

Sandy Ridge Vol. Rescue Squad Inc.
Pre-hospital Care Protocols

REVISED April 2009

INTRODUCTION

This operational protocol has been designed to serve as a guide for this agency in providing pre-hospital care. It also should serve as a guide to nurses and physicians who are involved in the delivery of Advanced Life Support through pre-hospital personnel. At the time of writing this manual, the protocols were written with current medical treatment in mind. However, given the complexity of medical care, these protocols should not be expected to provide the definitive care needed by every patient. These are guidelines that can be used to support patient care in a majority of cases, but cannot replace careful assessment of each patient and the specific setting in which they present.

Physicians that will be rendering treatment orders are encouraged to use this manual as a source for such orders, with the realization that many times, once contact has been made with a physician and a full description of the circumstances of the patient are revealed, certain treatments may differ from these protocols. It certainly remains the on-line physicians prerogative to deviate from these protocols.

A "Reference Table" format has been selected for these protocols which will facilitate their use by all EMS providers. A provider need only reference the column of procedures headed by his/her level of training and follow them in sequential order. Symbols used in these protocols are defined as follows:

"*" - Skill which requires additional OMD approved training at this level of certification.

"S" - Standing Order, to be performed prior to contact with online Medical Control.

"O*" - On-line Order, to be performed with approval of online Medical Control.

In some cases, "O*" procedures may be performed IF Medical Control cannot be contacted via radio or telephone and with the OMD's prior approval. Also, please note that when dealing with critical patients, the receiving facility should be contacted as early as possible.

We hope that this manual will help to provide some degree of standardization for the rescue squad, and will help to define the level of care that should routinely be given by pre-hospital personnel. Any questions or concerns about this manual are welcomed, and should be directed through the Council Office at 276-628-4151.

SKILLS FOR CERTIFICATION LEVELS

Please refer to the Virginia Office of EMS Medication schedule and Procedures schedule, which can be found on the OEMS website. These schedules are intended to be used as operational maximums and training minimums, as per this agency's OMD. The Agency OMD will determine which skills on this checklist will be permitted for each certification level.

Sandy Ridge Vol. Rescue Squad Inc.
Advanced Life Support
Assist / Intercept Guidelines

Patients with evidence of the following shall indicate immediate dispatch of ALS if available:

I. AIRWAY / RESPIRATORY EMERGENCIES:

- A. Obstructed Airway
- B. Breathing which is:
 - 1. ABSENT 2. SEVERELY Labored
 - 3. Rate above 40 / below 10 in head trauma above 30
- C. Skin cyanotic (blue color)

II. CIRCULATORY / CARDIAC EMERGENCIES:

- A. Pulse which is:
 - 1. ABSENT 2. IRREGULAR (new onset)
 - 3. very weak 4. Rate above 160 / below 40
- B. Blood Pressure: -above 200/120 or below 90/60
- C. SEVERE Chest Pain / Pale, clammy skin
- D. Severe, Uncontrolled bleeding

III. LEVEL of CONSCIOUSNESS:

- A. UNRESPONSIVE
- B. Decreased - below normal for Pt.
(i.e. overdose, diabetic, stroke)

IV. TRAUMA ***

- A. Severe injury to the HEAD, CHEST, or Abdomen
 - B. Multiple fractures
 - C. MVA with:
 - 1. Entrapment 2. Ejection from vehicle
 - 3. Multiple injuries 4. Pedestrian at >20 mph or
 - 5. Death of same vehicle occupant
 - D. Falls greater than 15 feet.
- *** Should also indicate activation of Aeromedical helicopter if more than 15 minutes from Trauma Center

V. INDEX OF SUSPICION:

ALS should be dispatched for any patient who sounds or looks "Bad" - as if death may be imminent!
DO NOT WAIT - for ALS at the scene . . . Meet them enroute.

MASS CASUALTY INCIDENT RESPONSE OUTLINE

Use "5S" approach.

1. Scene safety survey.
2. Sizeup-how many patients? how severe?
3. Send info to dispatch and initial mutual aid request as needed.
4. Setup-establish incident command including triage officer.
5. S.T.A.R.T. Triage

Use National Incident Command System Guidelines!

