Wise County
First Responder Organization
Patient Treatment Protocols

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Introduction

The Administrator of Record for Wise County EMS, or their agent, wrote this Protocol Manual for use by First Responder Organizations under their purview. The Medical Director of Wise County EMS has reviewed the protocols contained herein and has approved them for use by the personnel of the First Responder Organizations of Wise County in the discharge of their duties as set forth in the Wise County Letter of Agreement. These protocols are considered in effect when in the Wise County EMS service area and areas covered by mutual aid agreements.

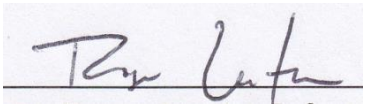
These protocols are to serve as guidelines in providing pre-hospital medical care.

The protocols contained herein were developed from nationally recognized sources including, but not limited to:

American College of Emergency Physicians

American Heart Association

American College of Surgeons



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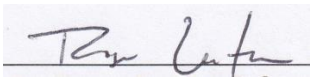
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OPERATIONS

Approved Equipment

The following is a list of approved equipment and supplies to be maintained on responding apparatus. This list also serves to establish *minimum* par levels for each item. This equipment listed has been approved to be carried by the First Responder Organization and is encouraged to be used as allowed by the First Responder Protocols. Optional equipment is encouraged, but not required, to be carried by First Responder Organizations.

1	AED	**Optional Equipment**	
2	Quick Combo Pads		
1	Adult BVM	1	Commercial Tourniquet
1	Child BVM	1	Portable Suction
1	Pediatric BVM	2	Cold Packs
1	Oxygen Regulator	2	Heat Packs
2	Non-Rebreather Mask	1	Commercial anti choking device
1	Set Oral Airways	1	Bottle 81mg Chewable Aspirin
2	Safety Goggles or Glasses	1	Rewarming Blanket
2	Surgical Gowns	1	Oral Glucose
2	N-95 Respirators	1	Commercial Chest Seal Device
2	Surgical Masks	1	Hemostatic Gauze
1	Box Exam Gloves Non-Latex	1	Long spine board
1	Adult Blood Pressure Cuff	1	SAM splint
1	Child Blood Pressure Cuff	1	Band-Aids
1	Stethoscope	1ea	Supraglottic airway (I.E. King, AirQ3)
1	Penlight	1	Nasal Cannula
1	Scissors or Trauma Sheers	1	High Flow Nasal Cannula (adult/pediatric)
25	Sterile 4x4 Gauze	1	Narcan Nasal Spray or Klaxxodo
2	Occlusive Dressing	1	Epi Auto Pen
1	Burn Sheet		
2	Combi Pads		
2	Short Splints		
2	Medium Splints		
5	Roller Gauze		
5	Triangular Bandages (Cravats)		
1	OB Kit		
2	Sterile Water or 0.9% NaCl Irrigation Saline Bottles		
1	Adult Adjustable Extrication Collar (or 1 of each size)		
1	Pediatric Adjustable Extrication Collar (or 1 of each size)		
1	Portable Oxygen Bottle [Size C (M-9), D (M-15), or JD (M-22)]		

Medical Director: 

Effective Date: 02/01/2024 Expiration Date: 2/1/2028

Approved Skills

All Texas Department of State Health Services certifications (EMR, EMT-Basic, AEMT, Paramedic) for the purposes of these protocols will be considered the same. The term "Certified Personnel" shall refer to personnel licensed by the State of Texas in one of the capacities listed above.

At no time should non-certified personnel render treatments above those listed in the Non-Certified Personnel section of the protocols.

Regardless of TDSHS certification level, no FRO personnel are to exceed these protocols when rendering care unless working under the direct, on-scene supervision of a physician who is assuming patient care.

Non-Certified Personnel

Airway/Respiratory

- Ventilatory assistance with BVM
- LifeVac™ Choking Device

Circulatory

- Automated external defibrillator
- Application of tourniquets

Medication Administration

- Narcan (nasal spray ***ONLY***) (Department carried)
- Epinephrine auto-injector

Continued on next page

Approved Skills cont.

Certified Personnel

Certified personnel may perform the following skills in addition to any skills listed in the Non-Certified Personnel skills section.

Airway/Respiratory

- Pulse oximetry
- Oxygen administration
- Nasopharyngeal/Oropharyngeal airway insertion
- Supraglottic Airway Insertion** (***Upon completion of approved course ONLY***)

Medication administration

- Aspirin (Department carried)
- Oral Glucose (Department carried)
- ***Assist*** patient with the following medications if prescribed to the patient
    - Bronchodilators (Albuterol, Xopenex, etc.)
    - Nitroglycerin

Other

- Finger stick blood glucose

General Orders for All Patients

FRO personnel holding the highest level of EMS certification should be the responder to access and lead the treatment of the patient until Wise County EMS arrives. Once the transporting medic arrives the FRO personnel that is in charge at the scene will give a report to the transporting medic including patient findings and treatments that have occurred prior to arrival of Wise County EMS. Once the Wise County EMS medic makes patient contact, the patient will be considered to be under the care of Wise County EMS.

When FRO Personnel arrive on scene:

1. Assess scene safety and patient condition.
2. Check responsiveness.
3. Check airway, breathing and circulation, (ABC's).
4. ***Certified Personnel*** administer O2 via NRB at 12-15lpm or by NC at 2-15lpm as appropriate
5. Control severe external bleeding.
6. Determine level of consciousness
7. Reassure the patient and keep him/her informed about treatment.
8. Obtain a brief history from the patient, family, and/or bystanders.
9. Record vital signs and perform a physical examination.
    a. Check for Medical Alert tag.
    b. For unresponsive patients consider checking their phone for an emergency contact.
10. Obtain list of medications and drug allergies if possible.
11. Administer appropriate treatment per protocol in order of priority.
12. Fill out the First Responder report form and give a copy to EMS.

