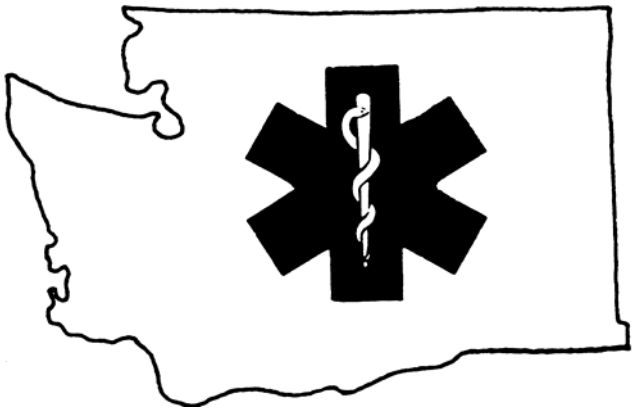
WASHINGTON STATE

DEPARTMENT OF HEALTH

HEALTH SERVICES QUALITY ASSURANCE DIVISION

OFFICE OF EMERGENCY MEDICAL SERVICES AND TRAUMA SYSTEM



EMT-BASIC FIELD PROTOCOLS

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Washington State Department of Health

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These Field Protocols Were Developed And Written By The Washington State Department of Health, Office Of Emergency Medical Services And Trauma System (OEMSTS) With Input And Review From The Following Groups And Individuals:

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These are State Protocols that establish the standard for field performance. EMS County Medical Program Directors may NOT have protocols that vary from these without specific written approval from the Department of Health. Any deviation from these protocols must be identified to and approved in writing by the Department of Health.

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Introduction

These protocols were developed by the Washington State Protocol Work Group based on the Washington State EMT-Basic Curriculum, Revised September 1996, and represent the consolidation of medical procedures for emergency prehospital patient care from many local and national sources.

These protocols were developed for use by EMT-Basic trained and certified personnel. No person may provide any treatment they are not trained to provide AND that are not certified by the Department at the required level of certification.

The assessment information in the General Orders is intended to be considered with all protocols. In addition, the General Medical Assessment should be considered with all medical protocols, the General Trauma Assessment should be considered with all trauma protocols, and the Pediatric Assessment should be considered with all pediatric protocols.

These protocols are intended to:

1. Provide direction for the use of appropriate emergency medical care procedures, based on the Washington State EMT-Basic curriculum training modules (identified on pages iii through v of the curriculum), to be used by EMT-Basic certified personnel while working under the direction of the County Medical Program Director;
2. Provide for the standardization of prehospital care in Washington State;
3. Provide base hospital physicians and nurses with an understanding of what aspects of patient care have been stressed to EMS personnel and what their treatment capabilities may be;
4. Provide EMS personnel with a framework for prehospital care and an anticipation of supportive orders from Medical Control;
5. Provide the basic framework on which Medical Control can conduct quality improvement programs.

They are <u>not</u> intended to:

1. Be a replacement for “on-line” medical control;
2. Be a teaching manual for EMS personnel. It is assumed that EMS personnel are appropriately trained and that each person will continue to meet the state’s continuing education requirements for recertification. It is further assumed that the County Medical Program Director will provide continuing education based on the results of patient care audit and review;
3. Interfere with the wishes of the patient or family;

GENERAL ORDERS

I. Scene Size-up/Assessment
- A. Body substance isolation per agency exposure control program
- B. Scene safety

II. Initial Patient Assessment
- A. Airway - Breathing - Circulation
  1. Follow current national standards for CPR, FBAO and defibrillation
  2. If patient has a DNR order, follow the Do Not Resuscitate (DNR) protocol on page 39
- B. Consider ALS response and support as identified in the regional patient care plan and/or patient care procedures

III. Focused History And Physical Exam - Medical Patients (see Medical Assessment, page 2)

IV. Focused History And Physical Exam - Trauma Patients (see Trauma Assessment, page 23)

V. Detailed Physical Exam
- A. Patient and injury specific
- B. Perform a detailed physical examination for additional information

VI. Management
- A. Provide appropriate care according to specific treatment protocol.
  1. Follow current national standards for CPR, FBAO and defibrillation

VII. Ongoing Assessment
- A. Repeat and record initial patient assessment, including time
- B. Reassess mental status
- C. Maintain open airway and monitor breathing for rate and quality
- D. Reassess pulse for rate and quality
- E. Monitor skin color and temperature
- F. Re-establish patient priorities
- G. Reassess and record vital signs, include time
- H. Repeat focused assessment of patient complaint or injuries
- I. Check interventions
- J. Monitoring of iv fluids by trained and authorized personnel

VIII. Communications
- A. Radio information protocol during transport.
  1. Identify ambulance service
  2. Patient's age, sex, and primary complaint or problem
  3. Physical assessment findings including, vital signs and level of consciousness
  4. Pertinent history as needed to clarify problem (medications, illnesses, allergy, mechanism of injury)
  5. Treatment given and patient's response
  6. Estimated time of arrival
- B. Verbal and written report to emergency department nurse or physician
- C. Consider critical incident stress debriefing as necessary

IX. Transportation
- A. Advise emergency department of changes in patient's condition during transportation
- B. Continue ongoing assessment and patient care

X. Clean, Service and Restock Vehicle

MEDICAL

GENERAL MEDICAL ASSESSMENT

I. Scene Size-up/Assessment
II. Focused History and Physical Exam
- A. Assess complaints and signs and symptoms, responsive patient
  1. O-P-Q-R-S-T assessment guidelines
  2. Obtain SAMPLE history
  3. Obtain vital signs
  4. Conduct AVPU mental status exam as needed
  5. Intervention

III. Management
- A. Provide appropriate care according to specific treatment protocol.

IV. Ongoing and/Or Detailed Assessment As Needed
V. Transport

ANAPHYLAXIS/ALLERGIC REACTION – Revised 9/05

Note: Life threatening airway/respiratory compromise may develop as the reaction progresses.

I. Scene Size-Up/Initial Patient Assessment

II. Focused History and Detailed Physical Exam

A. Signs and symptoms

1. Not all signs and symptoms are present in every case
2. History - Previous exposure; Previous experience to exposure; Onset of symptoms; Dyspnea
3. Level of Consciousness - Unable to speak; Restless; Decreased level of consciousness; Unresponsive
4. Upper Airway – Hoarseness; Stridor; Pharyngeal edema / spasm
5. Lower Airway – Tachypnea; Hypoventilation; Labored-Accessory muscle use; Abnormal retractions; Prolonged expirations; Wheezes; Diminished lung sounds
6. Skin – Redness; Rashes; Edema; Moisture; Itching; Urticaria; Pallor; Cyanotic
7. Vital Signs – Tachycardia; Hypotension
8. Gastrointestinal - Abnormal cramping; Nausea/vomiting; Diarrhea

Note: When a paramedic system exists, ALS rendezvous shall be arranged as soon as possible as directed by local or regional patient care procedures or when directed by medical direction/control.

III. Management

A. Remove offending agent (i.e. Stinger)

B. Clear the airway, provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)

C. Anaphylaxis/Allergic Reaction with Severe Respiratory Distress

1. Circulation
2. Epinephrine 1:1000 (Administered by an Epi Auto-injector from your EMS supplies)
   a) Dosage:
      (1) **Adult:** (30 kg or 66 lbs and higher) - one adult auto-injector (0.3 mg)
      (2) **Infant and child:** (Under 30 kg or 66 lbs) - one pediatric auto-injector (0.15 mg)
   b) Ensure epinephrine is not expired, cloudy or crystallized
   c) Only to be administered following approval by on-line or off-line medical direction/control.
   d) Record time of injection and reassess in two minutes
3. If the administration of Epi is refused do not administer Epi, contact medical control and continue supportive care.

D. Pulse Oximetry if available

E. Psychological support

IV. Ongoing Assessment

V. Transport

ALTERED MENTAL STATUS

I. Scene Size-Up/Initial Patient Assessment

II. Focused History and Physical Exam

A. Use AVPU mnemonic to determine level of responsiveness
   1. Alert and oriented
   2. Responsiveness to verbal stimuli
   3. Responsiveness to painful stimuli
   4. Unresponsiveness

B. Attempt to determine cause of altered mental status, if possible; e.g., overdose, medical condition by SAMPLE history or trauma assessment
   1. Signs and symptoms
   2. Allergies
   3. Medications
   4. Pertinent past history
   5. Last oral intake
   6. Events leading to the injury or illness

III. Management

A. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)

B. Do not leave unattended

C. Pediatric Considerations
   1. Attempt to determine cause; i.e., hypoglycemia, poisoning, post seizure, infection, head trauma, hypoperfusion
   2. See above for emergency medical care

IV. Ongoing Assessment

V. Transport

BEHAVIORAL EMERGENCIES

CAUTION:

Be alert: patient behavior may change rapidly and the scene may become unsafe.

I. Scene Size-Up/Initial Patient Assessment

A. If Scene Is Not Secure
1. Guarantee your own safety
2. Wait for law enforcement to secure the scene

B. When Scene Is Secure
1. Scan for signs of items contributing to crisis
2. Locate the patient
3. Assess and treat life-threatening problems
4. If show of force necessary to render care, request assistance from law enforcement and contact medical control

II. Focused History and Physical Exam

A. Signs and symptoms
1. Psychological Crisis
a) Panic
b) Agitation
c) Bizarre behavior
d) Danger to self or others
2. Suicide Risk
a) Depression
b) Suicidal gestures
c) Mental Status Examination (see Altered Mental Status, page 4)

III. Management

A. One EMT to assume control of situation
B. Speak in a calm, quiet voice; maintain eye contact and move slowly
C. Answer questions honestly
D. Do not leave the patient alone or turn your back
E. Restrain only if necessary for your protection or that of the patient

IV. Ongoing Assessment

V. Transport

A. If patient consents, follow general medical assessment guidelines (see page 2)
B. If patient refuses, obtain consent according to local protocol

CARDIOVASCULAR EMERGENCIES – Revised 9/05

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Onset/Provocation/Quality/Radiation/Severity/Time
- B. Signs and symptoms
  1. Chest pain
  2. Difficulty breathing
  3. Skin changes (pale, sweaty, cyanotic)
  4. Anxiety/irritability (feeling of impending doom)
  5. Circulatory (irregular pulse/BP, shock, pulseless)
  6. Nausea/vomiting
- C. Allergies/Medications/Previous Hx/Last Intake/Events Prior

III. Management
- A. Patient responsive, c/o chest pain/pressure/SOB/sweating
  1. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
  2. Patient's own, physician prescribed Nitroglycerin available; assist patient with self administration of Nitroglycerin, after consulting on or off line medical control
     a) Nitroglycerin (see page 49)
     b) Aspirin (see page 47)
  3. If patient's own, physician prescribed Nitroglycerin not available or appropriate;
     a) Continue oxygen
     b) Allow patient to achieve safe position of comfort
- B. Patient unresponsive
  1. Check respirations and pulse
  2. Begin CPR if not provided during Initial Patient Assessment (follow current national standards). If Do Not Resuscitate Order, follow protocols on Do Not Resuscitate (DNR) protocol on page 39
  3. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
  4. Attach Automatic External Defibrillator (AED) if available
  5. Follow current national standards for defibrillation

IV. Ongoing Assessment
V. Transport

DIABETIC EMERGENCIES

I. Scene Size-Up/Initial Patient Assessment

II. Focused History and Physical Exam

A. Signs and symptoms

1. Hypoglycemia (Develops rapidly)
   a) Dizziness and headache
   b) Abnormal, hostile or aggressive behavior
   c) Fainting, convulsions
   d) Full rapid pulse
   e) Skin pale, cold and clammy
   f) Copious saliva, drooling
2. Hyperglycemia (Develops slowly)
   a) Dry mouth, and intense thirst
   b) Abdominal pain and vomiting
   c) Restlessness
   d) Weak, rapid pulse
   e) Dry, red, warm skin

III. Management

A. If patient is able to swallow, administer oral glucose, or substance high in simple sugar; i.e., honey, orange juice with 2-3 tsp. of sugar, after consulting on or off line medical control

B. Be prepared for patient to vomit

C. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)

D. Maintain body temperature

IV. Ongoing Assessment

V. Transport

A. Place patient in position of comfort, preferably lying on their side, and be prepared for patient to vomit

B. If patient regains full consciousness and refuses transport, consult with medical control

GYNECOLOGICAL EMERGENCIES

Excessive Vaginal Bleeding

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
III. Management
A. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
B. If bleeding due to trauma to external genitalia, place appropriate external dressings to any wounds
C. Do not place dressings inside vagina
D. If hypotensive, treat for shock (see Shock, page 31)
IV. Ongoing Assessment
V. Transport

Sexual Assault

Note: Protect Potential Crime Scene and any Evidence as Much as Possible.