PATIENT ASSESSMENTGUIDELINES

EVALUATE THE SCENE

Hospital personnel must rely on the information that you can give them regarding a scene. You also owe it to yourself and others (co-workers and the public) to continually assess each scene for potential dangers to you and them, as well as the patient. While on the scene you should assess mechanisms of injury, the total number of victims, and what resources are immediately available versus those that may be needed.

Specific Hazards that are most commonly found:

- Fire
- Electrical charges
- Hazardous Materials
- Traffic
- Severe Weather
- Weapons (You should always have law enforcement officers secure this type of scene before entering!!!)

PRIMARY SURVEY

A -AIRWAY

ALWAYS ensure an open AIRWAY. Many simple techniques are available to deal with the compromised airway. ALWAYS consider mechanisms of injury and the POTENTIAL OF CERVICAL SPINE INJURY. If the potential of spinal injury exists, appropriate measures to stabilize this are mandated with the initiation of airway care.

B - BREATHING

Once assured that a patent airway is present, evaluation of BREATHING comes next. ALL PATIENTS must have the proper amount of air to enter the lungs. If spontaneous ventilation is not present, or is not adequate, artificial ventilation or assisted

PATIENT ASSESSMENTGUIDELINES(cont)

PATIENT ASSESSMENT GUIDELINES(cont)

B - BREATHING (continued)

ventilation is often life-saving. After ventilations are effectively dealt with advanced airway placement may be considered for the situation based on patient's condition, and the pre-hospital care provider's skill level. Advanced airway use should almost always be considered in the patient with a respiratory rate of less than 10 or greater than 30. With assessment of breathing it is also important to evaluate the chest by exposure, inspection, and auscultation of breath sounds, with palpation of the chest wall most important if trauma has occurred.

C - CIRCULATION/BLEEDING

Check for the presence of a pulse; remember that the presence of a carotid pulse indicates a systolic of approximately 60, the presence of a femoral pulse means a systolic BP of 70, and the presence of a radial indicates a systolic BP of 80 or higher. In the absence of a palpable pulse, chest compressions should be started at a rate and depth appropriate to the patient. Refer to appropriate protocol. If a pulse is present quickly evaluate the condition for the skin to include capillary refill.

Attempt to control all major bleeding sources immediately.

D - DISABILITY

Reassess the level of consciousness by using the AVPU scale:

A -Alert

V -Verbal stimuli produces a response

P - Painful stimuli produces a response

U - Unresponsive even to painful stimuli

PATIENT ASSESSMENT GUIDELINES (cont)

PATIENT ASSESSMENT GUIDELINES (cont)

E - EXPOSE / ENVIRONMENT

Expose the patient and remove clothing to evaluate the patient entirely, so that any injuries can be properly examined. With this exposure remember that it is important to maintain normal body temperature and prevent hypothermia.

IF EARLY OR IMMEDIATE TRANSPORT IS INDICATED, IV's and Secondary Survey are to be completed enroute to the hospital!!!!

SECONDARY SURVEY

Head to Toe examination

Neurological Baseline

Pupil Response

Eye Opening

Verbal Response

Motor Response

Stabilization of Fractures

Control of Minor Bleeding

** Continuous reassessment of the patient is important. Monitoring of Vital Signs every 5 minutes during transport is important for the critically ill or injured patient.

PATIENT ASSESSMENT GUIDELINES

Cardiac Emergencies

For Adults

**Refer to AHA PALS 2006 provider
manual for Pediatric patient Management**

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Asystole

	FR	EMT	Enh.	Int.	P
If the rhythm is unclear, and the possibility of Ventricular Fibrillation exists treat as Ventricular Fibrillation. Confirm Asystole in two leads.	-	-	-	S	S
Establish Unresponsiveness and pulselessness.	S	S	S	S	S
Institute CPR with 100% oxygen and ventilate the patient.	S	S	S	S	S
Consider causes; Hypoxia, Hyperkalemia, Hypokalemia, Acidosis, drug overdose, Hypothermia.	-	-	S	S	S
Perform advanced airway maneuvers as certified.	-	S	S	S	S
Establish IV or Adult IO of NS to wide open.	-	-	S	S	S
Administer 1 mg of Epinephrine 1:10,000 IV push if not given by the ET tube. Repeat every 3-5 minutes while in cardiac arrest.	-	-	-	S	S
Administer 1 mg Atropine IV every 3-5 minutes until max dose of 0.04 mg/kg	-	-	-	S	S
Transport, ALS/BLS Contact Medical Control. Consider termination.	-	S	S	S	S

*Epi by ET should be avoided unless several IV attempts are unsuccessful.