Cancellation of EMS Units

Canceling a responding EMS unit is allowable under the following conditions:

- Adult patients, who are conscious, fully oriented and who state they do not want to be transported to a hospital. (Patients with injuries have the right to refuse treatment/transport)
- An adult may refuse treatment/transportation for a minor child, if that adult is a family member or guardian, school personnel, daycare personnel or any adult with written permission to make healthcare decisions for that child
- Pregnant females of any age can refuse treatment/transport for matters directly related to the pregnancy
- Any person who is enlisted in the U.S. Military, no matter their age, can refuse treatment/transport
- An adult who possesses Durable Power of Attorney for Healthcare over another adult can refuse treatment/transport for the named adult ***IF*** the patient is altered or unresponsive. If the actual patient is alert, oriented, and requesting treatment and or transport, the wishes of the patient override the Durable Power of Attorney and the patient must be treated/transported.
- Minors who do not live with an adult family member are considered to be an emancipated minor and can refuse treatment/transport.

If any of the above individuals state they do not want ambulance treatment/transportation, there is no need for EMS to continue solely for paperwork purposes. Have the patient sign the First Responder refusal form.

Air Evacuation Criteria and Orders

In the event that FRO personnel believe that a patient requires Air Medical transport, contact Rescue 1 and give them a brief report of the patient findings which indicate the need for air medical.

R1 or an Officer of Wise County EMS will be the final determiner of whether air medical is "launched" or utilized. If no officer of Wise County EMS or R1 are available, contact the responding Medic unit. FRO personnel should not request that air medical be launched and should not contact dispatch directly regarding air medical.

The following conditions are indications to be *considered* for air evacuation of a patient. Not all situations meeting these criteria will result in a patient being transport by air medical:

- Inaccessibility by ground units due to terrain or environmental conditions
- Burns
    - 2° involving >25% BSA adult or > 20% BSA pediatric
    - 3° involving >10% BSA in any patient
    - to face, hands, feet or perineum
    - complicated by major trauma
- Penetrating trauma to head, neck or torso
- Amputation
- Trauma to extremity which could result in the loss of that extremity and/or multi systems trauma
- Suspected spinal cord trauma

FRO Personnel Assisting in MICU

From time to time it may be necessary for FRO personnel to assist with patient care in the ambulance on scene prior to transport. Prior to assuming the need to assist in patient care in the MICU, FRO personnel should ask the Wise County EMS Paramedic in charge if they require assistance.

Upon arrival of additional Wise County EMS personnel, FRO personnel assisting in the back of the MICU should turn over care they are assisting in as soon as possible and exit the MICU.

These steps are required to reduce unnecessary congestion in the back of the MICU.

Accompanying Patients in the Ambulance

From time to time it may be necessary for FRO personnel to accompany patients in the ambulance during transport. This is to be determined by the Wise County EMS Paramedic in charge. This may occur under the following conditions:

- There is a need for the FRO personnel to accompany the patient in the ambulance due to extenuating circumstances.
- The medic on the transporting ambulance approves.
- The FRO personnel will assist under direct supervision of the attending medic.
- The FRO personnel will wear seat belt while the ambulance is in motion.
- The FRO personnel will follow all HIPAA guidelines regarding patient confidentially.

MEDICAL PROTOCOLS

CPR/AED (Adult and Pediatric)

It is HIGHLY recommended that ALL FRO Personnel, non-certified included, carry a current CPR card.

Non-Certified Personnel

INDICATIONS

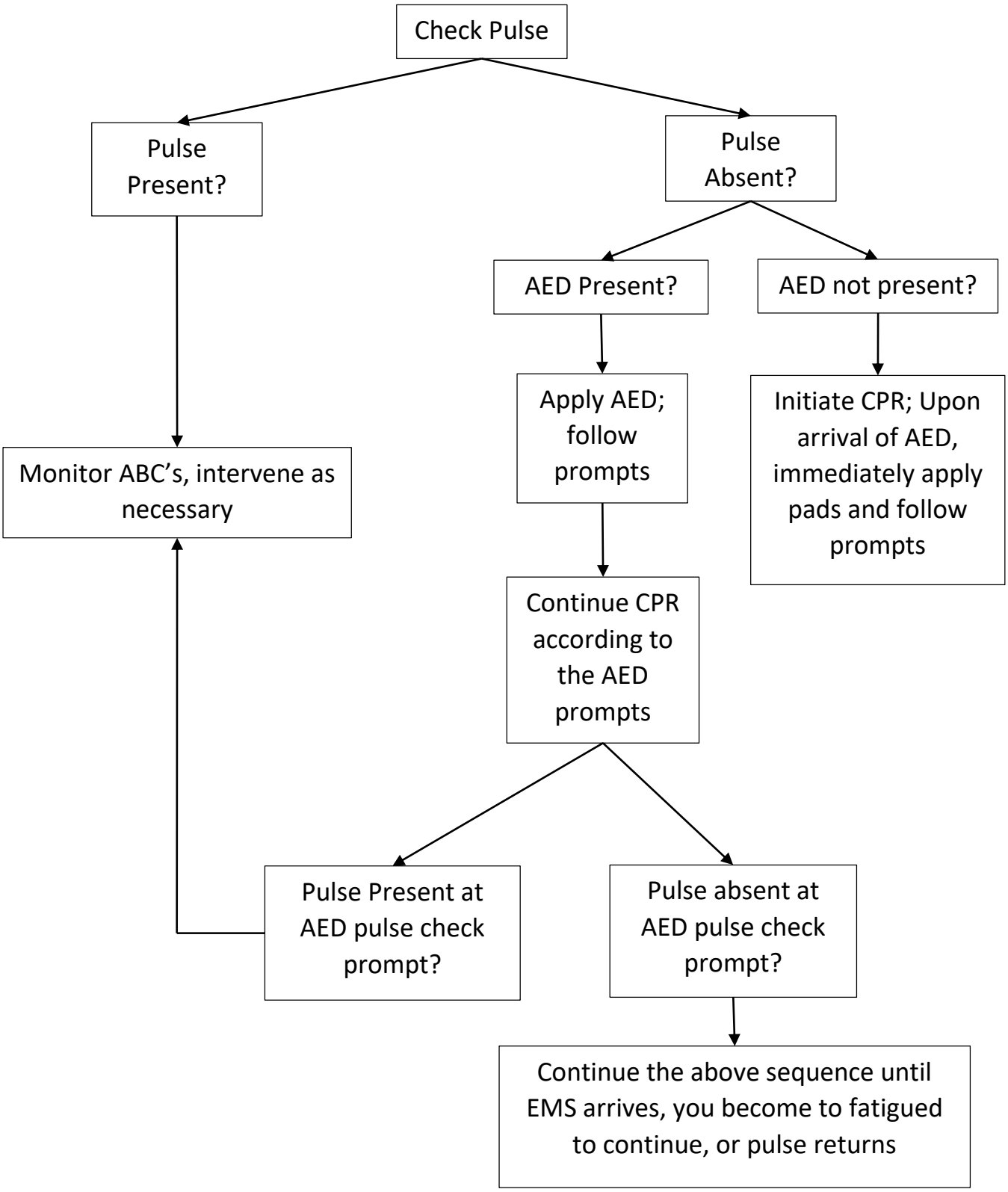
- Patients who are unresponsive, pulseless, and not breathing
- If pediatric patient (less than 8 y/o or less than 90lbs) use pediatric pads