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
III. Management
A. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
B. Follow treatment protocols for victims of trauma, see page 23
C. Advise patient not to wash, douche, urinate or defecate prior to physician exam
D. Do not examine genitalia unless obvious bleeding requires the application of a dressing
E. Do not place dressings inside vagina
F. If hypotensive, treat for shock (see shock, page 31)
IV. Ongoing Assessment
A. Provide non-judgmental emotional support
V. Transport

OBSTETRICAL EMERGENCIES

Emergency Delivery

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Determine
  1. Date of expected birth
  2. Onset of contractions/pain
  3. Any bleeding or discharge
  4. Number of pregnancies/births
  5. Duration and frequency of contractions
- B. Signs and symptoms of imminent delivery
  1. Perineum bulging or baby crowning
  2. Contractions < 2 minutes apart
  3. Mother expresses the need to "push" or "bear down"

III. Management
- A. Have mother lie supine with knees drawn up and spread apart
- B. Prepare OB kit
- C. When the infant's head appears during crowning, place fingers on bony part of skull and exert very gentle pressure to prevent explosive delivery
- D. When head is delivered, suction infant's nose and mouth with bulb syringe
- E. Assist delivery of shoulders and body; do not pull on infant
- F. When baby is delivered;
  1. Wipe blood and mucus from mouth and nose, suction mouth and nose again
  2. Assure patent airway, stimulate cry by tapping soles of feet
  3. Do APGAR assessment on infant one minute after delivery (appearance, pulse, grimace, activity, respiratory effort (see APGAR, page 36)
  4. Wrap infant in warm blanket and place on its side, head slightly lower than trunk
  5. Keep infant level with vagina until the cord is cut
  6. As pulsations cease; double clamp, tie and cut cord between two clamps
- G. Record time of delivery
- H. Let placenta deliver normally - Note: Do not pull on cord.
  1. Place placenta in plastic bag and transport with mother
  2. Massage mother's lower abdomen until firm
- I. Place sterile pad over vaginal opening

IV. Ongoing Assessment
- A. Estimate blood loss, treat for shock as necessary

V. Transport

Complications Of Deliveries

Miscarriage - Spontaneous Abortion

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  1. Cramp-like lower abdominal pain similar to labor
  2. Moderate to severe vaginal bleeding, which may be bright or dark red
  3. Passage of tissue or blood clots

III. Management
- A. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
- B. Treat for shock (see Shock, page 31)
- C. Place sterile pad over vaginal opening
- D. Bring fetal tissues to the hospital

IV. Ongoing Assessment
V. Transport

Prolapsed Cord

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  1. Cord presents through the birth canal before delivery
  2. Normally occurs early in labor

III. Management
- A. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
- B. Position mother in knee chest position or extreme Trendelenburg
- C. Insert sterile gloved hand into vagina pushing the presenting part of the fetus away from the pulsating cord
- D. Keep pressure on presenting part and monitor pulsations in the cord
- E. Continue monitoring pulsations until relieved at the hospital

IV. Ongoing Assessment
V. Transport

Breech Birth and/or Limb Presentation

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  - 1. Buttocks or extremities present first during the delivery process

III. Management
- A. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
- B. Allow delivery to progress spontaneously
- C. Support infant's body as it is delivered
- D. If head delivers spontaneously, proceed as with normal delivery - If head does not deliver within 4-6 minutes, insert gloved hand into vagina, create an airway for the baby
- E. Place mother in head down position with pelvis elevated
- F. Do not remove hand from inside vagina until relieved by hospital staff

IV. Ongoing Assessment
V. Transport

Meconium Stain

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  - 1. Greenish or brownish-yellow amniotic fluid rather than clear
  - 2. Discoloration/staining on infant’s face
  - 3. Often indicates possible fetal distress during labor

III. Management
- A. Do not stimulate infant to breath prior to suctioning
- B. Thoroughly suction oropharynx and nasopharynx
- C. Maintain infant’s airway

IV. Ongoing Assessment
V. Transport

Pre-delivery Seizures

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  - 1. Mild pre-eclampsia
    - a) Hypertension (moderate, above 140 and below 160 systolic)
    - b) Edema
    - c) Rapid weight gain
  - 2. Moderate to severe
    - a) Hypertension above 160 systolic
    - b) Headache
    - c) Changes in behavior
    - d) Visual disturbances
    - e) Dyspnea
    - f) Cyanosis
  - 3. Eclampsia (any of the above plus)
    - a) Seizure
    - b) Postictal

III. Management
- A. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
- B. Take seizure precautions (see Seizures, page 16)
- C. Transport patient preferably lying on left side

IV. Ongoing Assessment
V. Transport

POISONING/OVERDOSE

CAUTION: Do not expose yourself to toxic atmospheres or substances without proper training, PPE and other equipment. If caregiver or patient is exposed, consider primary HAZMAT decontamination.
Note: Life threatening airway/respiratory compromise or shock may develop as the reaction progresses; consider ALS.

Ingested Substances

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
A. Signs and symptoms: history of ingestion, nausea, vomiting, diarrhea, altered mental status, abdominal pain, chemical burns around the mouth, different breath odors
III. Management
A. Remove pills, tablets or fragments from patient's mouth
B. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
C. Consult medical control
1. Consult poison control as directed
2. Activated Charcoal - 1 gram per kilogram of body weight, OR;
3. Syrup of Ipecac - 2 tablespoons and 2, 8 oz. glasses of any safe liquid (water, milk, soda pop, etc.) for adults and children. Repeat in thirty minutes if the patient does not vomit.
4. Contraindications for either medication include altered mental status, ingestion of acids/alkalis, inability to swallow
IV. Ongoing Assessment
V. Transport

Inhaled Substances

I. Scene Size-Up/Initial Patient Assessment
A. Ensure scene is secure to avoid exposure of personnel
II. Focused History and Physical Exam
A. Signs and symptoms: history of inhalation of toxic substance, difficulty breathing, chest pain, cough, hoarseness, dizziness, headache, confusion, seizures, altered mental status
III. Management
A. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)
IV. Ongoing Assessment
V. Transport

Toxic Injection

(See Bites and Stings, page 17)

I. Scene Size-Up/Initial Patient Assessment

A. Ensure scene is secure to avoid exposure of personnel

II. Focused History and Physical Exam

A. Signs and symptoms: weakness, dizziness, chills, fever, nausea, vomiting

III. Management

A. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)

B. Treat open wounds

IV. Ongoing Assessment

V. Transport

Absorbed Substances

I. Scene Size-Up/Initial Patient Assessment

II. Focused History and Physical Exam

A. Signs and symptoms: history of exposure, liquid or powder on patient's skin, burns, itching, irritation, redness

III. Management

A. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)

B. Skin - remove contaminated clothing while protecting self from contamination

1. If powder present, brush off patient
2. Irrigate with water for at least 20 minutes, continuing enroute to the hospital, if possible

C. Eye - irrigate with clean water away from unaffected eye for at least 20 minutes, continuing enroute to the hospital if possible

D. Be prepared for vomiting, seizures or further deterioration of the patient

E. Bringing all containers, bottles, labels, etc. of poison agents to receiving facility

IV. Ongoing Assessment

V. Transport

RESPIRATORY EMERGENCIES

I. Scene Size-Up/Initial Patient Assessment

II. Focused History and Physical Exam

A. Assess Onset/Provocation/Quality/Radiation/Severity/Time

B. Signs and symptoms

1. Anxious/restless
2. Shortness of breath (air hunger, increased/decreased/absent respirations)
3. Skin color changes (cyanotic, pale/clammy, redness/flushing)
4. Abnormal airway noises (wheezing, stridor, gurgling, snoring)
5. Mechanics of respiration (fatigue due to breathing effort, diaphragmatic breathing, retractions, irregular breathing pattern)
6. Patient position (upright, feet dependent; tripod)
7. Drooling, difficulty swallowing, seal bark cough

C. Allergies/medications/pm Hx/last oral intake/events prior

III. Management

A. Patient c/o SOB/inadequate respirations

1. Remove obstruction, if any (follow current national standards for foreign body airway obstruction)
2. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (See Oxygen Delivery, page 50)
3. Allow patient to achieve position of comfort (POC)
4. Prepare to manage/assist respirations as necessary
   a) patient not breathing
   b) patient unable to maintain adequate breathing on their own

B. Patient c/o SOB with wheezing

1. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (See Oxygen Delivery, page 50)
2. Assist patient with self administration of inhaler
   a) if available and prescribed for patient
   b) consult with medical control

C. Pediatric Considerations

1. Airway obstruction (follow current national standards for foreign body airway obstruction)
   a) Use infant/child foreign body airway procedures if complete obstruction
   b) If incomplete obstruction
      (1) do not agitate patient
      (2) allow patient position of comfort
      (3) oxygen/limited exam
2. Patient drooling, with difficulty swallowing, or seal bark cough

   Note: **Do not** attempt to visualize oropharynx.

   a) Assist ventilations p.r.n.
   b) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
   c) Allow patient to achieve position of comfort (parent's lap p.r.n., except during transport)

D. Be prepared to provide positive pressure ventilation should patient deteriorate

IV. Ongoing Assessment

A. Monitor patient and vital signs closely

V. Transport

SEIZURES

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  - 1. May experience sensory changes
    - a) Aura
    - b) Abnormal twitch
    - c) Anxiety
    - d) Dizziness
    - e) Smell, vision, taste
  - 2. Sudden unresponsiveness
  - 3. Convulsions
  - 4. Loss of bowel and bladder control
  - 5. Postictal (recovery phase)
    - a) Confusion, disoriented and possibly combative
    - b) Exhausted and weak

III. Management
- A. Maintain airway
- B. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient assessment (see Oxygen Delivery, page 50)
- C. Suction as needed
- D. Prevent injury to the patient
- E. Pediatric Considerations - Febrile Seizure
  - 1. Signs and symptoms
    - a) Oral or rectal temperature > 100°
    - b) Convulsions
  - 2. Emergency Medical Care
    - a) Remove heavy or swaddling clothes, keep lightly dressed
    - b) Maintain airway
    - c) Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)
    - d) Suction as needed

IV. Ongoing Assessment
V. Transport
- A. Transport patient on their side

NOTE: Conditions that may cause seizures:
• Epilepsy • Fever • Infections • Poisoning • Hypoglycemia (low blood sugar) • Stroke
• Head trauma • Hypoxia (oxygen starvation) • Dysrhythmia (abnormal heart rhythms)
• Pre-delivery seizure, usually related to severe high blood pressure (eclampsia)

ENVIRONMENTAL

BITES AND STINGS - VENOMOUS

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
A. Signs and symptoms
1. History of bite (spider, snake) or sting (insect, scorpion or marine animal)
2. Pain
3. Redness and/or swelling
4. Weakness and/or dizziness
5. Chills or fever
6. Nausea and vomiting
7. Bite marks or stinger

III. Management
A. If stinger is present, scrape the sting site to remove the stinger
Note: Do not attempt to pull the stinger.
B. Wash area gently
C. Remove jewelry from the affected limb before swelling begins, if possible
D. Keep limb immobilized and below the level of the heart and keep patient at rest
E. Do not apply cold to a snakebite
F. Consult medical direction regarding constricting band for snakebite
G. Observe for development of signs and symptoms of an allergic reaction (see Anaphylaxis/Allergic Reaction, page 3)

IV. Ongoing Assessment
V. Transport

DROWNING AND NEAR DROWNING - WATER RELATED EMERGENCIES

I. Scene Size-Up/Initial Patient Assessment

A. CAUTION: Assure the safety of the rescue personnel.

II. Focused History and Physical Exam

A. Signs and symptoms

1. Consider length of time in cold water drowning. Any pulseless, non-breathing patient who has been submerged in cold water should have resuscitation efforts initiated (See Hypothermia, page 20)
2. Suspect spinal injury

III. Management

A. All drowning and near-drowning patients

1. In-line immobilization and removal from water with a backboard if spine injury is suspected or the patient is unresponsive
2. If there is no suspected spinal injury:
   a) Pace patient on left side to allow water, vomitus and secretions to drain from the upper airway
   b) Suction as necessary
3. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
4. If gastric distention interferes with artificial ventilation
   a) Place patient on their left side, while continuing to protect the c-spine
   b) Place hand over the epigastric area of the abdomen
   c) Apply firm pressure to relieve the distention

      Note: This procedure should only be done if the gastric distention interferes with the ability to artificially ventilate the patient effectively.

      Suction as necessary

B. For pulseless and non-breathing drowning patients, follow the Cardiovascular Emergencies protocol (see page 6)

1. For pulseless and apneic drowning patients, consult medical control

IV. Ongoing Assessment

V. Transport

HEAT EMERGENCIES

I. Scene Size-Up/Initial Patient Assessment

II. Focused History and Physical Exam

A. Signs and symptoms

1. Muscular cramps
2. Weakness or exhaustion
3. Dizziness or faintness
4. Skin
   a) Moist, pale, normal to cool temperature
   b) Hot, dry or moist (extreme emergency)
5. Rapid heart rate
6. Altered mental status or unresponsive

III. Management

A. Patient with moist, normal to cool temperature skin

1. Remove patient from the hot environment and place patient in a cool environment (back of an air conditioned ambulance)
2. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)
3. Loosen or remove clothing
4. Cool patient by fanning
5. Place patient in supine position with legs elevated
6. If patient is responsive and not nauseated, have patient drink water
7. If the patient is unresponsive or is vomiting, transport to hospital with patient on left side

B. Patient hot with dry or moist skin

1. Remove patient from the hot environment and place patient in a cool environment (back of an air conditioned ambulance with air conditioner running on high)
2. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
3. Remove clothing
4. Apply cool packs to neck, groin and armpits
5. Keep skin wet by applying water by sponge or wet towels
6. Fan aggressively

IV. Ongoing Assessment

V. Transport

A. Transport to hospital immediately

HYPOTHERMIA

I. Scene Size-Up/Initial Patient Assessment

II. Focused History and Physical Exam

A. Signs and symptoms

1. Environmental conditions of cold exposure
2. Cool to cold skin temperature
3. Decreased mental and/or motor status
4. Stiff or rigid posture or muscles
5. Shivering may be present or absent (absent when temp below 90°)
6. Abnormal breathing
   a) Early/rapid
   b) Late/slow or absent
7. Low to absent blood pressure
8. Slowly responding pupils
9. Inappropriate judgment
10. Complaints of joint or muscle stiffness
11. Skin may be red (early), pale, cyanotic, and/or stiff/hard

III. Management

A. Obtain temperature using hypothermia thermometer, if not available, estimate temperature using the Core Body Temperature chart (see page 38)