Bradycardia -Stable Patient

	FR	EMT	Enh.	Int.	P
Administer Oxygen.	S	S	S	S	S
Obtain VS, Patient History.	S	S	S	S	S
Monitor EKG.	-	-	-	S	S
Establish IV of NS at KVO rate.	-	-	S	S	S
Transport as soon as possible with close observation of VS every 3 to 5 minutes.	-	S	S	S	S
Notify Medical Control of patient's condition, and at any time that the condition worsens.	S	S	S	S	S

Bradycardia - Unstable Patient

The patient is considered to be symptomatic when one or more of the following occur: systolic BP < 90 mm Hg, Chest Pain, Dyspnea, PVCs, lightheadedness or altered mental status. In the presence of any of these, the patient should be generally considered unstable.

	FR	EMT	Enh.	Int.	P
Administer O ₂ .	S	S	S	S	S
Establish IV of N S at KVO Rate.	-	-	S	S	S
Administer Atropine 0.5 IV push.	-	-	-	S	S
Transport with reassessment of patient's vital signs every 3-5 minutes.	-	S	S	S	S
Contact Medical Control	-	S	S	S	S
Repeat Atropine 0.5 IV push every 3-5 minutes until a maximum dose of 0.04 mg/kg has been given.	-	-	-	S	S
Start Dopamine Drip for hypotension per medical control	-	-	-	-	O
For Pt's in 2nd degree type 2 and pt in 3rd degree heart blocks pt should be Paced with TCP.	-	-	-	S	S
Consider Atropine for 3rd degree heart blocks.	-	-	-	-	S

Chest Pain of Suspected Cardiac Origin

	FR	EMT	Enh.	Int.	P
Obtain History, Vital Signs.	S	S	S	S	S
Administer Oxygen.	S	S	S	S	S
Apply cardiac monitor and monitor cardiac rhythm.	-	-	-	S	S
Obtain and Interpret 12-Lead EKG	-	O*	O*	S	S
Establish IV or NS at KVO rate.	-	-	S	S	S
If systolic BP>100 mm Hg, administer NTG 0.4 mg via spray or tablet, may repeat every 5 minutes X 2 if systolic BP remains >100 mm Hg and patient continues to have chest pain.	-	O*	S	S	S
Administer 4 Baby Aspirin (324 mg) chewed and swallowed if no allergies to aspirin.	S	S	S	S	S
Contact Medical Control.	S	S	S	S	S
Morphine Sulfate 2-10 mg given IV slowly in 2 mg increments every 10 minutes.	-	-	-	O	S
Transport monitoring VS every 35 minutes.	-	S	S	S	S
Monitor EKG Update ER of any changes in pt status.	-	-	-	S	S

Congestive Heart Failure

	FR	EMT	Enh.	Int.	P
Apply oxygen at 100%. If the patient has a decreased level of consciousness, consider assisting the patient with positive pressure ventilation. If the patient is alert, oxygen is to be given via nonrebreathing mask at 12-15 liters.	S	S	S	S	S
Perform patient assessment, obtain a history, present medications, etc.	S	S	S	S	S
Monitor cardiac rhythm. If the rhythm is Ventricular Tachycardia or Supraventricular Tachycardia, use appropriate protocol.	-	-	-	S	S
Prepare for immediate transport.	-	S	S	S	S
Establish INT or IV of D5W at KVO rate.	-	-	S	S	S
If systolic BP>100 mg Hg administer NTG 0.4 mg via tablet or spray. In the patient with a decreased LOC, the administration of NTG shall be by spray only. This may be repeated X 2 every 5 minutes if the systolic BP>110.	-	-	O*	S	S
Contact Medical Control.	-	S	S	S	S

Congestive Heart Failure (cont.)