CONTRAINDICATIONS

- Patients who are conscious, have a pulse, or spontaneous respirations

TREATMENT

1. Assess scene safety
2. Perform initial assessment
3. Follow the flow chart below


Check Pulse
Pulse Present?
Pulse Absent?
AED Present?
AED not present?
Apply AED; follow prompts
Initiate CPR; Upon arrival of AED, immediately apply pads and follow prompts
Monitor ABC's, intervene as necessary
Continue CPR according to the AED prompts
Pulse Present at AED pulse check prompt?
Pulse absent at AED pulse check prompt?
Continue the above sequence until EMS arrives, you become to fatigued to continue, or pulse returns

Breathing Difficulties

Non-Certified Personnel

1) Assess scene safety and patient condition
2) Ensure airway is patent
3) Assist ventilation with BVM if necessary
4) Place patient in sitting position if possible
5) Perform detailed history and physical exam.
6) Perform vital signs every 3-5 minutes
7) If patient is believed to be choking, you may utilize a commercial anti choking device (if carried) as listed under the optional equipment list. Device is to be utilized ONLY as directed by manufacturer recommendations.

Certified Personnel

1. Provide oxygen via NRB mask at 12-15 lpm
2. Assist patient with rescue inhaler or small volume nebulizer if prescribed to patient by a physician. Be sure to check expiration dates on medications before administration.

Chest Pain

ASSESSMENT CONSIDERATIONS

- Chest pain may be a result of Angina, Acute Myocardial Infarction (AMI), or stress/anxiety reactions. Treat all patients complaining of chest pain as if they are having an AMI.
- Use the OPQRST method to assess chest pain.
- Signs and symptoms may include a feeling of impending doom, SOB, restlessness, anxiety, pallor, diaphoresis, or chest pain not alleviated by rest and/or nitroglycerin
- Patient's vital signs may be in any range from below normal to normal to above normal
- 15% to 20% of patients having an AMI will have no pain at all or they may have atypical pain such as in the back or abdomen

TREATMENT

Non-Certified Personnel

1) Assess scene safety
2) Perform initial assessment and intervene as required. Note the general appearance of the patient
3) Loosen any restrictive clothing, place patient in a position of comfort, reassure patient and keep him/her still calm and quiet
4) Perform detailed physical exam and take as thorough a history as possible
5) Vital signs every 3-5 minutes

Certified Personnel

1) Provide oxygen per General Orders
2) Assist patient with their nitroglycerin unless patient's systolic blood pressure is below 100mm Hg.
   a) Total dosage shall not exceed three doses.
   b) Be sure to check expiration dates on all medications
3) Give patient four 81mg chewable Aspirin (324mg) if available

Allergic Reaction/Anaphylaxis

1) Assess scene safety and patient condition
2) Establish and maintain a patent airway
3) Assist ventilation with BVM and supplemental oxygen if necessary
4) Provide oxygen per General Orders
5) Vital signs every 3-5 minutes
6) Treat patient for shock
7) If patient has difficulty breathing, unresponsiveness, or swelling of the face/throat:
    a) Assist patient with administration of Epinephrine Auto-Injector if prescribed to patient by a physician

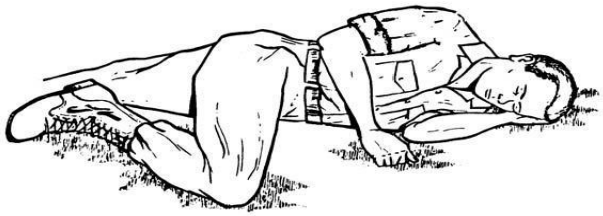
Neurological Emergencies (CVA/TIA/Stroke)

ASSESSMENT CONSIDERATIONS

- Patients suffering from TIAs are at risk to suffer a stroke, even though patient may have complete resolution of symptoms; TIA patients should be encouraged to allow transport
- Perform a thorough history and complete neurological exam
- A conscious patient suffering from a CVA can deteriorate quickly so be prepared to intervene

TREATMENT

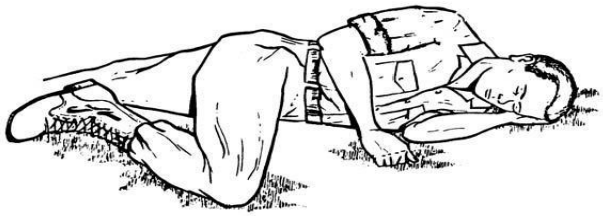
1) Assess scene safety
2) Perform initial assessment, be prepared to suction airway or position patient to prevent aspiration
3) Provide oxygen per General Orders
4) Vital signs every 3-5 minutes
5) If patient is unconscious:
   a) Maintain patent airway and ventilate patient with BVM and supplemental oxygen if indicated
   b) Place patient in lateral recumbent position (recovery position)