B. Remove patient from the cold environment and protect the patient from further heat loss

C. Remove patient's wet clothing and wrap the patient in blankets. Keep patient out of draft

D. Handle with extreme care (rough handling may cause ventricular fibrillation)

E. Care for shock and provide oxygen (warm and humidify the oxygen, if possible)

F. Assess pulses for 30 to 45 seconds before starting CPR

1. If no pulse, begin CPR (follow current national standards)
2. Place AED (Follow current national standards for defibrillation)
3. Continue efforts to rewarm
4. If pulseless and directed by the machine, defibrillate (defibrillation may be successful after warming)
5. If pulseless, continue CPR and warming throughout transport
6. Although patients suffering from hypothermia should be evaluated on an individual basis, in general, patients should be warmed to normal temperatures before stopping resuscitation

G. If the patient is alert and responding appropriately, with temp >94°, actively rewarm

1. Warm blankets
2. Heat packs or hot water bottles to groin, axillary and cervical regions
3. Turn up heat high in the patient compartment of the ambulance
4. Give warm fluids
5. Do not allow the patient to walk or exert themselves

H. If the patient is unresponsive or not responding appropriately, with temp 94° to 84°, rewarm passively
   1. Warm blankets
   2. Turn up heat high in the patient compartment of the ambulance

I. Do not allow patient to have any stimulants (caffeine, chocolate, etc.)

J. Do not massage extremities

K. Care for other life threatening injuries including frostbite

IV. Ongoing Assessment

A. Check and record pulse and vitals, including temperature

B. Do not allow patient to remain in or return to a cold environment

V. Transport

A. Transport all but the very mildest cases

B. Handle patient gently (ventricular fibrillation may result from rough handling)

C. Do not allow patient to become exposed

LOCAL COLD INJURIES

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  1. Local injury with clear demarcation
  2. Early or superficial injury
     a) Blanching of the skin
     b) Loss of feeling and sensation in the injured area and the skin remains soft
     c) If rewarmed, tingling sensation
  3. Late or deep injury
     a) White, waxy skin which feels firm to frozen on palpation
     b) Swelling and/or blisters may be present
     c) If thawed or partially thawed, the skin may appear flushed with areas of purple and blanching or mottled and cyanotic

III. Management
- A. Remove patient from the cold environment and protect the patient from further heat loss
- B. Protect the cold injured part from further injury
- C. Remove wet or restrictive clothing from patient
- D. If early or superficial
  1. If the injury is to an extremity, splint and cover the extremity
  2. Do not rub, massage, or re-expose to the cold
- E. If the injury is late or a deep cold
  1. Remove jewelry
  2. Cover with dry clothing or dressings
  3. Do not rub, massage, apply heat, or rewarm
  4. Do not allow the patient to walk on the affected extremity
- F. Do not allow patient to remain in or return to a cold environment
- G. When an extremely long or delayed transport is inevitable, then active rapid rewarming should be done as follows:
  1. Obtain medical direction prior to initiating rewarming
  2. Use warm water (100° F - 105° F)
  3. Fill container with water. Remove clothing, jewelry, bands, or straps from the injured extremity
  4. Fully immerse the injured part
  5. Continuously stir the water
  6. When water cools to below 100° F, remove limb and add more warm water
  7. When extremity is rewarmed (it is soft and the color and sensation has returned)
     a) gently dry affected area and apply a dry sterile dressing
     b) be sure fingers and toes are separated by sterile dressings
- H. Keep area warm and do not put any pressure on the site
- I. Keep patient at rest and protect the part from refreezing
- J. Expect the patient to complain of severe pain

IV. Ongoing Assessment
V. Transport

TRAUMA

GENERAL TRAUMA ASSESSMENT

I. Scene Size-Up
- A. Assess for number of multiple trauma patients
- B. Activate local emergency system as necessary following regional patient care procedures

II. Initial Patient Assessment
- A. A.B.C.
- B. Establish patient care priorities as soon as possible
  1. Triage multiple patients
     a) Notify receiving facility
  2. Follow the Trauma Triage Procedures (see page 52)
     a) Notify the trauma center as soon as possible

III. Rapid Or Focused History And Physical Exam (Trauma)
- A. Deformities, Contusions, Abrasions, Punctures - Burns, Tenderness, Lacerations, And Swelling - DCAP-BTLS)
- B. Pulse, Movement, Sensation (PMS)
- C. Vital Signs
- D. SAMPLE History
- E. Glasgow Coma Scale (GCS) (see Glasgow Coma Scale, page 42)

IV. Management
- A. Provide appropriate care according to specific treatment protocol

V. Ongoing Assessment
- A. Re-evaluate Initial Patient Assessment Items
  1. Unstable patient a maximum of every 5 minutes
  2. Stable patient every 15 minutes

VI. Transport
- A. Mode of transportation and destination based on regional patient care procedures
- B. Prioritize patient transport

ABDOMINAL INJURY

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  1. Tender, rigid or distended abdomen
  2. Position (guarding)
  3. Signs and symptoms of shock
  4. Consider abdominal spinal injury
  5. Wounds, (entrance/exit), bruising
  6. Consider pregnancy (see Obstetrical Emergencies, page 9)

III. Management
- A. Assure patent airway
- B. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)
- C. Do not touch or try to replace exposed organs
  1. Cover exposed organs with sterile/moist dressing
- D. Control bleeding
- E. Treat for shock (see Shock, page 31)
- F. Pregnancy (see Obstetrical Emergencies page 9)
- G. Consider use of the MAST/PASG if available (see page 44)
- H. Mechanical head and spine immobilization as necessary
- I. Give nothing by mouth
- J. Position supine with flexed knees, if no contraindications

IV. Ongoing Assessment
V. Transport

BURN INJURY

CAUTION: Identify source of burning and take appropriate safety precautions.

Note: Stop the burning process.

Note: For burns involving chemicals, refer to the Poisoning/Overdose protocol (see page 13).

Note: Burns may be more severe than they first appear.

I. Scene Size-Up/Initial Patient Assessment

II. Focused History and Physical Exam

A. Signs and symptoms

1. Evaluate depth and area by using Rule of Nines appendix (see page 58)
2. Carefully evaluate respiratory tract for involvement
3. Shock

III. Management

A. Assure patent airway

B. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery, page 50)

1. continuously reassess respiratory status

C. Remove jewelry and non-adhered clothing as necessary

D. Cover burns with dry sterile dressing

E. Control bleeding

F. Treat for shock (see Shock, page 31)

G. Consider use of the MAST/PASG if available (see page 44)

IV. Ongoing Assessment

V. Transport

Note: If patient needs to be transported, follow local burn center protocols as directed by medical control and regional patient care procedures.

CHEST INJURY

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  1. Changes in respiratory rate/quality
  2. Breath sounds diminished, unequal, or absent
  3. Flail chest
  4. Use of accessory muscles
  5. Distended neck veins (JVD)
  6. Consider thoracic spinal injury
  7. Shock
  8. Penetrating wounds (check for both entrance & exit wounds)
  9. Bruising/blunt trauma injuries
  10. Complains of pain with inspiration or expiration

III. Management
- A. Assure patent airway
- B. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)
  1. continuously reassess respiratory status
- C. Pneumothorax
  1. Cover immediately
  2. When time allows, place an occlusive dressing
- B. Tension Pneumothorax
  1. If a result of a sealed an open chest wound, partially remove the occlusive dressing to relieve the tension
  2. If a result of a closed chest wound:
     a) Support ventilation with high-flow oxygen
     b) Request ALS support if available
- D. Flail Chest
  1. Strapping, if pain is significant
- E. Control bleeding
- F. Treat for shock (see Shock, page 31)
- G. Mechanical head and spine immobilization as necessary

IV. Ongoing Assessment
V. Transport

EXTERNAL BLEEDING AND AMPUTATIONS

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  1. Spurting/steady flowing or oozing blood
  2. Bright red or dark blood
  3. Separation or displacement of tissue or body part
  4. Shock

III. Management
- A. Assure patent airway
  1. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)
- B. Control bleeding
  1. Direct pressure/pressure point
  2. Elevation
  3. Splints
  4. Consider use of the MAST/PASG if available (see page 44)
  5. Tourniquet
  6. Apply dressing and bandage
- C. Do not remove impaled objects
  1. Unless impaled in cheek and airway is compromised by the object
  2. Secure in place
- D. Amputations
  1. Wrap severed body part in dry sterile dressing
  2. Wrap or bag amputated part in plastic and keep cool (do not allow to freeze)
  3. Transport severed part with patient, if possible

  Note: **Do not** complete partial amputations.
- E. Treat for shock (see Shock, page 31)

IV. Ongoing Assessment
V. Transport

EXTREMITY INJURY

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  1. Exposed bone ends
  2. Joints locked in position
  3. Loss of feeling or movement
  4. Loss of distal pulse
  5. Bruising/swelling
  6. Pain
  7. Shock
  8. Multiple long bone fracture

III. Management
- A. Assure patent airway
- B. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)
- C. Consider alignment with gentle traction if pulses absent or gross deformity noted
- D. Mechanical immobilization
  1. Reassess distal PMS after applying splint
  2. Consider application of cold pack to painful or swollen area
  3. Consider elevation of extremity
- E. Control bleeding
- F. Treat for shock (see Shock, page 31)
- G. Consider use of the MAST/PASG if available (see page 44)

IV. Ongoing Assessment
V. Transport

HEAD AND SPINE INJURY

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  1. Cerebrospinal fluid or blood from nose, ears, mouth
  2. Glasgow Coma Scale score (see Glasgow Coma Scale, page 42)
  3. Bruising around eyes, or behind ears
  4. Altered mental status
  5. Irregular breathing
  6. Changes in pulse rate
  7. Changes in blood pressure
  8. Neurologic disability
  9. Loss of bowel or bladder control
  10. Unequal pupils with altered mental status
  11. Seizures

III. Management
- A. Immediate manual head and C-spine immobilization
- B. Assure patent airway
- C. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)
- D. Control bleeding
- E. Treat for shock (see Shock, page 31)
- F. Mechanical head and spine immobilization

IV. Ongoing Assessment
V. Transport

MULTI-SYSTEM/TIME CRITICAL TRAUMA

I. Scene Size-up And Initial Patient Assessment
- A. Begin extrication (if necessary) and treatment simultaneously if possible
  - 1. Immediate manual head and c-spine immobilization
- B. Treat life threatening injuries as they are found
- C. On-scene time should be limited to 10 minutes, barring extrication or rescue
- D. Notify the trauma center as soon as possible, (see trauma triage procedures, page 52)

II. Focused History and Physical Exam
- A. Assess for other signs and symptoms
  - 1. Provide rapid survey of head, chest, abdomen

III. Management
- A. Provide any urgent treatment required

IV. Ongoing Assessment
- A. Assess response to treatment provided and document
- B. Immobilize patient

V. Transport
- A. Transport as soon as possible following initial treatment

SHOCK

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam

Note: (For anaphylaxis, refer to Anaphylaxis/Allergic Reaction, see page 3).

A. Signs and symptoms
1. Altered mental status
2. Shallow/rapid breathing
3. Restlessness/anxiety
4. Cyanosis or pale skin color
5. Cool/clammy skin
6. Weak rapid pulse
7. Decreasing blood pressure
8. Nausea/vomiting
9. Dilated pupils
10. Thirst

III. Management

A. Assure patent airway
B. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)
1. Continuously reassess respiratory status
C. Control bleeding
D. Consider use of the MAST/PASG if available (see page 44)
E. Give nothing by mouth
F. Elevate lower extremities, if no contraindications
G. Splint fractures
H. Prevent heat loss

IV. Ongoing Assessment
V. Transport

PEDIATRIC/GERIATRIC

PEDIATRIC ASSESSMENT

I. Scene Size-up And Initial Patient Assessment
- A. Assess ABC
  - 1. Airway - do not hyperextend or hyperflex child's neck
  - 2. Breathing - check for obstructions
  - 3. Circulation - check capillary refill
- B. Consider possible domestic violence or abuse by adults

II. Focused Assessment And Physical Examination
- A. Consider the patient's developmental stage when assessing signs and symptoms
- B. Physical exam may be better tolerated if conducted from trunk to head
- C. Be alert for signs of child abuse and neglect (see physical abuse and neglect, page 55)

III. Management
- A. Provide appropriate care according to specific treatment protocol.

IV. Ongoing Assessment

V. Transport
- A. Utilizing regional PCPs, local guidelines, and protocols regarding pediatric trauma destinations

FEVER

CAUTION: Consider full body substance isolation procedures

I. Scene Size-Up/Initial Patient Assessment

II. Focused History and Physical Exam
- A. Signs and symptoms
  - 1. Flushed, warm dry skin
  - 2. Restless
  - 3. May have rash or stiff neck
  - 4. Seizures
  - 5. Dehydration, decreased urine output

III. Management
- A. Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery, page 50)
- B. If prolonged transport is necessary
  - 1. Undress child to the underwear
  - 2. Use tepid water to cool patient

IV. Ongoing Assessment

V. Transport

Febrile Seizure

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
- A. Signs and symptoms
  - 1. Oral or rectal temperature > 100°
  - 2. Convulsions

III. Management
- A. Remove heavy or swaddling clothes, keep lightly dressed
- B. Maintain airway
- C. Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery, page 50)
- D. Suction as needed

IV. Ongoing Assessment
V. Transport

GERIATRIC EMERGENCIES

I. Scene Size-Up/Initial Patient Assessment
- A. General cleanliness of the environment
- B. Availability of food and water
- C. Hazards in the home
- D. Observe for signs of physical abuse/neglect (see page 55)
- E. If many medications, take them or a list of them to the hospital

II. Focused History and Physical Exam
- A. Establish quick and effective rapport with patient and family
- B. Level of function with his/her own function prior to problem
- C. Past medical history to assess present condition and anticipate effect of one disease on another
- D. If in long-term care, determine reason for their being there and present condition requiring EMS

