nurse specialist (CNS).
5. A verbal DNR order is issued by the patient's attending physician, CNP, or CNS.

EMS providers are not required to search a patient to locate DNR identification. Copies of the documents listed under items 1, 2, or 4 are sufficient. The EMS provider must verify the identity of a physician or CNP/CNS issuing a verbal DNR order. Acceptable methods of verification include personal knowledge of the physician or CNP/CNS, a return telephone call to verify the information provided, or a list of practitioners with other identifying information such as addresses.

DO NOT RESUSCITATE/SUPPORT CARE GUIDELINES (cont'd)

A DNR order is considered current if it is present in a health care facility's records or patient chart. A DNR order for a patient outside of a health care facility is considered current unless it is revoked by the patient or by the patient's attending physician or CNP/CNS. EMS providers are not required to research whether a DNR order that appears to be current has been discontinued.

The DNR Comfort Care patient always retains the right to request resuscitation even if the protocol has been activated. A request for resuscitation by the patient revokes the DNR Comfort Care status and the EMS providers should immediately follow the resuscitation procedures in the State of Ohio EMS Guidelines.

Once the DNR Comfort Care protocol has been activated, the wishes of family members or bystanders demanding or requesting resuscitation should not be honored. Any and all resuscitative measures should continue to be withheld. Attempts should be made to help the family understand the dying process and the patient's choice not to be resuscitated.

When the DNR Comfort Care Protocol has been activated, EMS personnel will provide the following care as clinically indicated:

1. Suction the airway.
2. Administer oxygen.
3. Position for comfort.
4. Splint or immobilize.
5. Control bleeding.
6. Provide pain medication.
7. Provide emotional support.
8. Contact medical direction
9. Contact other appropriate health care providers such as hospice, home health, attending physician, CNP/CNS as time or patient scenario permits.

When the DNR Comfort Care Protocol has been activated, EMS personnel will not perform the following:

1. Administer chest compressions.
2. Insert an artificial airway.
3. Administer resuscitative drugs.
4. Defibrillate or cardiovert.
5. Provide respiratory assistance other than the methods listed above.
6. Initiate resuscitative IV access.
7. Initiate cardiac monitoring.

NOTE: If any of these actions have been initiated prior to confirmation of the patient's DNR Comfort Care status, discontinue them when the DNR Comfort Care protocol is activated. Any and all respiratory assistance, IV medications, or other therapies that have been part of a patient's ongoing course of treatment for an underlying disease may be continued.

When the DNR Comfort Care protocol is performed, the suggested documentation on the patient care report should include the following information:

1. The document identifying the DNR Comfort Care status of the patient.
2. The method of verification of the patient's identity, if any was found through reasonable efforts.
3. DNR Comfort Care or DNR Comfort Care-Arrest classification.
4. All actions taken to implement the DNR Comfort Care protocol.
5. Any and all unusual events occurring enroute or on scene including interactions with family members, bystanders, or health care providers.

Any and all questions or concerns that arise during the management of DNR Comfort Care patients may be directed to and discussed with medical direction for assistance and guidance.

GUIDELINES FOR PATIENT REFUSAL OF TREATMENT OR TRANSPORT

GENERAL STATEMENT

A. Competent adult patients have the right to give consent for, or refuse, any or all treatments. EMS should attempt to obtain vital signs on all patients. Competent adult patients also have the right to give consent for, or refuse ambulance transport. Each agency should have established guidelines for patient consent and refusal. A performance improvement (PI) process should be in place to review these runs.

1. Consent

a. When waiting to obtain lawful consent from the person authorized to make such consent would present a serious risk of death, serious impairment of health or would prolong severe pain or suffering of the patient, treatment may be undertaken to avoid those risks without consent. In no event should legal consent procedures be allowed to delay immediately required treatment.

b. Adults

A competent patient may withdraw consent for treatment at any time.

1. Prior to discontinuing or withdrawing treatment, the EMT shall determine if the patient is competent

2. Mental Competence - Decision Making Capability

a. A person is mentally competent if he:

1. Is capable of understanding the nature and consequences of the proposed treatment.
2. Has sufficient emotional control, judgment, and discretion to manage his own affairs.

b. Ascertaining that the patient is oriented, has an understanding of what happened and may possibly happen if treated or not treated, and a plan of action - such as whom he will call for transportation home - should be adequate for these determinations.