6) If patient is conscious:
   a) perform detailed history and physical exam including neurological exam
   b) Place patient in position of comfort with head slightly elevated
   c) Keep patient calm and reassured

Seizures

1) Assess scene safety
2) If patient is actively convulsing:
   a) place the patient on the floor or ground
   b) move them away from objects which could harm the patient
   c) do not attempt to restrain the patient
   d) cushion the patient's head to prevent trauma
   e) **NEVER** attempt to force any object into the mouth of a seizure patient
3) Be prepared to suction the patient's airway or position the patient to prevent aspiration
4) Once convulsions have ceased, perform initial assessment and intervene as necessary
5) Place patient in lateral recumbent position (recovery position)

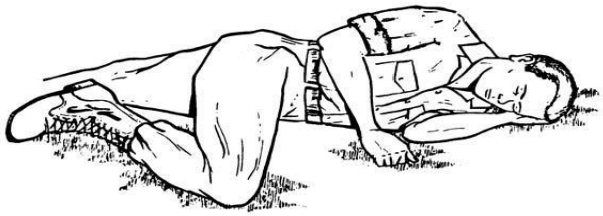


6) Provide oxygen per General Orders
7) Perform detailed history and physical exam.
8) Perform vital signs every 5 minutes.
9) Treat any secondary injuries as appropriate

Diabetic Emergencies

Non-Certified Personnel

1) Assess scene safety and patient condition.
2) If patient is conscious, alert, has a gag reflex, and is able to drink without assistance:
   a) have the patient eat or drink a substance containing sugar (orange juice with 2-3 tablespoons of sugar mixed in it, soft drink, etc.)
3) If patient is unconscious:
   a) Place patient in recovery position



   b) Prevent aspiration
   c) Suction any secretions
4) Place patient on side in recovery position
5) Vital signs every 5-10 minutes

Certified Personnel

1) Provide oxygen per General Orders
2) If patient is alert, has a gag reflex, and is able to swallow provide oral glucose.

Psychological Emergencies

1. Assess scene safety and patient condition.
2. Treat life-threatening injuries
3. Assess the situation and call for police support. If the patient appears dangerous, has a lethal weapon or seems in danger of losing control, or had violent, disruptive or self-destructive impulses, the law-enforcement personnel may aid in providing the necessary physical restraints
4. Approach the patient in a direct, honest manner. Maintain continuous contact with the patient. Encourage the patient to discuss situational stresses and be alert for emotional instability such as mood swings, paranoid delusions and depression
5. Avoid restraining the patient, if possible, but once restraints are applied do not remove them
6. Treat non-life-threatening injuries as the patient allows

Poisonings/Overdose

Non-Certified Personnel

As soon as the substance is identified, relay information to responding EMS unit with the substance name and the amount ingested. Only contact Poison Control if the responding EMS unit is more than 30 minutes away. If inhaled, notify EMS of the hot zone and move the patient to the warm zone for decontamination if needed. Once decontaminated, move the patient to the cold zone for EMS to assume care. **Poison Control 1-800-222-1222**

INGESTED

1) Assess scene safety and patient condition.
2) Determine the nature of the poisoning
3) Perform a brief physical assessment
4) Vital signs every 5 minutes
5) Transport substance container and any emesis to hospital with patient
6) Place the patient on his/her side
7) Treat other problems/injuries as needed
8) If patient is unresponsive with respirations less than 4-6/minute, *and* suspected substance is an **opiate**:
    a) For Narcan® spray nasal dosage form:
        i) Adults and children — 1 spray into one nostril (4mg).
        ii) Another spray may be given into the other nostril every 2 to 3 minutes until the patient responds or until emergency medical assistance becomes available.
    b) For Kloxxado™ spray nasal dosage form:
        i) Adults and children — 1 spray into one nostril.
        ii) Another spray may be given into the other nostril every 2 to 3 minutes until the patient responds or until emergency medical assistance becomes available.

INHALED

1) Assess scene safety and patient condition
2) Remove patient from poisonous atmosphere
3) Provide oxygen via NRB mask at 12-15 LPM per General Orders
4) Vital signs every 5 minutes

INJECTED (Bites and Stings)

1) Assess scene safety and patient condition, then contact responding EMS unit
2) Keep the victim quiet
3) Remove all jewelry and tight-fitting clothing from the affected limb
4) Immobilize the affected limb
5) Vital signs every 10 minutes
6) Be alert for S/S of anaphylaxis

Cold Emergencies

FROSTBITE

1) Assess scene safety and patient condition.
2) Vital signs every 10 minutes
3) Classify frostbite:
   a) 1° - Redness and swelling without blister formation
   b) 2° - Redness and swelling with large, clear blisters
   c) 3° - Redness and swelling with blood filled blisters
4) Remove all clothing and socks from the affected area
5) Immerse the affected area in lukewarm water (100-105° F) until resolution of numbness
6) Cover the re-warmed area with dry sterile dressing
7) Elevate and immobilize the affected area

SYSTEMIC HYPOTHERMIA

1) Assess scene safety and patient condition
2) Remove all wet clothing and wrap patient in dry blankets
3) Vital signs every 5 minutes
4) Place patient in a warm environment
5) If ETA of EMS unit is less than 30 minutes, DO NOT attempt to re-warm patient
6) If ETA of EMS unit is greater than 30 minutes, apply re-warming blanket (if available). If a re-warming blanket is not available, place hot packs (if available) around the patient's head and neck and in the axillary and groin areas.