III. Management
- A. Medical
  - 1. Altered Mental Status (see page 4)
  - 2. Behavioral Emergencies (see page 5)
  - 3. Cardiovascular Emergencies (see page 6)
  - 4. Diabetic Emergencies (see page 7)
  - 5. Environmental Emergencies (see pages 17-22)
  - 6. Gynecological Emergencies (see page 8)
- B. Trauma
  - 1. Cause of trauma may be medical
  - 2. Age > 60 at higher risk for mortality and morbidity
  - 3. Treat according to trauma treatment protocols for specific trauma (see pages 23-31)

IV. Ongoing Assessment
V. Transport

PHYSICAL ABUSE AND NEGLECT

I. Scene Size-Up/Initial Patient Assessment
II. Focused History and Physical Exam
A. Signs and symptoms of suspected abuse and neglect
1. Multiple bruises in various stages of healing
2. Injury inconsistent with mechanism described
3. Repeated calls to the same address
4. Fresh burns
5. Parents or care giver seem inappropriately unconcerned
6. Conflicting stories
7. Fear on the part of the patient to discuss how the injury occurred
8. Lack of adult supervision
9. Malnourished appearance
10. Unsafe living environment
11. Untreated chronic illness

III. Management
A. Follow appropriate treatment protocol
IV. Ongoing Assessment
V. Transport
A. Notify appropriate authorities if abuse is suspected, (see page 55)

APPENDICES

APGAR SCORING

Sign	0	1	2	Points
Appearance (Color)	**Blue, pale**	**Body pink, extremities blue**	**Completely pink**	
Pulse Rate (Heart rate)	**Not detectable**	**Slow (below 100)**	**Over 100**	
Grimace (Irritability)	**No Response**	**Grimace**	**Cry**	
Activity (Muscle Tone)	**Limp**	**Some Flexion**	**Active Motion**	
Respirations (Respiratory effort)	**Absent**	**Slow, irregular**	**Good, crying**	
			TOTAL	

SCORE		
Point Total	**Infant's Condition**	**Treatment Considerations**
10	**Very Good**	**Routine**
7 - 9	**Good**	**Routine**
4 -6	**Fair**	**May need stimulation and oxygen**
0 - 3	**Poor**	**May need oxygen by bag-valve-mask and CPR**

CHARTING

1. **S.O.A.P.**

- Subjective - What is reported by the patient and others.
- Objective - What is observable, objective, measurable, or verifiable
- Assessment - What is your appraisal of the patient's condition
- Plan - What was done for the patient while in your care

2. **C.H.A.R.T.**

- Chief Complaint - The major problem with the patient
- History - Subjective information told to you by patient, family, etc. Follow the S.A.M.P.L.E.D. guideline
  - Symptoms
  - Allergies
  - Medication
  - Past medical history
  - Last Food\Beverage
  - Events prior
  - Description of patient
- Assessment - Physical findings, including vital signs
- Rendered Treatment - What you did for the patient and its effect
- Transport/Transfer - How, where, who transported. Changes during transport

CORE BODY TEMPERATURE

Note: Use A Hypothermia Thermometer.

CORE BODY TEMPERATURE		**SYMPTOMS**
99 F-96 F	37.0 C-35.5 C	Shivering
95 F-91 F	35.0 C-32.7 C	Intense shivering. If conscious patient has difficulty speaking.
90 F-86 F	32.0 C-30.0 C	Shivering decreases. Strong muscular rigidity. Thinking is less clear, general comprehension is dulled, possible total amnesia. Muscle coordination erratic and jerky. Patient generally able to maintain the appearance of psychological contact with surroundings.
85 F-81 F	29.4 C-27.2 C	Irrational. Loses contact with environment drifts into a stuporous state. Muscular rigidity continues. Pulse and respirations are slow and cardiac arrhythmias may develop.
80 F-78 F	26.6 C-20.5 C	Patient loses consciousness and does not respond to spoken words. Most reflexes cease to function. Heart-beat becomes erratic.

DEAD ON ARRIVAL (DOA)

I. EMS personnel shall not initiate resuscitation measures when a patient is determined to be:
   A. The “obviously dead” are victims who, in addition to absence of respiration and cardiac activity, have suffered one or more of the following:
      1. Decapitation
      2. Evisceration of the heart or brain
      3. Incineration
      4. Rigor Mortis
      5. Decomposition
   B. Do Not Resuscitate orders and no pulse or respirations
      1. DOA victims will be reported to the appropriate authorities based on local procedures.
      2. **DO NOT** leave body unattended
      3. Consider critical incident stress debriefing for EMS personnel when involved with sudden, unexpected, accidental, traumatic and/or unexplained deaths, particularly if children are involved.

DO NOT RESUSCITATE (DNR) ORDERS

I. Scene Size-Up/Initial Patient Assessment

II. Focused History and Detailed Physical Exam

A. Determine the patient is in a Do Not Resuscitate status in one of the following ways:

1. The patient has an original, valid POLST Form at the bedside, on the medicine cabinet, on the back of the bedroom door, or on the refrigerator, OR
2. The patient has an EMS-No CPR bracelet that is intact and not defaced. The bracelet can be located on either wrist, either ankle, or on a necklace or neck chain, and worn by the patient, OR
3. The patient has an **original** EMS-No CPR Form at the bedside, on the medicine cabinet, on the back of the bedroom door, or on the refrigerator.
4. The patient has other DNR Orders: We encourage medical facilities to use the POLST Form.
   a) Sometimes health care facilities prefer to use their own health care DNR orders. When encountering other DNR orders, perform the following:
      (1) Verify that the order has a physician signature requesting "Do Not Resuscitate."
      (2) Verify the presence of the patient's name on the order.
   b) Contact on-line medical control for further consultation. In most cases, on-line medical control will advise to withhold CPR following verification of a valid physician-signed DNR order.
5. In extended or intermediate care facilities, look for the DNR form in the patient's chart.

III. Management

A. Begin resuscitation when it is determined:

1. No valid DNR order exists.
2. In your medical judgment, your patient has attempted suicide or is a victim of a violence

B. Do Not initiate resuscitation measures when:

1. The patient is determined to be "obviously dead".
   a) The "obviously dead" are victims who, in addition to absence of respiration and cardiac activity, have suffered one or more of the following:
      (1) Decapitation
      (2) Evisceration of heart or brain
      (3) Incineration
      (4) Rigor Mortis
      (5) Decomposition

C. When the patient has an existing, valid DNR order:

1. POLST:
   a) Provide resuscitation based on patient’s wishes identified on the form
   b) Provide medical interventions identified on the form
   c) Always provide comfort care

2. EMS-No CPR:
   a) Do not begin resuscitation measures
   b) Provide comfort care
   c) Contact patient's physician or on-line medical control if directed by local protocols or if questions or problems arise.
3. Other DNR orders:
   a) Follow specific orders contained in the DNR order based on the standard of care allowed by your level of certification/licensure and communications with on-line medical control.
4. **Remember** – Do Not Resuscitate does not mean Do Not provide comfort care when necessary.

D. If resuscitative efforts have been started before learning of a valid DNR order, STOP these treatment measures unless continuation is requested by the DNR order and provide comfort care:
1. Basic CPR.
2. Intubation (leave the endotracheal tube in place, but stop any positive pressure ventilations).
3. Cardiac monitoring and defibrillation.
4. Administration of resuscitation medications.
5. Any positive pressure ventilation (through bag valve masks, pocket face masks, endotracheal tubes).

E. Revoking the DNR order. The following people can inform the EMS system that the DNR order has been revoked:
1. The patient (by destroying the order, drawing a diagonal line or the word VOID across the front of the form, or by verbally revoking the order).
2. The physician expressing the patient's revocation of the directive.
3. The legal surrogate for the patient expressing the patient's revocation of the directive. (The surrogate cannot verbally revoke a patient executed directive).

F. Documentation
1. Complete the Medical Incident Report (MIR) form approved by your Medical Program Director.
2. State in writing in the upper left hand corner of the narrative summary:
   b) "Patient identified as DNR by POLST, EMS-No CPR, or Other directive."
3. Record the name of the patient's physician, and state whether you contacted the physician.
4. Record the reason why the EMS system was activated.
5. Comfort the family and bystanders when patients have expired
6. Follow your local Medical Program Director's protocols for patients who have expired. Actions may include contact of the local coroner's office, the local law enforcement agency, the local chaplain service, or funeral home. The MIR form must still be completed.

G. Comfort Care Measures - Providing comfort care is an important responsibility and service you provide to patients and their families at a crucial moment in their lives.
1. Comfort care measures for the dying patient may include:
a) Manually open the airway (do not provide positive pressure ventilation with a bag valve mask, pocket mask or endotracheal tube).
b) Clear the airway (including stoma) of secretions with appropriate suction device.
c) Provide oxygen per nasal cannula at 2-4 l/min.
d) Positioning for comfort.
e) Splinting.
f) Controlling bleeding.
g) Providing pain medications pertinent to the level of certification/licensure.
h) Providing emotional support.
i) Provide emotional support to the family.
2. Contact patient's physician or on-line medical control if directed by local protocols or if questions or problems arise.

H. Special situation:
1. The patient's wishes in regard to resuscitation should always be respected. Sometimes, however, the family may vigorously and persistently insist on CPR even if a valid DNR order is located. These verbal requests are not consistent with the patient's directive. However, in such circumstances:
a) Attempt to convince family to honor the patient's decision to withhold CPR/treatment. If family persists, then
b) Initiate resuscitation efforts until relieved by paramedics (for First Responders and EMTs).
c) Advanced life support personnel should continue treatment and consult medical control.

I. **Remember: -** Once a death has occurred, the family and relatives become your patients.

IV. Ongoing Assessment as appropriate

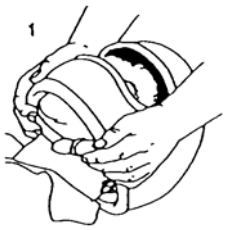
V. Transport if necessary

GLASGOW COMA SCALE

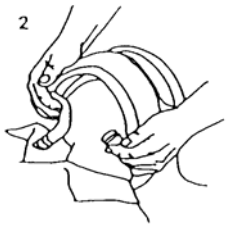
Eye Opening				
Score	Adult	Pediatric - Greater Than 1 year	Pediatric - Less Than 1 Year	
4	Spontaneous	Spontaneous	Spontaneous	
3	To Voice	To Voice	To Shout	
2	To Pain	To Pain	To Pain	
1	No Response	No Response	No Response	
Best Motor Response				
Score	Adult	Pediatric - Greater Than 1 year	Pediatric - Less Than 1 Year	
6	Obeys Commands	Obeys Commands	Spontaneous	
5	Localizes Pain	Localizes Pain	Localizes Pain	
4	Withdraws To Pain	Withdraws To Pain	Withdraws To Pain	
3	Flexion To Pain	Flexion To Pain	Flexion To Pain	
2	Extension To Pain	Extension To Pain	Extension To Pain	
1	No Response	No Response	No Response	
Best Verbal Response				
Score	Adult	Pediatric - Greater Than 5 years	Pediatric 2 to 5 Years	Pediatric 0 to 23 Months
5	Oriented	Oriented and converses	Appropriate Words and Phrases	Smiles, Coos
4	Confused	Disoriented and Converses	Inappropriate Words	Cries, Consolable
3	Inappropriate Words	Inappropriate Words	Persistent Cries and/or Screams	Persistent Inappropriate Crying and/ or Screaming
2	Incomprehensible Words	Incomprehensible Sounds	Grunts	Grunts, Agitated/ Restless
1	No Response	No Response	No Response	No Response
USE THE **BEST** PATIENT RESPONSE FOR EACH CATEGORY.				
Note: Lowest possible score = 3; Highest possible score = 15				

HELMET REMOVAL

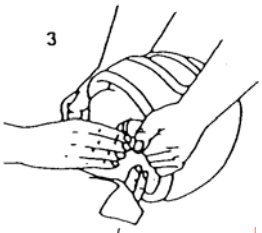
1. One rescuer applies in-line stabilization by placing his or her hands on each side of the helmet with the fingers on the victim's mandible. This position prevents slippage if the strap loosens.



2. The rescuer cuts or loosens the straps or the D-rings while maintaining in-line stabilization.



3. A second rescuer places one hand on the mandible, at the angle, with the thumbs on one side and the long and index fingers on the other. With the other hand, the second rescuer also applies pressure from the occipital region. This maneuver transfers the in-line stabilization responsibility to the second rescuer.



4. The rescuer at the top removes the helmet, considering these three factors: A. The helmet is egg shaped and must be expanded laterally to clear the ears, B. Glasses must be removed prior to helmet removal, C. If the helmet provides full facial coverage, it must be raised over the nose and moved backwards.

5. The second rescuer must maintain in-line stabilization from below in order to prevent head tilt.

6. After the helmet is removed, the rescuer at the top places his or her hands on either side of the victim's head with the palms over the ears.

7. In-line stabilization is maintained from above until a backboard and cervical collar are securely in place.

MAST/PASG - NARRATIVE

Use of the MAST/PASG is based on direction from medical control. Consult medical control before placing or inflating the unit!

I. Purpose

A. Assist in the control of bleeding from pelvic fractures when associated with shock.
B. Pressure dressing, to control severe bleeding caused by massive soft tissue damage in the lower extremities.
C. Splint, to immobilize bone and joint injuries of the lower legs.