3. Impairment

a. Patients may be considered incompetent to refuse care and/or transportation when they appear impaired. Patients who appear impaired include:

Suicidal Patients

Patients impaired by alcohol

Patients impaired by illicit drugs

Patients impaired by prescription or nonprescription drugs

Patients impaired by medical conditions such:

Hypoglycemia

Hypoxemia

Hypoperfusion

Head trauma

Psychiatric conditions

PROTOCOL FOR PATIENT REFUSAL (cont'd)

c. Pediatric

1. A critically ill or injured child should be treated and transported immediately
2. In non-emergency cases involving minors, consent should be obtained from the parent or legal guardian prior to undertaking any *treatment*. All children must be

- evaluated for acuity of illness, regardless of obtaining parental consent.
3. Each agency should have policies which delineate situations in which children may be left at the scene, emancipated status, and instances when medical control should be contacted.

PROCEDURE FOR REFUSAL

- A. If a patient wishes to refuse treatment, examination or transportation, each agency should have steps which will be followed and optimally all of these runs will be reviewed as part of the PI process.
- B. The completion of a Patient Refusal Checklist by the EMS professional is suggested (see enclosed example)
 1. The patient must be advised of the benefits of treatment and transport as well as the specific risks of refusal of treatment and transport.
 2. The patient must be able to relate to the EMS professional in his or her own words what the risks and benefits of refusal of transport.
 3. The patient will be provided with a refusal information sheet, also attached. A copy of this refusal information sheet or the refusal section of the check list will be signed by the patient, dated, and both will be kept with the patient's file.

REFUSAL INFORMATION SHEET

PLEASE READ AND KEEP THIS FORM

This form has been given to you because you have refused treatment and/or transport by the Emergency Medical Service. Your health and safety are our primary concern, so even though you have decided not to accept our advice, please remember the following:

1. The evaluation and/or treatment provided to you by EMS professionals is not a substitute for medical evaluation and treatment by a doctor. We advise you to get medical evaluation and treatment.
2. Your condition may not seem as bad to you as it actually is. Without treatment your condition or problem could become worse. If you are planning to get medical treatment, a decision to refuse treatment or transport by the EMS may result in a delay which could make your condition or problem worse.
3. Medical evaluation and/or treatment may be obtained by calling your doctor, if you have one, or by going to any hospital emergency department in this area, all of which are staffed 24 hours a day by emergency physicians. You may be seen at these emergency departments without an appointment.
4. If you change your mind or your condition becomes worse and you decide to accept treatment and transport by the Emergency Medical Service, please do not hesitate to call us back. We will do our best to help you.
5. **If the box at the left has been checked**, it means that your problem or condition has been discussed with an emergency physician at the medical control hospital by radio or telephone, and the advice given to you by the Emergency Medical Service has been issued or approved by the emergency physician.

*** I have been informed of the dangers of my not being treated and/or transported by the Emergency Medical Services, for my condition, for treatment by an emergency department or private physician. I release _____ and consulting hospital their employees and officers from all liability for any adverse results caused by my decision.

I have received a copy of this information sheet.

Signature: _____

Circle one: Patient Spouse Parent Guardian

Print Name: _____

Signature of EMS professional: _____ Witness: _____

Print Name: _____

Report Number: _____ Date: _____

NON-TRANSPORTS

A number of EMS calls result in non-transport of the patient or victim. If an individual is not transported by the squad, the following guidelines will apply:

1. In the event of a patient assist call and no Emergency Medical Services are rendered, a report should be made but Medical Control need not be contacted.
2. If the patient refuses treatment or transport, the patient refusal procedure should be followed.
2. If the patient is requesting transport and the EMS professionals in charge does not feel it is necessary to transport the patient, Medical Control must be contacted and approve the EMS refusal. This includes any case that might be transported by car or private ambulance.
 - a. A Code I Advisory Sheet should be initiated and given to the patient. (See Code I Advisory Sheet)
4. Code I (non-transport) for minors

If after evaluation of a minor, the EMS professional and medical control agree that the patient is a Code I, that minor can be left in the care of a responsible adult that is not the parent or legal guardian. The responsible adult may be a family friend, neighbor, school bus driver, teacher, school official, police officer, social worker, or other person at the discretion of medical control and the EMS professional.