	FR	EMT	Enh.	Int.	P
Administer Lasix 20-80 mg IV is systolic BP>100 mm Hg.	-	-	-	S	S
If systolic BP<90 mm Hg, consider titrating Dopamine to raise systolic BP to 100-110 mm Hg.	-	-	-	O	O
Transport, monitor VS every 3-5 minutes.	-	S	S	S	S

Premature Ventricular Contractions
(PVCs) In the Presence of Chest Pain

	FR	EMT	Enh.	Int.	P
Airway Assessment, Obtain History, Vital Signs.	S	S	S	S	S
Administer Oxygen at 4L to 6L/min, may need higher flow.	S	S	S	S	S
Apply cardiac monitor	-	-	-	S	S
Establish IV of NS at KVO rate.	-	-	S	S	S
Administer Lidocaine 1-1.5 mg/kg slowly IV push. Begin Lidocaine drip at 2 mg/minute.	-	-	-	S	S
Monitor EKG for changes after Lidocaine administration.	-	-	-	S	S
Contact Medical Control.	S	S	S	S	S
If PVCs continue, administer 0.50.75 mg/kg of Lidocaine every 810 minutes until 3 mg/kg given. Adjust drip rate as ordered.	-	-	-	S	S

Pulseless Electrical Activity (PEA)

	FR	EMT	Enh.	Int.	P
Establish unresponsiveness, pulselessness.	S	S	S	S	S
If no pulse, begin CPR via BVM with 100% oxygen and ventilation.	S	S	S	S	S
Apply cardiac monitor and check for rhythm. If monitor shows Ventricular Tachycardia, this rhythm should be treated as Ventricular Fibrillation!!!	-	-	-	S	S
Perform advanced airway procedures as certified, verify placement, continue CPR	-	S	S	S	S
Establish IV of NS.	-	-	S	S	S
Administer 1 mg of Epinephrine 1:10,000 IV/IO. Repeat dose every 3-5 minutes IV.	-	-	-	S	S

Pulseless Electrical Activity (cont.)

	FR	EMT	Enh.	Int.	P
If PEA is Bradycardic, give Atropine 1 mg IV. Repeat in 3-5 minutes to a maximum dose of .04 mg/kg.	-	-	-	S	S
Consider causes and treatments available to EMS personnel: Hypovolemia-give fluid bolus (NS), Hypoxi, Acidosis, Tension Pneumo-needle decompression; Cardiac Tamponade-fluids/rapid transport, Hypothermiawarming/rapid transport.	-	-	S	S	S
Contact Medical Control.	S	S	S	S	S
Transport without delay, continue BLS/ALS as ordered by Medical Control.	-	S	S	S	S

Ventricular Fibrillation/Pulseless
Ventricular Tachycardia

	FR	EMT	Enh.	Int.	P
WITNESSED ARREST					
Establish unresponsiveness, pulselessness, and apnea.	S	S	S	S	S
If VF /V T Defibrillate at 360 joules monophasic 200 joules biphasic if manufactures settings is unknown. If manufactures settings is known use manufactures settings. Resume C P R for 2 to 3 minutes.	-	-	-	S	S
If no pulse present, continue with unwitnessed arrest below.	S	S	S	S	S
UNWITNESSED ARREST					
Check pulse. If no pulse start C P R for 2 min. Assist ventilations with BVM and 100% O ₂ .	S	S	S	S	S
If no pulse apply AED or Cardiac Monitor, analyze with AED, following AED protocol.	S	S	S	-S	-S
If VF /V T Defibrillate at 360 joules monophasic 200 joules biphasic if manufactures settings is unknown. If manufactures settings is known use manufactures settings. Resume C P R for 2 to 3 minutes.	-	-	-	S	S
If VF persists, Defibrillate at 360 joules monophasic 200 joules biphasic if manufactures settings is unknown. If manufactures settings is known use manufactures settings. Resume C P R for 2 to 3 minutes.	-	-	-	S	S
If VF persists, and no pulse present continue C P R with 100% oxygen and hyperventilation.	-	-	S	S	S

Ventricular Fibrillation/Pulseless
 Ventricular Tachycardia (cont.)