II. Indications

A. Blood pressure less than 90 mm. Hg. systolic with other clinical signs and symptoms of shock.
B. Pelvic fractures
C. Femur fractures
D. Other cases when ordered by a physician

III. Absolute Contraindication

A. Pulmonary edema

IV. Relative contraindications

A. Uncontrolled bleeding above the level of the MAST/PASG
B. Head injuries
C. Eviscerations
D. Impaled objects in lower extremities or abdomen
E. Pregnancy; do not inflate the abdominal section

V. Inflation procedures

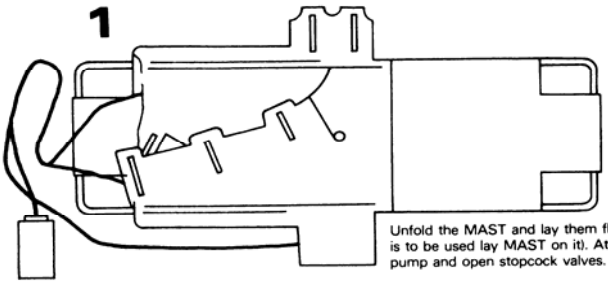
A. Monitor and record vital signs continuously during application and inflation
B. Remember; the only pressure that is important is the patient's blood pressure
C. Use in accordance with local procedure
D. Follow inflation steps (see page 45)

VI. Deflation procedures

A. Generally not a procedure performed in the field.
B. Follow local procedure

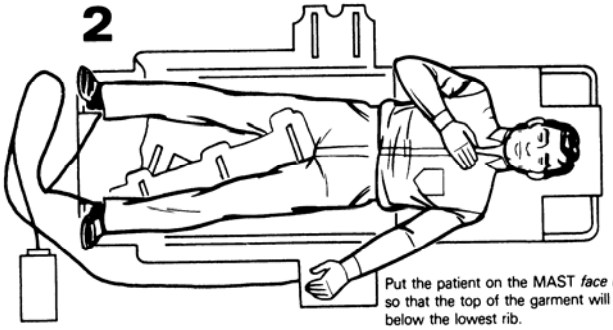
MAST/PASG - INFLATION STEPS

1. **Unfold the MAST and lay them flat (if stretcher is to be used lay MAST on it). Attach foot pump and open stopcock valves.**



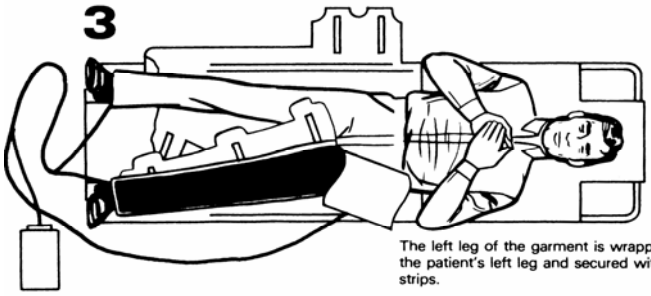
Unfold the MAST and lay them flat (if stretcher is to be used lay MAST on it). Attach foot pump and open stopcock valves.

2. **Put the patient on the MAST face up (supine) so that the top of the garment will be just below the lowest rib.**



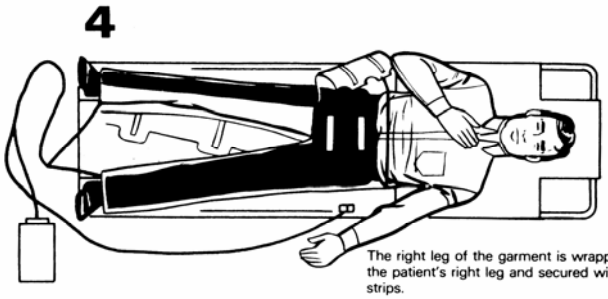
Put the patient on the MAST *face up (supine)* so that the top of the garment will be just below the lowest rib.

3. **The left leg of the garment is wrapped around the patient's left leg and secured with Velcro strips.**



The left leg of the garment is wrapped around the patient's left leg and secured with Velcro strips.

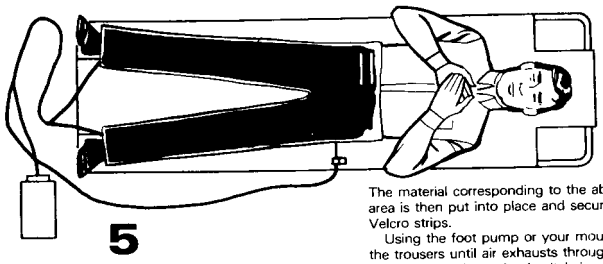
4. **The right leg of the garment is wrapped around the patient's right leg and secured with Velcro strips.**



The right leg of the garment is wrapped around the patient's right leg and secured with Velcro strips.

5. **The material corresponding to the abdominal area is then put into place and secured with Velcro strips.**

Using the foot pump or your mouth, inflate the trousers until air exhausts through the relief valves and/or the patient's vital signs become stable. Close the stopcock valves.



The material corresponding to the abdominal area is then put into place and secured with Velcro strips.

Using the foot pump or your mouth, inflate the trousers until air exhausts through the relief valves and/or the patient's vital signs become stable. Close the stopcock valves.

MEDICATION REFERENCE

ALBUTEROL – Assisting with Patient's Prescribed Inhaler

Medication Name
- Generic: Albuterol
- Trade: Proventil, Ventolin

Action
- Relaxes bronchial smooth muscle

Indications
- Bronchospasm from emphysema or asthma
- Authorization by medical direction/control.
- Reversible bronchospasm associated with chronic bronchitis and emphysema

Contraindications
- Hypersensitivity
- Cardiac arrhythmias associated with tachycardia
- Tachycardia caused by Digitalis toxicity

Precautions
- Use with caution in patients with cardiovascular disorders, including coronary insufficiency and hypertension, in patients with hyperthyroidism or diabetes and in patients unusually responsive to sympathomimetic amines, and cerebrovascular disease.
- Pregnancy

Incompatibilities/Drug interactions
- Cyclic antidepressants, monoamine oxidase inhibitors

Side Effects
- Arrhythmias
- Tachycardia
- Tremors
- Nervousness
- Nausea/Vomiting

Medication Form
- Aerosol inhaler: 90 ug/metered spray, 100 ug/metered spray

Dosage

As prescribed or per MPD

Route of Administration
- Metered-dose inhaler

ASPIRIN – Per MPD – Added 9/05

INDICATIONS FOR USE IN AN ACUTE CORONARY EVENT

1) Patient exhibits any of the following signs or symptoms:
   a) Uncomfortable pressure, fullness, squeezing or pain in the center of the chest that lasts more than a few minutes, or goes away and comes back.
   b) Pain that spreads to the shoulders, neck or arms.
   c) Chest discomfort with lightheadedness, fainting, sweating, nausea or shortness of breath.

-OR-

2) Patient exhibits any **two** of the following signs or symptoms, and you think it is of cardiac origin:
   a) Atypical chest pain, stomach or abdominal pain. This may include discomfort that can be localized to a point, which is "sharp" in nature, that is reproducible by palpation, or that is in the "wrong" location (such as the upper abdomen).
   b) Unexplained nausea (without vomiting) or lightheadedness (not vertigo) without chest pain.
   c) Shortness of breath and difficulty breathing (without chest pain).
   d) Unexplained anxiety, weakness or fatigue.
   e) Palpitations, cold sweat or paleness.

CONTRAINDICATIONS FOR USE

1) Patient is allergic to aspirin or ibuprofen (Motrin®, Advil®).
2) If they have just taken aspirin for this event, do not administer aspirin.

PROCEDURE:

1) ALS/ILS upgrade and evaluation required unless ALS/ILS is unavailable.
2) Be sure that the patient is alert and responsive.
3) If the patient has his/her own nitroglycerin and meets the criteria for administration, do not delay in administer nitroglycerin.
4) Have the patient chew two baby aspirin (162mg).
5) Record your actions, including the dosage and the time of administration.

EPINEPHRINE AUTO-INJECTOR – Updated 9/05

- Medication Name
  - Generic: Epinephrine
  - Trade: Adrenaline, Epi-Pen, Epi-Pen Jr.,
- Actions
  - Dilates the bronchioles
  - Constricts blood vessels
- Indications
  - Patient exhibits signs of a severe allergic reaction, including either respiratory distress or shock.
- Contraindications
  - No contraindications when used in a life-threatening situation
- Dosage
  - Adult: (30 kg or 66 lbs and higher) - one adult auto-injector (0.3 mg)
  - Infant and child: (Under 30 kg or 66 lbs) - one pediatric auto-injector (0.15 mg)
- Actions
  - Dilates the bronchioles
  - Constricts blood vessels
- Side Effects
  - Increased heart rate, chest pain, cardiac arrhythmias, cardiac arrest
  - Pallor
  - Dizziness
  - Chest pain
  - Headache
  - Nausea
  - Vomiting
  - Excitability, anxiety
- Medication Form
  - Liquid administered via a commercially pre-loaded, measured dose, auto- injectable syringe system
- Dosage
  - Adult: (30 kg or 66 lbs and higher) - one adult auto-injector (0.3 mg)
  - Infant and child: (Under 30 kg or 66 lbs) - one pediatric auto-injector (0.15 mg)
- Route of Administration
  - IM

NITROGLYCERIN - Assisting with Patient's Prescribed Nitroglycerin

Medication Name
- Generic: Nitroglycerin
- Trade: Nitrostat, Nitrobid, Nitrolingual Spray

Indications
- Chest pain, thought to be of cardiac origin

Contraindications
- Baseline systolic BP is below 100 mm/Hg
- Head injury suspected
- Patient is infant or child
- Three doses have already been taken by the patient

Medication Form
- Tablet, sublingual spray

Dosage
- One tablet or one spray under the tongue
- May be repeated in three to five minutes if no relief, not contraindicated, and medical direction authorizes
- Check patient's blood pressure prior to each repeated dose
- May not give more than three dosages Action
- Dilates blood vessels
- Decreases heart workload

Side Effects
- Headache
- Decreased blood pressure
- Changes in pulse

ORAL GLUCOSE

Medication Name
- Generic: Glucose, oral
- Trade: Glutose, Insta-glucose, etc.

Actions
- Increases blood sugar

Indications
- Patient with an altered mental status and a known history of diabetes.

Contraindications
- Unconsciousness
- Known diabetic who has not taken insulin for days
- Unable to swallow

Side Effects
- None when properly administered (May be aspirated by patient without a gag reflex)

Medication Form
- Gel in toothpaste-type tubes

Dosage
- One tube

Route of Administration
- po - between the cheek and gums

OXYGEN DELIVERY

OXYGEN ADMINISTRATION REFERENCE CHART		
Method	Flow Rate (in liters per minute)	% Oxygen Delivered
Room Air		21
Nasal Cannula (prongs)	1 2 4	24 28 31
Face Mask (simple)	6 10	35-40 40-50
Nonrebreather Face Mask *(1)	12 15	80 90
Face Mask with Oxygen Reservoir Bag	10-12	90
Pocket Mask	10 15 30	50 80 100 *(2)
Bag Valve Mask	Room Air 12	21 40 - 90 *(3)
Positive Pressure Device (demand valve) *(4)	100	100

*(1)Delivery system of choice for patients with inadequate breathing and patients who are cyanotic, cool clammy, short of breath, or suffering chest pain, suffering severe injuries, or displaying an altered mental status, or being transported.
*(2) This is accomplished by occluding breathing port with thumb.
*(3) Depends on brand of bag valve mask and provisions for occluding room air inlet.
*(4) Should not be used on children under 12 years old.

NOTES:
1. Administration rates by nasal cannulae of over 4 L/min. are uncomfortable.
2. Use humidified oxygen, when possible, on infants, children, suspected respiratory tract burns, and transports exceeding one hour duration.
3. Bag Valve mask is not recommended for use in patients in transport situations.
4. Most hypoxic patients will feel better with an increase in delivered oxygen from 21% to 24%.
5. Pressure cycled ventilators are NOT acceptable alternatives to oxygen therapy.
6. Percentages of delivered oxygen listed above are based on optimal conditions. Altitude, equipment, etc., may decrease percentages of delivered oxygen.

OXYGEN BOTTLE VOLUME AND FLOW				
Bottle Size	Volume in Liters	Time @ 5 L/min.	Time @ 10 L/min.	Time @ 15 L/min.
D	360	1 hr. 12 min.	36 min.	24 min.
E	625	2 hrs. 5 min.	1 hr. 3 min.	42 min.
M	3,200	10 hrs.	5 hrs.	3 hrs. 20 min.
G	5,300	17 hrs. 40 min.	8 hrs. 50 min.	5 hrs. 53 min.
H	6,900	23 hrs.	11 hrs. 30 min.	7 hrs. 40 min.

1. The above values are based on full bottle (2,000 to 2,200 p.s.i.) @ 70 degrees F.
2.Allow for pressure drop of 5 p.s.i. for every 1 degree drop in temperature below 70 degrees F.

PERIPHERAL INTRAVENOUS INFUSION MAINTENANCE

(Emergency Medical Technician Special Skill)

1. Check patency and type of infusion solution
2. Stabilization
   A. Dressing over insertion site
   B. Stabilize limb on armboard if necessary
   C. Stabilize tubing with two stress loops
3. Fluids
   A. **Note:** No medications in IV or to be given enroute - no blood products
   B. Start with full bag of prescribed solution hung by hospital staff.
   C. Adjust flow rate to prescribed rate
   D. Replace bag with sterile technique when 50cc remain in current bag and readjust flow rate
   E. Adjust flow rate as needed and at least hourly
4. Patency
   A. Observe for patency as necessary and record
   B. Avoid kinks in tubing, pressure over or near insertion site
   C. Observe insertion site for infiltration and extravasation
   D. Consider possibility of clot occlusion if not patent and no other reason for lack of flow
5. Discontinuing an infiltrated or occluded IV:
   A. Turn infusion off via roller clamp
   B. Gently and systematically remove tape
   C. Remove catheter and quickly cover with sterile 2x2
   D. Immediately observe for intact catheter
   E. Hold direct pressure over insertion site for 1-2 minutes until bleeding stops
   F. Secure 2x2 over site with tape or Band-Aid
   G. If catheter is not intact and a portion is missing, assume catheter embolus and immediately tourniquet limb well above insertion site, keep limb in dependent position and immediately seek medical intervention
6. Patient Assessment
   A. Respiratory and cardiovascular status assessed at start and as necessary throughout transport
   B. Fluids in and out, fluid remaining in bag checked and recorded hourly
   C. Condition of infusion site checked frequently and recorded at least hourly

STATE OF WASHINGTON
PREHOSPITAL TRAUMA TRIAGE (DESTINATION) PROCEDURE

Purpose

The purpose of the Triage Procedure is to ensure that major trauma patients are transported to the most appropriate hospital facility. This procedure has been developed by the Prehospital Technical Advisory Committee (TAC), endorsed by the Governor's EMS and Trauma Care Steering Committee, and in accordance with RCW 70.168 and WAC 246-976 adopted by the Department of Health (DOH).