CODE I ADVISORY SHEET

You have been evaluated by an EMS professional in communication with a physician over a radio. It has been determined that you do not need an ambulance at this time. **THIS DOES NOT MEAN THAT YOU SHOULD NOT BE SEEN BY A PHYSICIAN. THE EVALUATION AND TREATMENT YOU RECEIVED WAS TO DETERMINE THE SEVERITY OF YOUR PROBLEM AND WHETHER OR NOT YOU NEEDED AN AMBULANCE; IT IS NOT A SUBSTITUTE FOR FINAL EVALUATION AND TREATMENT BY A PHYSICIAN.**

We advise you to see a physician at this time. You may decide that you don't need to see a physician now, but if you don't then you must take the risk that you will not receive treatment that you need and that this may cause problems for you later on. The following may help you decide:

1. If you have a cut, only a physician should decide whether or not you need stitches. Most physicians recommend stitches within 8 hours because after that the risk of an infection becomes much greater.
2. If you have a cut, scrape or burn and have not had a tetanus (lockjaw) shot within 5 years, you may need one. You do not need to get a tetanus shot immediately, but you should not delay this more than 24 hours.
3. Many burns do not appear to be as bad as they really are. Also, serious problems can develop from some burns which may be prevented by early medical treatment.
4. If the pain or other discomfort you had has gone away, it does not necessarily mean the problem that caused it has gone away.
5. If you decide you don't need to see a physician and then change your mind, don't wait. The longer you wait, the more problems you may have.

USE COMMON SENSE!!!

"IF I DON'T HAVE A PHYSICIAN, OR CAN'T SEE MY PHYSICIAN NOW, WHAT CAN I DO?"

GO TO THE NEAREST EMERGENCY DEPARTMENT OR CALL BACK EMERGENCY MEDICAL SERVICES.

Patient Signature _____ Date _____

EMT Signature _____

Report # _____

PATIENTS WITH FUNCTIONAL NEEDS

In 1980, the World Health Organization created a classification called the International Classification of Impairments, Disabilities, and Handicaps (ICHDH) to identify populations with health components of special needs and/or disability. The list of conditions cited under this classification has been expanded several times over the years and remains in a fluid state. In 2001, the World Health Assembly amended the title of this classification to the International Classification of Functioning, Disability, and Health (ICF), and over time, the term “special needs” has been replaced with “functional needs”. In the United States, the Americans with Disabilities Act of 1990 (ADA) was the initial broad civil rights law to address individuals with disabilities. Many states, including Ohio, passed similar legislation to support individuals with disabilities and patients with functional needs. Per the ADA, disability is defined as “a physical or mental impairment that substantially limits a major life activity”.

EMS professionals must be cognizant of the protocols provided by the EMS medical director for the prehospital management of functional needs patients as well as the existing state and federal legislation. Most importantly, the quality of medical care should not intentionally be diminished or adversely altered during the triage, treatment, and transport of functional needs patients. Although your EMS medical director may provide additional parameters and protocols, the following provides a basic overview of the patient management scenarios most frequently seen by EMS professionals.

Communication Barriers

Language Barriers: EMS professionals may accept the assistance of family members or bystanders during communication with a patient who has expressive and/or receptive aphasia, is nonverbal, or who speaks a different language than the EMS professional. Documentation of the identification of the person assisting with the communication and, if possible, transport of this individual to the hospital with the patient is advised. For differences in language, there are a number of products on the market (translation cards, symbols, telephone-accessible services with live interpreters, etc.) specifically created for the medical environment to assist EMS professional in obtaining a patient’s chief complaint, medical history, medication, allergies, and other critical information. The methods through which the patient augments their communication skills (eye blinking, nodding, etc.) should be noted and communicated to the receiving facility.

Sensory Barriers: Sensory barriers, i.e. visual or auditory impairment, may present challenges in the prehospital setting, particularly during the acquisition of a patient history and the completion of patient assessment. The methods through which the patient augments their communication skills (use of Braille, sign language, lip reading, etc.) should be noted and communicated to the receiving facility. Written communication between the patient and the EMS professional is part of the medical record, even if it is on a scrap sheet of paper, and it should be retained with the same collation, storage, and confidentiality policies and procedures that are applicable to the written or electronic patient care report.

Assistance Adjuncts

Assistance devices: The devices that facilitate the activities of life for the patient with functional needs should be noted. These devices include, but are not limited to, magnifiers, white or sensory canes, hearing aids, tracheostomy speaking valves, or extremity prostheses. These devices should accompany the patient if possible during transport as their availability to the patient can facilitate the interaction between the patient and the healthcare provider and enhance the patient’s safety and overall well-being.

Service Animals: A service animal, usually a dog, is not classified as a pet and should, by law, always be permitted to accompany the patient. A service animal as defined by the ADA is “any guide dog, signal dog, or other animal individually trained to do work or perform tasks for the benefit of an individual with a disability, including, but not limited to guiding individuals with impaired vision, alerting individuals with impaired hearing to intruders or sounds, providing minimal protection or rescue work, pulling a wheelchair, or fetching dropped items.” The service animal is not required to wear a vest or a leash, and it is illegal to make a request for special identification or documentation from the service animal’s partner. EMS professionals may only ask the patient if the service animal is required because of a disability and the form of assistance the animal has been trained to perform. EMS professionals are not responsible for the care of service animals. If the patient is incapacitated and cannot personally care for the service animal, a decision can be made whether or not to transport the animal in this situation. Animals that provide emotional support, comfort, or companionship do not qualify as service animals.