	FR	EMT	Enh.	Int.	P
Perform advanced airway techniques as certified. Confirm proper placement of airway. Resume ventilation.	S	S	S	S	S
Establish IV of Normal Saline at KVO.	-	-	S	S	S
Upon establishment of IV, administer EPI (1:10,000) 1 mg IV or vasopressin 40 units 1 time dose only. Repeat EPI every 3-5 minutes while patient is in cardiac arrest.	-	-	-	S	S
If VF/VT persists, Defibrillate at 360 joules monophasic 200 joules biphasic if manufactures settings is unknown.. If manufactures settings is known use manufactures settings. Resume CPR 2 to 3 minutes.	-	-	-	S	S
If VF/VT persists, administer Amiodarone 300 mg IV bolus in 20 cc NS. or Lidocaine 1-1.5mg/kg IV/IO.	-	-	-	S	S
If VF/VT persists, Defibrillate at 360 joules monophasic 200 biphasic if manufactures settings is unknown.. If manufactures settings is known use manufactures settings. Resume CPR 2 to 3 minutes.	-	-	-	S	S
Transport continuing BLS/ALS as ordered by medical control	-	S	S	S	S

Stable Ventricular Tachycardia

	FR	EMT	Enh	Int.	P
Administer Oxygen.	S	S	S	S	S
Establish IV or NS KVO.	-	-	S	S	S
Prepare for immediate transport.	S	S	S	S	S
Contact Medical Control	S	S	S	S	S
	FR	EMT	Enh.	Int.	P
Consider placing an IV of NS prior to cardioversion . Also consider Valium 2-10 mg IV for sedation prior to cardioversion . If Valium is administered , careful observation of the airway/breathing is mandatory . O r approved medication for sedation approved by OMD .	-	-	-	S	S
Synchronized Cardiovert at 50 to 100 joules.	-	-	-	S	S
If unsuccessful, Synchronized Cardiovert at 200 joules.	-	-	-	S	S
If unsuccessful, Synchronized Cardiovert at 300 joules.	-	-	-	S	S
If unsuccessful, Synchronized Cardiovert at 360 joules.	-	-	-	S	S
Ensure the administration of Oxygen at appropriate flows.	S	S	S	S	S
Establish an IV of NS at KVO rate.	-	-	S	S	S
Administer Amiodarone 150 mg IV/IO over 10 mins if converts start drip of 360 mg over the next 6 hrs (1 mg/min) . Lidocane 1-1.5 mg/kg IV max of 3 mg/k g. If converts hang d rip o f 2-4 mg/min .	-	-	-	S	S
Prepare for immediate transport .	S	S	S	S	S

Ventricular Tachycardia (Unstable)

Unstable VT is characterized by a normal width QRS rhythm in a patient who is experiencing one or more of the following symptoms: Decreased Level of Consciousness, Systolic Blood Pressure < 99 mm Hg, Chest Pain, Dyspnea, or Pulmonary Edema.

Ventricular Tachycardia (Unstable)

	FR	EMT	Enh.	Int.	P
* If at any time after cardioversion the patient develops Ventricular Fibrillation, immediately defibrillate the patient at 360 joules monophasic 200 joules biphasic.	-	-	-	S	S
If patient reverts to VT after cardioversion, repeat cardioversion at last successful energy level.	-	-	-	S	S
If VT persists, Synchronized Cardiovert at 360 joules.	-	-	-	S	S

Supraventricular Tachycardia (Stable)

	FR	EMT	Enh.	Int.	P
Administer Oxygen at appropriate flow.	S	S	S	S	S
Assess vital signs, obtain history.	S	S	S	S	S
Apply cardiac monitor and monitor EKG rhythm.	-	-	-	S	S
Establish IV or NS at KVO.	-	-	S	S	S
Initiate transport, repeat vital signs every 3-5 minutes.	-	S	S	S	S
Contact Medial Control.	-	S	S	S	S