The procedure is described in the schematic with narrative. Its purpose is to provide the prehospital provider with quick identification of a major trauma victim. If the patient is a major trauma patient, that patient or patients must be taken to the highest level trauma facility within 30 minutes transport time, by either ground or air. To determine whether an injury is major trauma, the prehospital provider shall conduct the patient assessment process according to the trauma triage procedures.

Explanation of Process

A. **Any certified EMS and Trauma person can identify a major trauma patient and activate the trauma system.** This may include requesting more advanced prehospital services or aero-medical evacuation.

B. **The first step (1) is to assess the vital signs and level of consciousness.** The words "Altered mental status" mean anyone with an altered neurologic exam ranging from completely unconscious, to someone who responds to painful stimuli only, or a verbal response which is confused, or an abnormal motor response.

C. The "and/or" conditions in Step 1 mean that any one of the entities listed in Step 1 can activate the trauma system.

D. Also, the asterisk (*) means that if the airway is in jeopardy and the on-scene person cannot effectively manage the airway, the patient should be taken to the nearest medical facility or consider meeting up with an ALS unit. These factors are true regardless of the assessment of other vital signs and level of consciousness.

E. **The second step (2) is to assess the anatomy of injury.** The specific injuries noted require activation of the trauma system. Even in the assessment of normal vital signs or normal levels of consciousness, the presence of any of the specific anatomical injuries does require activation of the trauma system.

F. Please note that steps 1 and 2 also require notifying Medical Control.

G. **The third step (3) for the prehospital provider is to assess the biomechanics of the injury and address other risk factors.** The conditions identified are reasons for the provider to contact, and **consult with, Medical Control** regarding the need to activate the system. They do not automatically require system activation by the prehospital provider.

H. Other risk factors, coupled with a "gut feeling" of severe injury, means that Medical Control should be consulted and consideration given to transporting the patient to the nearest trauma facility.

I. Please note that certain burn patients (in addition to those listed in Step 2) should be considered for immediate transport or referral to a burn center/unit.

Patient Care Procedures

To the right of the attached schematic you will find the words "according to DOH-approved regional patient care procedures. "These procedures are developed by the regional EMS and Trauma council in conjunction with local councils. They are intended to further define how the system is to operate. They identify the level of medical care personnel who participate in the system, their roles in the system, and participation of hospital facilities in the system. They also address the issue of inter-hospital transfer, by transfer agreements for identification, and transfer of critical care patients.

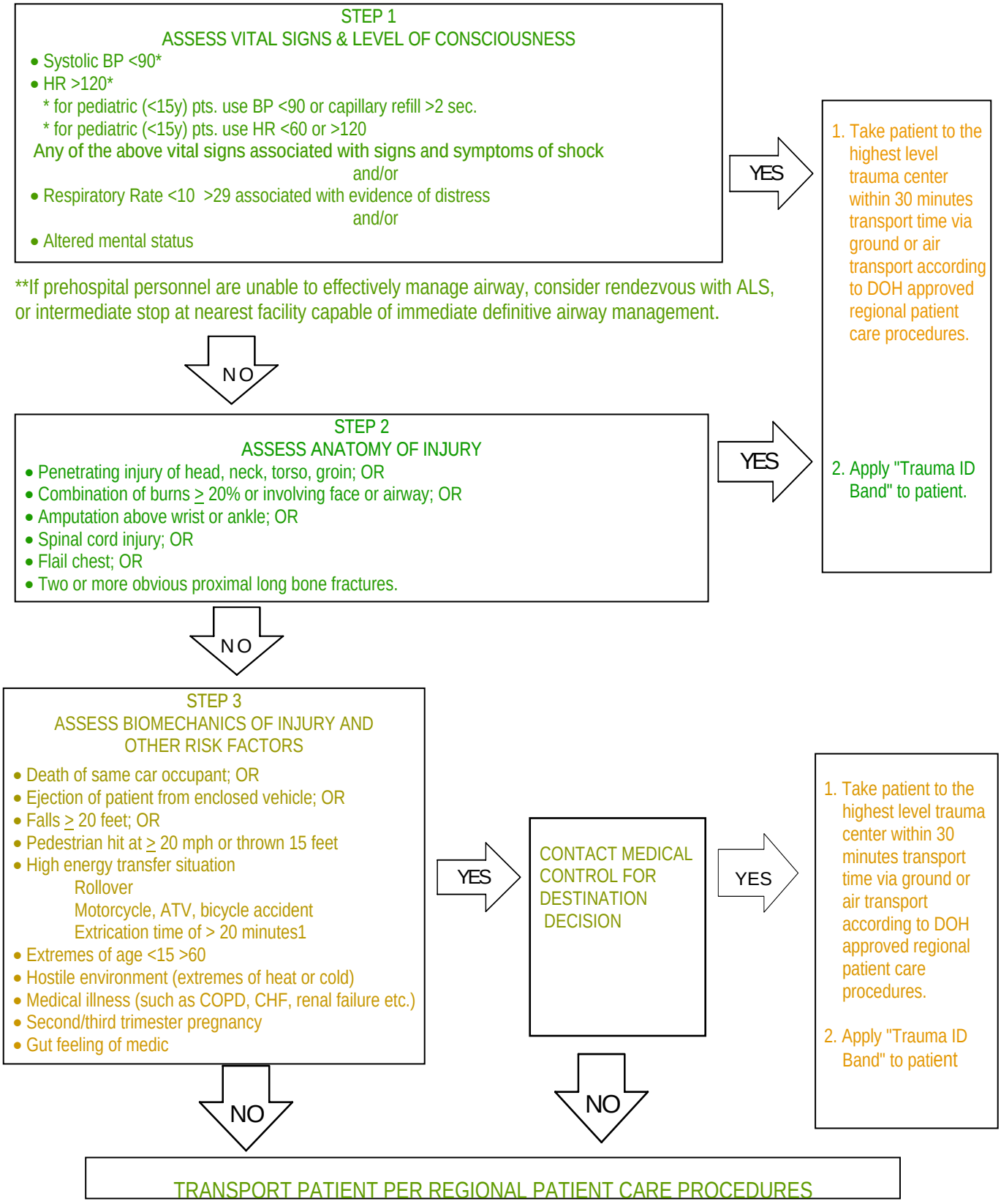
In summary, the Prehospital Trauma Triage Procedure and the Regional Patient Care Procedures are intended to work in a "hand in glove" fashion to effectively address EMS and Trauma patient care needs. By functioning in this manner, these two instruments can effectively reduce morbidity and mortality.

If you have any questions on the use of either instrument, you should bring them to the attention of your local or regional EMS and Trauma council or contact 1-800-458-5281.

1994/Disc 1/triage.exp

STATE OF WASHINGTON
PREHOSPITAL TRAUMA TRIAGE (DESTINATION) PROCEDURES

- Prehospital triage is based on the following 3 steps: Steps 1 and 2 require prehospital EMS personnel to notify medical control and activate the Trauma System. Activation of the Trauma System in Step 3 is determined by medical control**



PULSE, BLOOD PRESSURE, AND RESPIRATION - RANGES

NORMAL RANGES OF ARTERIAL BLOOD PRESSURES (mm/Hg)			
Newborn	80 / 46	8-9 Years	106 / 58
6-12 Months	89 / 60	9-10 Years	108 / 58
1 Year	96 / 66	10-11 Years	112 / 58
2 Years	98 / 64	11-12 Years	114 / 60
3 Years	100 / 68	12-13 Years	116 / 60
4 Years	98 / 66	13-14 Years	118 / 60
5 Years	94 / 56	Male Adult	Systolic: Patient's Age + 100 (Up to 150 mmHg) Diastolic: 60 to 90 mmHg
6-7 Years	100 / 56	Adult Female	Systolic: Patients Age + 90 (Up to 140 mmHg) Diastolic: 50 to 80 mmHg

Note:

The systolic values given above may vary up or down from the mean significantly, and still remain in the normal range as follows:

Newborn	+ or - 16
6 Mos. - 4 Years	+ or - 25
4 Years - 10 Years	+ or -16
10 Years - 14 Years	+ or -18

The diastolic values given above (for Newborn through 14 Years old) may vary up to + or - 24 mm/Hg from the mean and still remain in the normal range.

NORMAL PULSE RATES (HEART BEATS PER MINUTE)			
Newborn	110 - 150	6 Years	80 - 100
11 Months	100 - 140	8 Years	76 - 90
2 Years	90 - 110	10 Years	70 - 110
4 Years	80 - 120	Adult	60 - 100

NORMAL RESPIRATORY RATES (RESPIRATIONS PER MINUTE)			
Neonate	30 - 50	10 Years	14 - 22
2 Years	20 - 30	Adolescent and Adult	12 - 20

REPORTING CHILD AND DEPENDENT ADULT ABUSE
Revised 1998

26.44.030 Reports--Duty and authority to make--Duty of receiving agency--Duty to notify--Case planning and consultation--Penalty for unauthorized exchange of information--Filing dependency petitions--Interviews of children--Records--Risk assessment process--Reports to legislature.

(1)(a) When any practitioner, professional school personnel, registered or licensed nurse, social service counselor, psychologist, pharmacist, licensed or certified child care providers or their employees, employee of the department, or juvenile probation officer has reasonable cause to believe that a child or adult dependent or developmentally disabled person, has suffered abuse or neglect, he or she shall report such incident, or cause a report to be made, to the proper law enforcement agency or to the department as provided in RCW 26.44.040.

(b) The reporting requirement shall also apply to any adult who has reasonable cause to believe that a child or adult dependent or developmentally disabled person, who resides with them, has suffered severe abuse, and is able or capable of making a report. For the purposes of this subsection, “severe abuse” means any of the following: Any single act of abuse that causes physical trauma of sufficient severity that, if left untreated, could cause death; any single act of sexual abuse that causes significant bleeding, deep bruising, or significant external or internal swelling; or more than one act of physical abuse, each of which causes bleeding, deep bruising, significant external or internal swelling, bone fracture, or unconsciousness.

(c) The report shall be made at the first opportunity, but; and in no case longer than forty-eight hours after there is reasonable cause to believe that the child or adult has suffered abuse or neglect. The report shall include the identity of the accused if known.

(2) The reporting requirement of subsection (1) of this section does not apply to the discovery of abuse or neglect that occurred during childhood if it is discovered after the child has become an adult. However, if there is reasonable cause to believe other children, dependent adults, or developmentally disabled persons are or may be at risk of abuse or neglect by the accused, the reporting requirement of subsection (1) of this section shall apply.

(3) Any other person who has reasonable cause to believe that a child or adult dependent or developmentally disabled person has suffered abuse or neglect may report such incident to the proper law enforcement agency or to the department of social and health services as provided in RCW 26.44.040.

(4) The department, upon receiving a report of an incident of abuse or neglect pursuant to this chapter, involving a child or adult dependent or developmentally disabled person who has died or has had physical injury or injuries inflicted upon him or her other than by accidental means or who has been subjected to sexual abuse, shall report such incident to the proper law enforcement agency. In emergency cases, where the child, adult dependent or developmentally disabled person’s welfare is endangered, the department shall notify the proper law enforcement agency within twenty-four hours after a report is received by the department. In all other cases, the department shall notify the law enforcement agency within seventy-two hours after a report is received by the department. If the department makes an oral report, a written report shall also be made to the proper law enforcement agency within five days thereafter.

(5) Any law enforcement agency receiving a report of an incident of abuse or neglect pursuant to this chapter involving a child or adult dependent or developmentally disabled person who has died or has had physical injury or injuries inflicted upon him or her other than by accidental means, or who has been subjected to sexual abuse shall report such incident in writing as provided in RCW 26.44.040 to the proper county prosecutor or city attorney for appropriate action whenever the law enforcement agency's investigation reveals that a crime may have been committed. The law enforcement agency shall also notify the department of all reports received and the law enforcement agency's disposition of them. In emergency cases, where the child, adult dependent or developmentally disabled person's welfare is endangered, the law enforcement agency shall notify the department within twenty-four hours. In all cases, the law enforcement agency shall notify the department within seventy-two hours after a report is received by the law enforcement agency.

(6) Any county prosecutor or city attorney receiving a report under subsection (5) of this section shall notify the victim, any persons the victim requests, and the local office of the department of the decision to charge or decline to charge a crime within five days of making the decision.

(7) The department may conduct ongoing case planning and consultation with those persons or agencies required to report under this section with consultants designated by the department, and with designated representatives of Washington Indian tribes if the client information exchanged is pertinent to cases currently receiving child protective services or department case services for the developmentally disabled. Upon request, the department shall conduct such planning and consultation with those persons required to report under this section of the department determines it is in the best interests of the child or developmentally disabled person. Information considered privileged by statute and not directly related to reports required by this section shall not be divulged without a valid written waiver of the privilege.