Heat Emergencies

HEAT EXHAUSTION

(Cool, clammy skin)

1) Assess scene safety and patient condition.
2) Remove patient to a cool environment
3) Place patient in supine position
4) Vital signs every 10 minutes

HEAT STROKE

(Core temperature greater than 104° F, hot/dry skin, altered level of consciousness)

1) Assess scene safety and patient condition, then contact responding EMS unit
2) Remove patient to a cool environment
3) Reduce body temperature immediately. Place ice packs around the patient's head and neck, and in the axillary and groin areas (if available). If ice or ice packs are not available, wrap the patient in a sheet and wet the sheet with water.
4) Stop the cooling process if patient starts to shiver
5) Vital signs every 5 minutes
6) Provide oxygen per General Orders

Childbirth/Obstetrical Emergencies

1) Assess scene safety and patient condition.
2) Check the mother for seizures and/or periods of unresponsiveness
3) Vital signs every 10 minutes
4) Determine history:
   a) Age
   b) Last menstrual period
   c) Estimated date of confinement
   d) Multiple gestation
   e) Gravidity
   f) Parity
   g) Abortions
   h) Presence of/absence of contractions, vaginal bleeding or watery discharge, feeling of needing to move bowels
5) Perform physical exam. Gently palpate the mother's abdomen. Inspect the perineum for crowning with the next contraction
6) Prepare for imminent delivery if crowning is noted

NORMAL DELIVERY

1) As the baby's head becomes visible, use the palm of your hand to apply a GENTLE back pressure to prevent an explosive delivery and minimize tearing of the perineum
2) When the head is delivered, use a bulb syringe to suction the mouth and then the nose. Support the head with both hands.
3) Once the head is delivered, the baby will rotate to the left or right. To deliver the anterior shoulder, apply GENTLE, downward traction to the head.
4) The posterior shoulder will deliver next. Once the shoulders have delivered, the rest of the baby will deliver almost explosively, so be prepared.
5) Keep the baby at the same level as the vagina until the umbilical cord is clamped to avoid autotransfusion.
6) Place an umbilical clamp 7-10 inches from the baby. Place a second clamp between the baby and the first clamp, about 2-3 inches from the first.
7) Cut the cord BETWEEN the two clamps with STERILE scissors or scalpel
8) Dry the baby with clean towels, suction the airway as needed, and place the baby on the mother's abdomen wrapped with an infant thermal blanket or clean dry towel. (A newborn infant can become hypothermic very easily if not kept warm. Turn off ceiling fans and A/C if needed.)
9) Perform an APGAR assessment of the baby at 1 and 5 minutes after delivery.

Childbirth/Obstetrical Emergencies cont.

10) Prepare for delivery of the placenta. Externally massage the mother's uterus in a circular motion to stimulate contractions. NEVER pull on the umbilical cord to speed delivery of the placenta.
11) Once the placenta has delivered, examine it to determine if it is intact, and place it in a basin or bag for transport with the mother and baby.
12) Reassess the mother and baby continually until EMS arrives.

COMPLICATIONS OF CHILDBIRTH

MEMBRANES HAVE NOT RUPTURED

1) Use your fingers to rupture the membranes
2) Pull the membranes away from the baby's face

CORD IS WRAPPED AROUND THE BABY'S NECK

1) Try to place two fingers under the cord at the back of the baby's neck and loosen the cord
2) Slip the cord over the baby's head
3) If the cord cannot be loosened, place two clamps on the cord where possible
4) Carefully cut the cord between the clamps and unwind the cord from the baby's neck

PROLAPSED CORD

1) Place the mother in a face down, knees-to-chest position, or keep the mother supine and place pillows or blankets under the mother's buttocks
2) Provide the mother with oxygen via NRB mask at 12-15 LPM
3) Wrap the cord with sterile, moist dressings and try to keep the cord warm
4) Insert the fingers of a gloved hand into the vagina and lift any presenting part of the baby off the umbilical cord.
5) Be prepared to remain in this position until patient is delivered to surgery

VAGINAL BLEEDING

1. Treat the patient for shock
2. Place absorbent pads or dressings at vaginal opening. DO NOT pack the vagina.
3. Externally massage the uterus in a circular motion to promote contraction of the uterus

Childbirth/Obstetrical Emergencies cont.

APGAR SCORING SYSTEM

	0 Points	1 Point	2 Points	Points totaled
Activity (muscle tone)	Absent	Arms and legs flexed	Active movement	
Pulse	Absent	Below 100 bpm	Over 100 bpm	
Grimace (reflex irritability)	Flaccid	Some flexion of Extremities	Active motion (sneeze, cough, pull away)	
Appearance (skin color)	Blue, pale	Body pink, Extremities blue	Completely pink	
Respiration	Absent	Slow, irregular	Vigorous cry	

Severely depressed	0-3
Moderately depressed	4-6
Excellent condition	7-10

Vaginal Bleeding

1) Assess scene safety and patient condition.
2) Place absorbent pads or dressings at vaginal opening. DO NOT pack the vagina.
3) Vital signs every 5 minutes
4) Determine history:
   a) Last menstrual period
   b) Contraception
   c) Sexual history
5) Treat for shock
6) Save any tissues passed by the patient

TRAUMA PROTOCOLS

General Trauma Guidelines

1) Establish and maintain spinal precautions
2) Assess gross neurological function (pulse, motor functions, and sensation) in all extremities in patients with head injuries
3) Ensure and maintain patent airway
4) Provide positive pressure ventilations if indicated
5) Establish and maintain continuous pulse oximetry
6) Provide oxygen per General Orders
7) For patients with head injuries, make all efforts to maintain O_2 sat above 90%
8) Shock treatment should include the following:
    a. Keep the patient warm
        i. Keep the ambient temperature at 85 degrees
        ii. Apply blankets to the patient
    b. Control any hemorrhage
        i. Attempt direct pressure first
        ii. Commercial tourniquets should be applied to any extremity wound in which bleeding cannot be stopped by direct pressure; do not use improvised or homemade tourniquets as they are likely to cause more bleeding
        iii. Open wounds with signs of arterial or extensive venous bleeding should be packed with gauze (hemostatic gauze may be used if available); do not pack chest or abdominal wounds
9) Bandage any injuries appropriately
10) Splint any injured extremities appropriately
11) For impaled objects:
    a. Apply direct pressure around impaled object
    b. Immobilize the object.
    c. An impaled object in the cheek should only be removed if airway control cannot be maintained
12) Obtain baseline vital signs
    a. Repeat q 5 minutes