HEAVY PATIENTS

GENERAL CONSIDERATIONS

Less than one percent of the population has a weight in excess of 300 lbs. This means that in any community there may be one or more individuals who fall into this extreme. As patients, these individuals are frequently classed as high risk because of the increased medical complications associated with their excess weight. In the EMS system they present the additional problem of movement and transportation. These individuals have the right to expect prompt and expert emergency medical care. Therefore, in order to facilitate the care of these individuals without risking the health of EMS workers, the following protocol is established.

- A. In managing a patient with weight over 300 lbs., consider moving the patient with at least 6 individuals to assist. At the scene, as many EMS professionals that can be mobilized may be supplemented by police or other safety personnel as appropriate. If 6 individuals are not available, mutual aid will be required.
- B. It may be necessary to remove doors, walls or windows. The situation is no different than extrication from a vehicle, although property damage may be higher. At all times the patient's life must be the first priority.
- C. The patient is to be placed on at least 2 (double) backboards or other adequate transfer device for support.
- D. The patient is to be loaded on a cot that is in the down position, and the cot is to be kept in the down position at all times.
- E. It is **NECESSARY TO NOTIFY THE HOSPITAL WELL IN ADVANCE** of arrival so that preparations can be completed in a timely fashion.
- F. If individuals in the community are known to fall within this special category it is appropriate to inform them in advance of the type of assistance they can expect from the EMS system, and help them make plans well in advance to assist you. When calling for the squad, and if they identify themselves and their special needs, it will promote the timeliness of your efforts.

ON SCENE EMS INTERVENER

On an EMS run where an unknown EMS professional from outside the responding EMS agency wishes to intervene in the care of patients, the following steps should be initiated:

1. Ideally, if no further assistance is needed, the offer should be declined.
2. If the EMS intervener's assistance is needed or may contribute to the care of the patient:
 - a. An attempt should be made to obtain proper identification and confirm the possession of a valid Ohio EMS certificate. Acceptance of borderline states' EMS certification or licensure documents is at the discretion of individual EMS services. Notation of the EMS intervener's name, address and certification numbers must be documented on the run report.
3. Significant involvement with patient care or variance from protocols will require the EMS intervener to accompany the patient to the hospital.

PHYSICIAN AT THE SCENE

GOOD SAMARITAN PHYSICIAN

This is a physician with no previous relationship to the patient, who is not the patient's private physician, but is offering assistance in caring for the patient. The following criteria must be met for this physician to assume any responsibility for the care of the patient:

1. Medical Control must be informed and give approval.
2. The physician must have proof they are a physician. They should be able to show you their medical license. Notation of physician name, address, and certification numbers must be documented on the run report.
3. The physician must be willing to assume responsibility for the patient until relieved by another physician, usually at the emergency department.
4. The physician must not require the EMS professional to perform any procedures or institute any treatment that would vary from protocol and/or procedures outlined in the protocols provided by the medical director of the EMS agency or is not within the Ohio EMS scope of practice.

If the physician is not willing or able to comply with all the above requirements, his assistance must be courteously declined.

PHYSICIAN IN HIS/HER OFFICE, OR URGENT CARE CENTER

1. EMS should perform its duties as usual under the supervision of Medical Control or by protocol.
2. The physician may elect to treat the patient in his office.
4. The EMS professional should not provide any treatment under the physician's direction that varies from protocols provided by the medical director of the EMS agency or is not within the Ohio EMS scope of practice. If asked to exceed these boundaries, the EMS professional should decline the request until contact is made with Medical Control.
4. Once the patient has been transferred into the squad, the patient's care becomes entirely under Medical Control.