(8) Any case referred to the department by a physician licensed under chapter 18.57 or 18.71 RCW on the basis of an expert medical opinion that child abuse, neglect, or sexual assault has occurred and that the child's safety will be seriously endangered if returned home, the department shall file a dependency petition unless a second licensed physician of the parents' choice believes that such expert medical opinion is incorrect. If the parents fail to designate a second physician, the department may make the selection. If a physician finds that a child has suffered abuse or neglect does not constitute imminent danger to the child's health or safety, and the department agrees with the physician's assessment, the child may be left in the parents' home while the department proceeds with reasonable efforts to remedy parenting deficiencies.

(9) Persons or agencies exchanging information under subsection (7) of this section shall not further disseminate or release the information except as authorized by state or federal statute. Violation of this subsection is a misdemeanor.

(10) Upon receiving reports of abuse or neglect, the department or law enforcement agency may interview children. The interviews may be conducted on school premises, at day care facilities, at the child's home, or other suitable locations outside the presence of parents. Parental notification of the interview shall occur at the earliest possible point in the investigation that will not jeopardize the safety or protection of the child or the course of the investigation. Prior to commencing the interview the department or law enforcement agency shall determine whether the child wishes a third party to be present for the interview and, of so, shall make reasonable efforts to accommodate the child's wishes. Unless the child objects, the department or law enforcement agency shall make reasonable efforts to include a third party in any interview so long as the presence of the third party will not jeopardize the course of the investigation.

(11) Upon receiving a report of child abuse and neglect, the department of investigating law enforcement agency shall have access to all relevant records of the child in the possession of mandated reports and their employees.

(12) The department shall maintain investigation records and conduct timely and periodic reviews of all cases constituting abuse and neglect. The department shall maintain a log of screened-out non-abusive cases.

(13) The department shall use a risk assessment process when investigating child abuse and neglect referrals. The department shall present the risk factors at hearings in which the placement of a dependent child in an issue. The department shall, within funds appropriated for this purpose, offer enhanced community-based services to persons who are determined not to require further state intervention.

The department shall provide annual reports to the legislature on the effectiveness of the risk assessment process.

(14) Upon receipt of a report of abuse or neglect the law enforcement agency may arrange to interview the person making the report and any collateral sources to determine if any malice is involved in the reporting.

(15) The department shall make reasonable efforts to learn the name, address, and telephone number of each person making a report of abuse or neglect under this section. The department shall provide assurances of appropriate information required under this subsection, the department shall only investigate cases in which: (a) The department believes there is a serious threat of substantial harm to the child: (b) the report indicates conduct involving a criminal offense that has, or is about to occur, in which the child is the victim; or (c) the department has, after investigation, a report of abuse or neglect that has been founded with regard to a member of the household within three years of receipt of the referral. [1998 c 328 § 5 …]

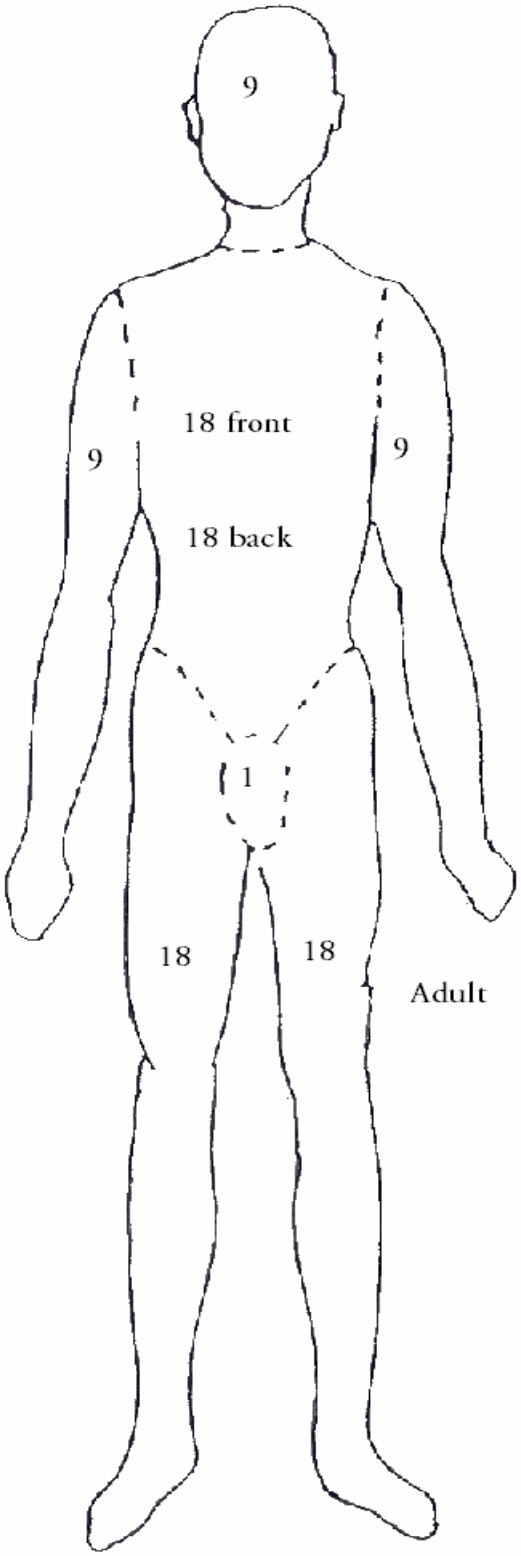
"The legislature finds that including certain department of corrections personnel among the professionals who are mandated to report suspected abuse or neglect of children, dependent adults, or, people with developmental disabilities is an important step towards improving the protection of these vulnerable populations. The legislature intends, however to limit the circumstances under which department of corrections personnel are mandated reporters of suspected abuse or neglect to only those circumstances when the information is obtained during the course of their employment. This act is not to be construed to alter the circumstances under which other professional are mandated to report suspected abuse or neglect, nor is it he legislature's intent to alter current practices and procedures utilized by other professional organizations who are mandated reporters under RCW 26.44.030(1)(a)." [1996 c 278 § 1]

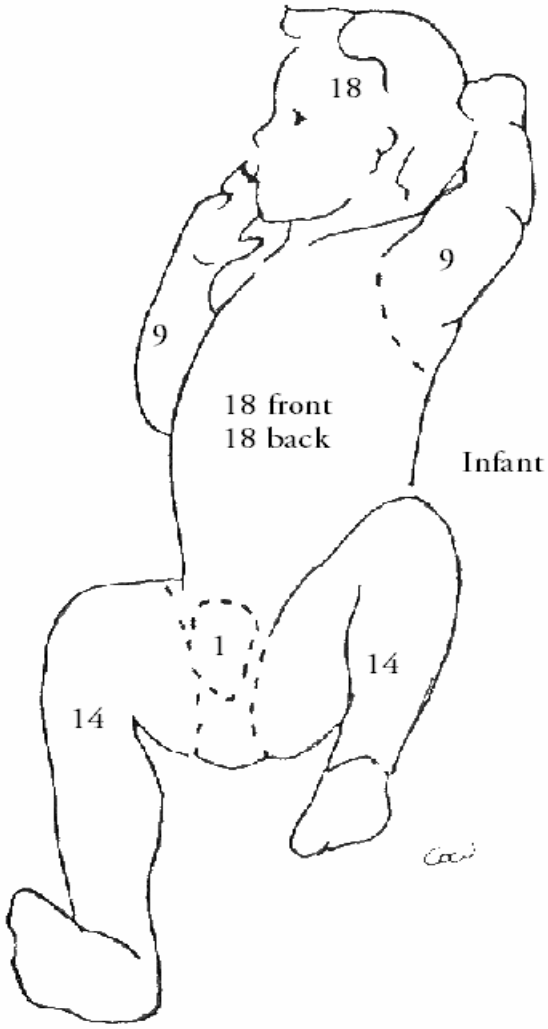
The Washington State legislature finds and declares:

The children of the state of Washington are the state's greatest resource and the greatest source of wealth to the State of Washington. Children of all ages must be protected from child abuse. Governmental authorities must give the prevention, treatment, and punishment of child abuse the highest priority, and all instances of child abuse must be reported to the proper authorities who should diligently and expeditiously take appropriate action, and child abusers must be held accountable to the people of the state for their actions.

The legislature recognizes the current heavy caseload of government authorities responsible for the prevention, treatment, and punishment of child abuse. The information obtained by child abuse reporting requirements, in addition to its use as a law enforcement tool, will be used to determine the need for additional funding to ensure that resources for appropriate governmental response to child abuse are available. [1985 c 259 § 1]

RULE OF NINES - ESTIMATING BURNS





START TRIAGE

Simple Triage And Rapid Treatment

I. RPM method of identifying immediate patients; (Respirations, Perfusion, Mental status)
II. Triage Criteria
    A. Immediate (Red)
        1. Respirations >30 per minute or absent until head repositioned, or
        2. Radial pulse absent or capillary refill > 2 seconds, or
        3. Can not follow simple commands
    B. Delayed (Yellow)
        1. Respirations present and < 30 per minute, and
        2. Radial pulse present and can follow simple commands
            - The saying is 30 - 2 - can do, represents a delayed patient.
    C. Minor (Green)
        1. Anyone that can get up and walk when instructed to do so.
    D. Deceased (Black)
        1. Anyone not breathing after you open the airway
III. This system is limited to use in the incident where needs exceed resources immediately available
IV. Frequently reassess patients and perform a more in-depth triage as more rescuers become available

SUCTIONING

I. Purpose of suctioning

A. Remove blood, other liquids and food particles from the airway.

B. Some suction units are inadequate for removing solid objects like teeth, foreign bodies and food.

C. A patient needs to be suctioned immediately when a gurgling sound is heard with artificial ventilation.

II. Types of equipment

A. Suction devices

1. Mounted

2. Portable

a) Electrical

b) Hand operated

B. Suction catheters

1. Hard or rigid ("Yankauer," "tonsil tip")

a) Used to suction the mouth and oropharynx of an unresponsive patient.

b) Should be inserted only as far as you can see.

c) Use rigid catheter for infants and children, but take caution not to touch back of airway.

2. Soft (French)

a) Useful for suctioning the nasopharynx and in other situations where a rigid catheter cannot be used.

b) Should be measured so that it is inserted only as far as the base of the tongue.

III. Techniques of use

A. Suction device should be inspected on a regular basis before it is needed. A properly functioning unit with a gauge should generate 300 mm Hg vacuum. A battery-operated unit should have a charged battery.

B. Turn on the suction unit.

C. Attach a catheter.

1. Use rigid catheter when suctioning mouth of an infant or child.

2. Often will need to suction nasal passages; should use a bulb suction or French catheter with low to medium suction.

D. Maintain body substance isolation

E. Use with extreme caution in patients with epiglottitis.

F. Insert the catheter:

1. Into the oral cavity without suction, if possible. Insert only to the base of the tongue.

2. Into the stoma or trach tube

a) Use French catheter

b) Measure length of catheter for insertion to length of little finger (approximately 3 inches)

c) Suction

G. Apply suction. Move the catheter tip side to side.

H. Suction airway until clear, and observe for bradycardia in children. Suction for no more than 15 seconds at a time. (15 seconds is the maximum recommended suction duration per insertion.)

1. In infants and children, shorter suction time should be used.
2. If the patient has secretions or emesis that cannot be removed quickly and easily by suctioning, the patient should be log rolled and the oropharynx should be cleared.
3. If patient produces frothy secretions as rapidly as suctioning can remove, suction for 15 seconds, artificially ventilate for two minutes, then suction for 15 seconds, and continue in that manner. Consult medical direction for this situation.

I. If necessary, rinse the catheter and tubing with water to prevent obstruction of the tubing from dried material.

COMMON MEDICAL ABBREVIATIONS

1°	Primary, first degree
2°	Secondary, second degree
3°	Tertiary, third degree
<	Less than
≤	Less than or equal to
>	Greater than
≥	Greater than or equal to
≡	Approximately equal to
α	Alpha
a̅	Before
abd	Abdomen
ASA	Aspirin
c̅	With
c/o	Complaining of
CA	Cancer
CAO	Conscious, alert, orientated
CHF	Congestive heart failure
COPD	Chronic obstructive pulmonary disease
cx	Chest
Dx	Diagnosis
♀	Female
Fx	Fracture
g,gm	Gram
Ga.	Gauge
GI	Gastrointestinal
gr	Grain
gtt	Drop
HA	Headache
HTN	Hypertension
Hx	History
LOC	Level of consciousness
♂	Male
MI	Myocardial infarction
min	Minute
N&V	Nausea, vomiting
NTG	Nitroglycerin
p̅	After
po	By mouth, orally
p.r.n.	As needed
q̅	Every
Rx	Prescribed for
s̅	Without
Sz	Seizure
↓	Decreased
↑	Increased
Δ	Change
∅	No, none

GLOSSARY

ABC	Assess for and treat as necessary life threatening Airway, Breathing, and Circulatory problems during the Initial Patient Assessment.
ABORTION	The premature expulsion from the uterus of the embryo or a nonviable fetus.
ADENOPATHY	Swelling and morbid change in lymph nodes; glandular disease.
ALS	Advance Life Support.
AMBULATE	To walk about.
ANCILLARY	Subordinate or dependent muscles, breathing without usual chest wall movement.
APHASIA	A defect in speaking or comprehending in the normal fashion, caused by injury or disease in the brain centers regulating speech.
APNEA	Absence of breathing.
ASPHYXIA	Suffocation.
AUSCULTATION	The technique of listening for and interpreting sounds that occur within the body, usually with a stethoscope.
AVPU	Alert, responds to Verbal stimulus, responds to Painful stimulus, Unresponsive.
BCLS	Basic Cardiac Life Support
BILATERAL	Pertaining to both sides.
BLANCHING	Palpation of the skin following which the normal skin color does not return.
BLS	Basic Life Support.
BM	Bowel Movement.
BSI	Body Substance Isolation precautions (universal precautions).