Amputations

ASSESSMENT CONSIDERATIONS

- Almost any part can be re-attached; arm, hand, fingers, leg, foot, scalp, penis, nose or ear
- Re-attachment can be performed as late as 24 hours after injury, but results are best when performed within a few hours of injury
- Speed is therefore important, but do not overlook other injuries

TREATMENT

1) Control bleeding, (see BLEEDING protocol)
2) Treat for shock per General Trauma protocol
3) Care for amputated part
   a) Rinse the part briefly with normal saline to remove loose debris; **do not scrub**
   b) Wrap amputated part with sterile gauze moistened with normal saline
   c) Place wrapped part into a plastic bag and seal **(do not pour more fluid into bag)**
   d) Place plastic bag into cool container, **(do not place on ice)**
   e) Transport amputated part to hospital with the patient, if possible

Evisceration

1) Assess scene safety and patient condition.
2) Control bleeding
3) Treat for shock
4) Provide oxygen per General Orders
5) Cover eviscerated tissue with moist, sterile dressings and place an occlusive cover over that dressing
6) **DO NOT** attempt to replace the eviscerated organs back into the abdominal cavity
7) Vital signs every 5 minutes

Fractures and Dislocations

1) Assess scene safety and patient condition.
2) Control bleeding
3) Check pulse and sensation distal to injury
4) Vital signs every 10 minutes
5) Treat for shock if indicated
6) Immobilize the fracture/dislocation as it is found.
7) Use caution with femur fractures as movement of the extremity can result in extensive internal bleeding

Certified Personnel

1) If a distal pulse is present, leave immobilized fracture as splinted
2) If distal pulse is absent, apply gentle traction to the extremity while repositioning it until pulse returns.
3) If pulse does not return, immobilize the extremity

Burn Injuries

ALWAYS ASSURE SCENE SAFETY BEFORE APPROACHING OR TREATING CHEMICAL OR ELECTRICAL BURN PATIENTS

DEGREE OF BURN DEFINITIONS

FIRST DEGREE (1°) – superficial injury involving only the epidermis of the skin. It is characterized by reddening of the skin and perhaps some swelling. First-degree burns are evaluated as partial-thickness burns.

SECOND DEGREE (2°) – the first layer of skin is burned through and the second layer is damaged but the burn does not extend to underlying tissues. Second-degree burns are characterized by red, mottled skin with blisters. Burn will be accompanied by intense pain. These burns are also evaluated as partial-thickness burns.

THIRD DEGREE (3°) – this is a full-thickness burn involving all layers of the skin. Areas of charred black or dry and white skin characterize these burns. There may be an absence of pain in these areas, but extreme pain on the periphery. Third-degree burns may be difficult to distinguish from second-degree burns.

SEVERITY CLASSIFICATION OF BURNS

MINOR BURNS

- Third-degree burns involving less than 2% BSA, excluding face, hands, feet, groin or major joints
- Second-degree burns involving less than 15% BSA
- First-degree burns involving less than 20% BSA

MODERATE BURNS

- Third-degree burns that involve 2% to 10% BSA, excluding face, hands, feet, groin or major joints
- Second-degree burns that involve 15% to 30% BSA
- First-degree burns that involve 20% to 75% BSA

CRITICAL BURNS

- All burns complicated by other injuries, especially to the respiratory tract
- Second- or third-degree burns to the face, hands, feet, groin or major joints

Burn Injuries cont.

- Third-degree burns involving more than 10% BSA
- Second-degree burns involving more than 30% BSA
- First-degree burns involving more than 75% BSA

USE THE "RULE OF NINES" TO DETERMINE % BODY SURFACE AREA (BSA) AFFECTED

THE EXTENT OF INJURY TO ALL BURN PATIENTS SHOULD BE DETERMINED ACCORDING TO THE ABOVE CRITERIA AND THAT INFORMATION REPORTED TO THE RESPONDING EMS UNIT.

TREATMENT OF BURN

THERMAL BURNS

1) Assess scene safety.
2) Stop the burning process. Wrap the victim in a fire blanket or roll him/her on the ground. If that is not possible, extinguish the flames with a multi-purpose dry chemical (ABC) fire extinguisher.
3) Perform initial patient assessment.
4) Provide oxygen per General Orders
5) Remove all jewelry and non-adhering clothing from burned areas.
6) Perform detailed assessment to include complete burn classification, secondary injuries and vital signs every 3-5 minutes.
7) Dress burns with dry sterile dressings.
8) Treat secondary injuries appropriately.
9) Keep patient warm as severe burns can affect the body's temperature regulation.

CHEMICAL BURNS

1) Assess scene safety.
2) Make every attempt to determine the chemical or chemicals involved and take the appropriate personal protective measures.
3) Flush the affected areas with large amounts of gentle flowing water.
4) In the case of dry lime exposures:
5) Brush the dry chemical from the skin first.
6) Flush as directed above.
7) Continue flushing for at least 20 minutes while removing clothing and jewelry.
8) Perform initial assessment.
9) Do not use antidotes.
10) Treat patient as directed by Thermal Burns protocol.

Burn Injuries cont.