RESTRAINTS

GENERAL GUIDELINES

- A. Soft restraints are to be used only when necessary in situations where the patient is potentially violent and may be of danger to themselves or others. Patients who are clinically competent retain a right to refuse transport. EMS professionals must remember that aggressive violent behavior may be a symptom of medical conditions such as but not limited to:
1. Head trauma
 2. Alcohol/drug related problems
 3. Metabolic disorders (i.e., hypoglycemia, hypoxia, etc.)
 4. Psychiatric/stress related disorders
- B. Patient health care management remains the responsibility of the EMS professional. The method of restraint shall not restrict the adequate monitoring of vital signs, ability to protect the patient's airway, compromise peripheral neurovascular status or otherwise prevent appropriate and necessary therapeutic measures. It is recognized that evaluation of many patient parameters requires patient cooperation and thus may be difficult or impossible.
- C. All restraints should have the ability to be quickly released, if necessary.
- D. The person who was responsible for applying a restraining device that requires a key or special releasing device must physically remain with the patient regardless of the vehicle of transport in the interest of the patient's safety. This policy is not intended to negate the need for law enforcement personnel to use appropriate restraint equipment to establish scene control.
- E. Patients should be transported in the supine or decubitus position to ensure adequate respiratory and circulatory monitoring and management. The prone position should be a position of last resort and rarely used. All restrained patients should be placed on a stretcher with adequate foam padding particularly underneath the head if the patient is positioned in the prone position. Extremity restraints should be secured to the stationary portion of the stretcher frame in a fashion where they can be removed quickly in the event of an emergency. Stretcher straps should be placed on all patients as these are analogous to seatbelts during transport. Restraint of the extremities in a spread eagle fashion significantly reduces the strength the patient can generate from the large muscle groups. Restraints that use multiple knots or that may restrict chest wall motion are unacceptable.
- F. Restrained extremities should be monitored for color, nerve and motor function, pulse quality, and capillary refill at the time of application and frequently thereafter. The patient's ventilatory status, pulse oximetry, or waveform capnography should be monitored during transport.
- G. After addressing and/or treating metabolic causes of aggressive or violent behavior, administration of a benzodiazepine and/or antipsychotic as a chemical restraint should be considered.

RESTRAINTS (cont'd)

- H. Restraint documentation on the EMS report shall include:
1. Reason for restraint
 2. Agency responsible for restraint application (i.e., EMS, Police)
 3. Documentation of serial cardio-respiratory status and peripheral neurovascular

status

- I. Prehospital care providers reserve the right to refuse elective transport of patients who are deemed too violent or uncooperative to be controlled by the restraint methods and devices permitted by their prehospital protocols. The safety of prehospital care providers will be maintained at all times during transport. The prehospital care provider reserves the right to request completion of transport by law enforcement personnel. The prehospital care provider may administer an appropriate dose of a benzodiazepine and/or antipsychotic as a pharmacological restraint prior to transport of the patient. The prehospital care provider reserves the right to suggest to medical facilities the use of adequate pharmacological restraints prior to acceptance of the patient. A decision to refuse elective transport of a violent or uncooperative patient may be made by any member of the prehospital care team or its supervisor. Medical direction may be contacted at any time for advice or for pharmacological orders.

TRANSPORT TO FREE-STANDING EMERGENCY CARE CLINICS

EMS units should not transport patients to free-standing emergency care clinics (***free-standing emergency departments are acceptable destinations***), urgent care facilities, or private physicians' offices in response to emergency calls except:

1. When directed by Medical Direction.

2. If specifically authorized by on-line medical direction.
3. When the EMS unit is following protocols approved by Medical Direction that authorize such transports under certain circumstances.
4. When the EMS unit is a private service responding to a call in which the patient and/or the family requests transport to such facility and the patient is clearly in stable condition.

From the perspective of an EMS system, free-standing emergency care clinics are no different, and no more appropriate as an EMS transport destination, than any private physician's office, unless they have been through a health system agency or regional EMS review.

A free-standing emergency clinic is not automatically expected to be incorporated into the EMS system. However, in certain circumstances these facilities may be a valuable component.

NON-HOSPITAL TRANSFER POLICY

GUIDELINES FOR TRANSFER FROM A NON-HOSPITAL LOCATION TO A NON-HOSPITAL LOCATION: HOME TO HOSPICE; HOSPICE TO HOME

- A. On occasion, the out-of-hospital EMS professional(s) will be called upon to transport a patient from a non-hospital location to another non-hospital facility such as hospice center or from hospice to home or a doctor's office. The provider(s) will follow the written or pre-existing orders of the patient's physician or physician approved hospice center orders for the transport. At times, a hospice nurse may arrive or already be at the scene. He/she should be able to help review orders and/or advance directives such as DNR or "Support Care" orders to enable transport in accordance with the wishes of the patient and his/her family. A hospice patient by definition is DNR.

Medical Control does not need to be contacted unless the DNR is revoked. However, if the EMS professional(s) feels the need to contact Medical Control for advice or direction, the professional(s) will clearly advise Medical Control of the patient's terminal condition and DNR status.