BRACHIAL	Pertaining to the arm.
BRADYCARDIA	An abnormal condition in which the heart contracts steadily but at a rate of less than 60 beats per minute.
BRADYPNEA	An abnormally slow rate of breathing.
BREECH BIRTH	A delivery in which the presenting part is the buttocks or foot.
BRONCHITIS	Inflammation of the bronchi.
BURN	An injury caused by An injury caused by extremes of temperature, electric current, or certain chemicals: • Superficial - A burn affecting only the outer skin layers • Partial Thickness - A partial thickness burn penetrating beneath the superficial skin layers, producing edema and blistering • Full Thickness - A full thickness burn, involving all layers of the skin and underlying tissues as well, having a charred or white, leathery appearance
CAROTID	One of the main arteries of the neck supplying blood to the head.
CENTRAL NERVOUS SYSTEM (CNS)	The brain and spinal cord.
CEREBROSPINAL FLUID (CSF)	The fluid that bathes the brain and spinal cord.
CEREBROVASCULAR ACCIDENT (CVA)	The sudden cessation of circulation to the region of the brain, caused by thrombus, embolism or hemorrhage. It is sometimes called a stroke.
CHEYNE-STOKES RESPIRATION	An abnormal breathing pattern characterized by rhythmic waxing and waning of the depth of respiration, with regularly occurring periods of apnea) It is seen in association with central nervous system dysfunction.
CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)	A term comprising chronic bronchitis, emphysema, and sometimes asthma-illnesses that cause obstructive problems in the lower airways.

COMA	A state of unconsciousness from which the patient cannot be aroused, even by powerful stimulation.
COMA POSITION	A body position which allows the unconscious patient (non-traumatic) to breathe without obstruction from oral bleeding or drainage.
CONTRAINDICATION	Any condition which renders a particular line of treatment improper or undesirable.
CONVULSION	A violent, involuntary contraction or series of contractions of the voluntary muscles; a "fit;" a seizure.
CPR	Cardio-Pulmonary Resuscitation.
CREPITUS	A grating sound heard and a sensation felt when the fractured ends of a bone rub together.
CROWNING	The stage of birth when the presenting part of the baby is visible at the vaginal orifice.
CYANOSIS	Bluish color to the skin, associated with hypoxia.
DCAP-BTLS	Acronym for Deformities, Contusions, Abrasions, Punctures or penetrations, Burns, Tenderness, Laceration, and Swelling.
DECEREBRATE POSTURE	A posture assumed by patients with severe brain dysfunction characterized by extension and rotation of the arms and extension of the legs.
DECORTICATE POSTURE	A posture assumed by patients with severe brain dysfunction characterized by extension of the legs and flexion of the arms.
DETAILED PHYSICAL EXAM	A head to toe examination at a slower pace than the rapid assessment or Initial Patient Assessment and only performed on low priority patients or in the transport mode with high priority patients.
DIABETES MELLITUS	A systemic disease affecting many organs, including the pancreas, whose failure to secrete insulin causes an inability to metabolize carbohydrate and consequent elevations in blood sugar.
DIAPHORESIS	Profuse perspiration.
DOA	Dead On Arrival.

DOT	Department Of Transportation.
DOTS	Assessment of Deformities, Open injuries, Tenderness, Swelling
DYSPNEA	Difficulty in breathing, with resultant rapid, shallow respirations.
EDEMA	The condition in which excess fluid accumulates in body tissue, manifested by swelling.
EGOPHONY	A nasal sound somewhat like the bleat of a goat, heard in auscultation, when the patient speaks in a normal tone.
EMBOLISM	A mass (embolus, singular; emboli, plural) of solid, liquid or gaseous material that is carried in the circulation and may lead to occlusion of blood vessels, with resultant infarction and necrosis of tissue supplied by those vessels.
EMPHYSEMA	Infiltration of any tissue by air or gas; a chronic pulmonary disease caused by dissension of the alveoli and destructive changes in the lung.
EMS	Emergency Medical Services.
EMS-MPD	Emergency Medical Services-Medical Program Director.
EMERGENCY MEDICAL TECHNICIAN (EMT)	A person certified to provide emergency care per RCW 18.73.081
EPIGASTRIUM	The upper central portion of the abdomen within the sternal angle.
ERYTHEMATOUS	A spot or colored area showing diffused redness of the skin.
ETA	Estimated Time of Arrival.
ETIOLOGY	The causative agent of a disease.
EVISCERATE	To remove the intestines; to disembowel.
EXSANGUINATE	To bleed to death.

EXTENTION	A movement allowed by certain joints of the skeleton that increases the angle between two adjoining bones. For example, extending the leg increases the angle between the thigh and the calf. Compare flexion.
EXTRAVASATION	Leakage of intravenous fluid into surrounding tissues.
FEBRILE	Characterized by fever.
FIRST RESPONDER	A person certified to provide emergency care per RCW 18.73.081.
FLAIL CHEST	The condition in which several ribs are broken, each in at least two places, or in which there is sternal fracture or separation of the ribs from the sternum, producing a free or floating segment of the chest wall that moves paradoxically on respiration.
FLEXION	The act of bending.
HEAT CRAMPS	Painful muscle cramps resulting from excessive loss of salt and water through sweating.
FOCUSED PHYSICAL EXAM	The step of patient assessment that follows the Initial Patient Assessment of the medical patient
GLASGOW COMA SCALE	A measurement tool used to accurately record the patient's level of consciousness at regular intervals.
GRAND MAL SEIZURE	A generalized motor seizure
HEAT EXHAUSTION	Prostration caused by excessive loss of water and salt through sweating, characterized by cold, clammy skin and a weak, rapid pulse.
HEAT STROKE	A life-threatening condition caused by a disturbance in the temperature regulating mechanism, characterized by extreme fever, hot and dry skin, bounding pulse, and delirium or coma.
HYPERGLYCEMIA	Abnormally increased concentration of sugar in the blood.
HYPERTHERMIA	Abnormally increased body temperature.
HYPERVENTILATION	An increased rate and/or depth of respiration.
HYPOGLYCEMIA	Abnormally diminished concentration of sugar in the blood.

HYPO-PERFUSION	Decreased perfusion to the body's tissue, also called shock.
HYPOTHERMIA	Having a body temperature below normal.
HYPOVENTILATION	A reduced rate or depth of breathing, often resulting in an abnormal rise of carbon dioxide.
HYPOVOLEMIA	Abnormally decreased amount of blood and fluids in the body.
HYPOXIA	Reduction of oxygen in body tissues below normal levels.
INFARCTION	Death (necrosis) of a localized area of tissue caused by the cutting off of its blood supply.
INITIAL PATIENT ASSESSMENT	A step to quickly determine if the patient is suffering from any life threatening injuries or illnesses.
INSUFFICIENCY	The condition of being inadequate to normal performance.
INSULIN SHOCK	Severe hypoglycemia caused by excessive insulin dosage with respect to sugar intake. It may be characterized by bizarre behavior, sweating, tachycardia, or coma.
INTERMEDIATE LIFE SUPPORT TECHNICIAN (ILST)	A person who has been certified to practice as an intermediate Life Support Technician per RCW 18.71.200.
JVD	Jugular Vein Distention
KILOGRAM	A measure of weight equaling 2.2 pounds.
LATERALIZING SIGNS	The appearance of signs on the opposite side of the body from the affected part, i.e., a stroke occurs on the right side of the brain, and show signs of paralysis on the left side of the body.
LAVAGE	To wash out, or irrigate.
LETHARGY	A condition of drowsiness or indifference.
M.A.S.T.	Military Anti-Shock Trousers.

MEDICAL PROGRAM DIRECTOR (MPD)	The physician in each county certified by the Department of Health to carry out the duties of the MPD.
MENSTRUATION	The process by which the uterine lining is shed each month by women between the ages of puberty and menopause.
MIR	Medical Incident Report form.
MOI	Mechanism Of Injury
MISCARRIAGE	A layman's term for an abortion, or the premature expulsion of a nonliving fetus from the uterus.
NECROSIS	The death of tissue, usually caused by a cessation of its blood supply.
NEUROLOGICAL FLOW SHEET	A written record of vital signs and level of consciousness used for patients with altered levels of consciousness.
N.H.T.S.A.	National Highway Traffic Safety Administration
NOI	Nature Of Illness
NORMAL SALINE	A solution containing 0.9% sodium chloride.
OCCLUSIVE DRESSING	A watertight covering for a wound.
O-P-Q-R-S-T	Mnemonic device used to assess the patient's chief complaint or major symptoms, Onset, Provocation, Quality, Radiation, Severity, Time.
O_2	Oxygen
PARADOXICAL RESPIRATION	The situation in which attempts to inhale cause collapse of a portion of the chest wall instead of expansion. It is seen in flail chest.
PARAMEDIC	A person certified to engage in paramedic practices per RCW 18.71.200.
P.A.S.G.	Pneumatic Anti-Shock Garment (See M.A.S.T.)
PATIENT CARE PROCEDURES (PCPs)	Written operating guidelines adopted by the regional EMS/TC council per WAC 246-976-010.

PERINEUM	That area of the anatomy bounded anteriorly by the pubic symphysis and posteriorly by the coccyx.
PERIORAL	Around the mouth.
PERIORBITAL	Around the eye.
PETIT MAL SEIZURE	A type of epileptic attack seen especially in children, characterized by momentary loss of awareness without loss of motor tone.
PLACENTA	A vascular organ attached to the uterine wall, supplying oxygen and nutrients to the fetus; also called the afterbirth.
PMS	Pulse, Movement, Sensation.
PNEUMOTHORAX	Air in the pleural cavity.
POC	Position Of Comfort.
POSTICTAL	Referring to the period after the convulsive state of a seizure.
POSTPARTUM	Occurring after childbirth, with reference to the mother.
p.r.n.	As circumstances may require, as necessary.
PROLAPSED CORD	A delivery in which the umbilical cord appears at the vaginal orifice before the head of the infant.
PRONE	Lying flat with the face downward.
PROPHYLAXIS	Taking measures to prevent the occurrence of a given disease or abnormal state.
PROTOCOL	Written procedures adopted by the MPD that direct the out-of-hospital emergency care per WAC 246-976-010.
PSDE	Painful, Swollen, Deformed, Extremity, formerly referred to as a fracture.
PSYCHOSIS	A mental disorder causing disintegration of personality and loss of contact with reality.
PULMONARY EDEMA	Congestion of the pulmonary air spaces with exudate and foam.

RAPID ASSESSMENT	The step of patient assessment that follows the Initial Patient Assessment of the high priority trauma patient. A rapid assessment of the head, neck, chest, abdomen, pelvis, extremities and posterior of the body to detect Causes, Signs, and Symptoms of injury.
RCW	Revised Code of Washington
RECOVERY POSITION	The patient positioned on his/her left side, used to help maintain an open airway by preventing the tongue from occluding the posterior aspect of the mouth and allowing gravity to assist in draining secretions.
RESPIRATORY INSUFFICIENCY	A condition which results in inadequate oxygen and carbon dioxide exchange in the lungs and tissues, due to disease or injury.
S.A.M.P.L.E.	history, acronym for Signs and symptoms, Allergies, Medications, Past pertinent medical history, Last oral intake, Events leading to illness or injury
SHOCK	A state of inadequate tissue perfusion (hypoperfusion), which may be caused by pump failure (cardiogenic shock), volume loss (hypovolemic shock), vasodilatation (neurogenic shock), or any combination of these.
SOB	Shortness Of Breath
STATUS EPILEPTICUS	The occurrence of two or more seizures without a period of complete consciousness between them.
SUBCUTANEOUS EMPHYSEMA	A condition in which trauma to the lung or airway results in the escape of air into the tissues of the body, especially the chest wall, neck, and face, causing a crackling sensation on palpation of the skin.
SUPERVISING PHYSICIAN	A physician designated by the EMS MPD to be responsible for the supervision of medical treatment procedures for BLS and ALS technicians.
SUPINE	Lying flat with the face upward.
TACHYCARDIA	A rapid heart rate, over 100 per minute.
TACHYPNEA	An abnormally rapid rte of breathing

TENSION PNEUMOTHORAX	The situation in which air enters the pleural space through a one-way valve defect in the lung, causing progressive increase in intrapleural pressure, with lung collapse and impairment of circulation.
THROMBUS	A fixed clot that forms inside a blood vessel.
TOXIN	A poison manufactured by bacteria or other forms of animal or vegetable life.
TINNITUS	Tinkling or ringing heard in one or both ears. It may be a sign of hearing injury.
TRACHEAL DEVIATION	A lateral shift in the position of the trachea so it no longer appears in the midline of the neck.
TRACHEAL DEVIATION	A lateral shift in the position of the trachea so it no longer appears in the midline of the neck.
TRAINING PHYSICIAN	A physician designated by the EMS-MPD to be responsible for BLS and ALS training programs.
TRENDELENBURG POSITION	The position in which a patient is placed on his back with legs raised and head lowered.
TRIAGE	A system used for categorizing and sorting patients according to the severity of their problems.
VENTRICULAR FIBRILLATION (VF or V-Fib)	A disorganized series of electrical stimulations which disrupts the heart's pumping and cuts off the cardiac output.
VITAL SIGNS	Pulse, blood pressure, respiration, skin color, and pupil size.
WAC	Washington Administrative Code

NOTES:

These protocols may be obtained in the following manner:

1. 81/2 in. X 11 in - available on the OEMSTS web site at http://www.doh.wa.gov/hsqa/emstrauma/publications.htm

2. Pocket sized protocols – Utilize the order form available on the OEMSTS web site at: http://www.doh.wa.gov/hsqa/emstrauma/order.htm

3. To obtain an order form, contact:

   Office of Emergency Medical Services and Trauma System
   PO Box 47853
   Olympia, WA 98504-7853

   (360) 236-2828

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