Electrical Burns

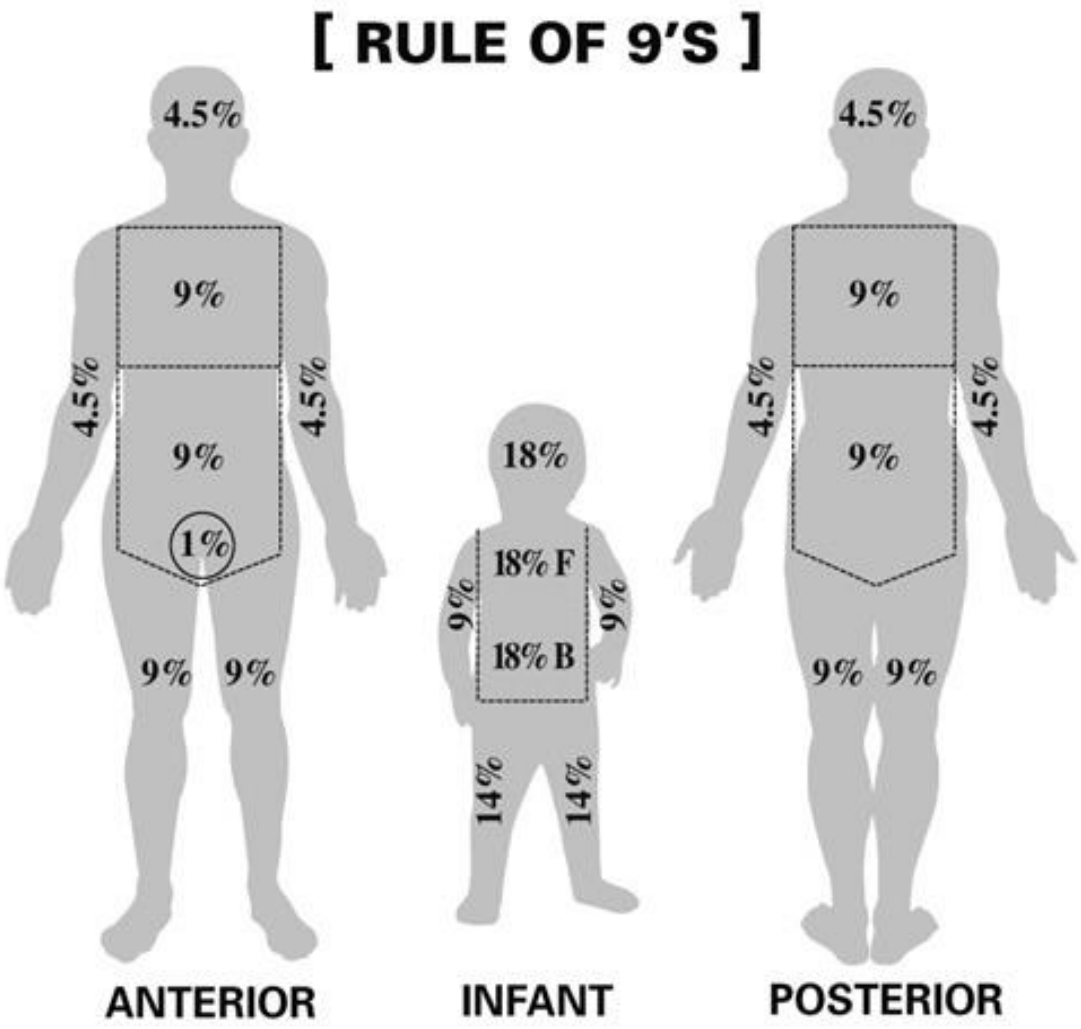
ASSESSMENT CONSIDERATIONS

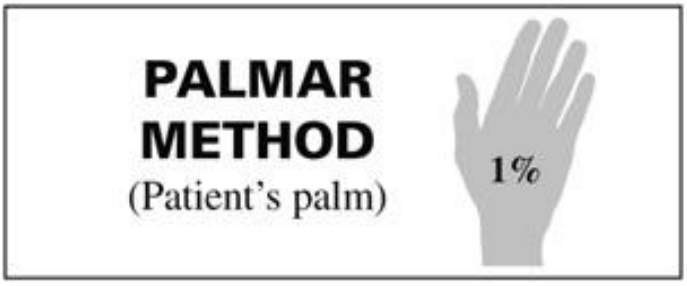
ALWAYS ENSURE THAT THE PATIENT IS NO LONGER IN CONTACT WITH THE ELECTRICAL SOURCE BEFORE APPROACHING OR TOUCHING THE PATIENT

1) Patients with high voltage electrical burns may present with what appear to be limited or minimal injuries. All electrical burns should be treated as critical burns due to hidden severe injuries from high voltage electrocutions.
2) Patient will have at least 2 burn sites, contact point with the source and contact point with a ground
3) Perform initial assessment and intervene as required
   a) Respiratory distress or arrest are possible
   b) Irregular heart rate or complete cardiac arrest are possible and may be initial or delayed
   c) Fractured bones or dislocations from severe muscle contractions or fall are possible, treat according to protocol
   d) Seizures may occur, treat according to the seizure protocol
   e) Paralysis resulting from disrupted nerve pathways is possible
4) Provide oxygen per General Orders
5) Vital signs every 3-5 minutes.
6) Dress burn sites with dry sterile dressings, treat any secondary injuries appropriately
7) Treat patient for shock per general trauma protocol

Continued on next page

Burn Injuries cont.





Chest Injuries

FLAIL CHEST

1. Assess scene safety and patient condition.
2. Stabilize flail segment with bulky pad and triangular bandages (cravats), do not tape
3. Provide oxygen per General Orders
4. Assist ventilations with BVM if necessary
5. Vital signs every 5 minutes

SUCKING CHEST WOUND

1. Cover the wound with occlusive dressing and tape on three sides only *or* cover the wound with a commercial chest seal device if available
2. Provide oxygen per General Orders
3. Assist ventilations with BVM if necessary
4. Vital signs every 5 minutes
5. If patient has increased difficulty breathing, uncover the wound immediately

Head/Neck/Spine Injuries

1) Assess scene safety and perform initial patient assessment.
2) Establish and maintain manual stabilization of cervical spine.
3) **DO NOT** hyperextend the patient's neck. Use the modified jaw thrust maneuver to open the airway, if necessary.
4) If not breathing, ventilate the patient with a BVM.
5) If patient is conscious, provide oxygen per General Orders
6) Control obvious external bleeding (except from ears or a possible depressed skull fracture) as noted in protocol.
7) Perform a neurological examination (level of consciousness, posture, sensation, movement and pupils) before and after immobilization.
8) Obtain vital signs every 5 minutes.
9) If the patient shows signs and symptoms of shock, treat as noted in general trauma protocol.
10) Search for and treat other injuries.
11) Prevent aspiration
12) Suction secretions from mouth as needed
13) If vomiting occurs, turn patient on his/her side as a unit.
14) Only move the patient if necessary
15) If moving the patient, long spine boards (if available) may be utilized as a movement device

Sexual Assault

1) Assess scene safety and patient condition.
2) Treat life-threatening injuries
3) Maintain as much privacy for the patient as possible. If possible, have same sex responder treat the patient.
4) Offer emotional support. Concentrate history on medical aspects of the case.
5) Search for and treat other injuries. If possible, do not disturb the scene of the assault or remove any clothing
6) When contacting the police and the responding EMS unit, do not identify the victim by name.
7) Do not allow the patient to shower, bathe, douche, urinate or defecate
8) Do not allow the patient to change clothes before being transported to the hospital by EMS
9) Arrangements may need to be made for additional clothing the patient can wear home from the hospital.

Snakebite

1) Assess scene safety and patient condition.
2) Keep the victim still and quiet
3) Remove all jewelry and tight clothing from the affected extremity
4) Elevation:
   a) In cases of *Crotalid* (i.e. rattlesnake, copperheads, and cottonmouth) bites, elevate the extremity above the level of the heart

   b) In cases of *Elapid* (i.e. coral snake) bites, keep the extremity below the level of the heart
5) Vital signs every 5 minutes
6) **DO NOT APPLY TOURNIQUET**
7) **DO NOT APPLY ICE PACK**

- If possible, identify the type of snake *with a picture*.
- Do not attempt to catch a live snake. Transport of the dead snake is not necessary as all snakes native to Wise County are treated with the same antivenin.
- If an exotic snake is involved, notify the responding unit as soon as possible as exotic venoms are not generally available and special transport decisions may need to be made.

PROCEDURES AND REFERENCES

LifeVac™ Choking Device Procedure

Indications

LifeVac™ is an FDA approved, non-invasive, single use only airway clearance device that utilizes a one-way valve and suction to clear the airway of a choking patient in whom abdominal thrusts have failed to clear the airway. LifeVac™ is approved for use in all patients over 22lbs, however, per the LifeVac™ company, the device has been used to save lives in infants under 22lbs.

Precautions

- Use with caution in patients with a known PVC allergy
- Use with caution in patients with known head, neck, facial, or back trauma

Procedure

1) Insert mask into the unit with a twisting motion while applying pressure. Make sure that you check mask to ensure it's attached to the unit. The stem of the mask DOES NOT need to be completely inserted into the unit.
2) Place mask over nose and mouth, holding chin upwards. MASK MUST BE HELD FIRMLY OVER NOSE AND MOUTH WITH HAND.
3) Holding mask in place with one hand and chin held upwards, push handle down with other hand to compress unit.
4) Once handle is depressed, pull handle upward with a short, SWIFT tug while holding mask firmly in place.
5) Roll person on side and sweep the mouth to clear any debris. Also check unit for debris.
6) Repeat steps 2-5 as necessary until the airway is clear.
7) If the patient is breathing, support the patient with high flow O2 on a non-rebreather mask
8) If the patient is not breathing, provide rescue breaths and CPR per the CPR protocol.

Continued on next page

LifeVac™ Choking Device Procedure cont.



Unwrap mask and discard plastic, coloured ring. Insert mask into the unit with a twisting motion while applying pressure. Make sure that you check mask to ensure it is attached to the unit.



Place mask over nose and mouth.

Mask must be held firmly over nose and mouth to ensure good seal.



Holding mask firmly in place with one hand, push handle toward patient to compress the bellows of the pump unit.



Once handle is depressed. Pull handle upward (away from the patient) with a short, swift action.



Turn the patient's head to the side and sweep any visible debris from the mouth or unit using your fingers. Repeat steps as necessary.

Supraglottic Airway Insertion Procedure

Do not proceed with this procedure unless you have been cleared by the Administrator of Record for Wise County EMS or their agent.

This procedure is only for Certified Personnel who have completed an approved Supraglottic Airway Insertion course.

Indications

When advanced airway management is necessary and orotracheal or nasotracheal intubation has failed following the procedures outlined in these protocols.

Contraindications

- Patients with known esophageal disease
- Patients who have ingested caustic substances

Precautions

- This procedure is directed toward the use of the King Airway and AirQ3, other supraglottic devices may require modification to the insertion procedure; follow manufacturers insertion/use guide.
- Always confirm placement of device by auscultation and end-tidal capnography (if available)

Procedure

1) Choose the correct size device based on patient height:
    a. 4 -5 feet in height Size 3
    b. 5 – 6 feet in height Size 4
    c. > 6 feet in height Size 5
2) Test cuff inflation
3) Lubricate the device
4) Pre-oxygenate patient
5) Place head in sniffing position if spinal precautions are not indicated. Device may also be inserted with head in neutral position
6) Open mouth with chin lift if not contraindicated
7) With the device rotated 90° to the long axis of the patient, introduce the tip into the mouth and advance behind the base of the tongue
8) As tip passes behind the tongue, rotate device toward midline

Continued on next page

Supraglottic Airway Insertion Procedure cont.

9) Advance the device until base of connector aligns with teeth
10) Inflate the cuffs
11) Attach BVM and gently pull back on device while ventilating until ventilations are easy and compliance

Confirm placement and secure the device

Glasgow Coma Scale

TABLE 38-2

Glasgow Coma Scale

BEHAVIOR	RESPONSE	SCORE
Eye opening response	Spontaneously	4
	To speech	3
	To pain	2
	No response	1
Best verbal response	Oriented to time, place, and person	5
	Confused	4
	Inappropriate words	3
	Incomprehensible sounds	2
	No response	1
Best motor response	Obeys commands	6
	Moves to localized pain	5
	Flexion withdrawal from pain	4
	Abnormal flexion (decorticate)	3
	Abnormal extension (decerebrate)	2
	No response	1
Total score:	*Best response*	15
	Comatose client	8 or less
	Totally unresponsive	3

- A brisk sternal rub is the preferred method of checking painful stimuli.
- Some patients may have conditions which normally limit the assessment of the GCS. Obtaining a patient history will be helpful in determining if the patient is acutely altered or of normal status.

Patient Assessment Chart