	FR	EMT	Enh.	Int.	P
Administer Oxygen at appropriate flow.	S	S	S	S	S
Establish IV of NS at KV O rate en route.	-	-	S	S	S
Establish communications with Medical Control for further orders.	-	S	S	-	-
In conscious patients, Adenocard 6 mg IV push.	-	-	-	S	S
If S V T persists, administer Adenocard 12 mg IV push.	-	-	-	S	S
If S V T persists, administer Adenocard 12 mg IV push.	-	-	-	S	S
Synchronized Cardiovert at 100 joules.	-	-	-	S	S
Contact Medical Control.	S	S	S	S	S

Supraventricular Tachycardia (Unstable)

Unstable SVT is characterized by a normal width QRS rhythm in a patient who is experiencing one or more of the following symptoms: Decreased Level of Consciousness, Systolic Blood Pressure < 99 mm Hg, Chest Pain, Dyspnea, or Pulmonary Edema

SVT (Unstable) (cont.)

	FR	EMT	Enh.	Int.	P
If still in SVT, Synchronized Cardiovert at 200 joules.	-	-	-	S	S
If still in SVT, Synchronized Cardiovert at 300 joules.	-	-	-	S	S
If still in SVT, Synchronized Cardiovert at 360 joules.	-	-	-	S	S
Transport without delay, monitoring VS every 3-5 minutes.	-	S	S	S	S

Medical Emergencies
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Environmental Emergencies
Heat Related Emergencies

	FR	EMT	Enh.	Int.	P
Obtain VS, History.	S	S	S	S	S
Administer oxygen as appropriate.	S	S	S	S	S
Remove from heat to cooler environment, do not allow to chill.	S	S	S	S	S
If fully conscious, allow oral fluids if not nauseated (salt solu. is best).	S	S	S	S	S
Establish IV or Normal Saline and run at 250-300 cc's per hour.	-	-	S	S	S
Apply cardiac monitor and monitor cardiac rhythm.	-	-	-	S	S
Transport, notify Medical Control.	-	S	S	S	S

Hypothermia

	FR	EMT	Enh	Int.	P
Maintain airway, D O N O T use adjuncts.	S	S	S	S	S
Remove all wet clothing carefully.	S	S	S	S	S
Begin external rewarming.	S	S	S	S	S
Avoid excessive handling of the patient	S	S	S	S	S
Transport rapidly, handling carefully at all times. -S S S S If cardiac arrest, transport with C P R, A L S ineffective without rewarming.	-	S	S	S	S
If P t is in V F /V T Defibrillate at 360 joules monophasic 200 joules biphasic if manufactures settings is unknown. If manufactures settings is know n use manufactures settings. 1 time only and 1 round of A C L S meds.	-	-	-	S	S

*One Round Of ACLS if patients is in full arrest.

OVERDOSE AND POISONING

	FR	EMT	Enh	Int	P
Assess LOC, Obtain Vitals, and History	S	S	S	S	S
Apply O2 high flow. If Pt is in respiratory arrest preform advance airway procedures.	S	S	S	S	S
Establish IV/IO of Normal Saline	-	-	S	S	S
Apply monitor	-	-	-	S	S
If Pt is unconscious and/or has a depressed respiratory rate consider narcotic/opiate overdose. If narcotic overdose administer Naloxone 0.4 mg IV/IO/IM over 2 minutes, dose may be repeated upto a maximum of 2 mg.	-	-	S	S	S
Advanced Airway Per Certification.	-	-	S	S	S
If S.L.U.D.G.E. (salivation, lacrimation, urination, defecation, GI complaints, emesis) symptoms, meiosis (small pupils) bradycardia, hypotension, altered LOC are found suspect organophosphate poisoning/nerve agent. Administer Atropine 2 mg IV/IO every 5 minutes until symptoms improve.	-	-	-	O	S
If decreased mental status/seizures, cardiac arrhythmia (especially wide complex) and/or hypotension are found suspect Tricyclic Antidepressant or Cocaine overdose. Administer Sodium Bicarb. 50 mEq IV/IO	-	-	-	O	S
If calcium channel blocker or beta blocker overdose suspected administer Glucagon 1 mg IV/IO	-	-	O*	O	S
Contact Medical Control and transport ASAP.	-	S	S	S	S

NAUSEA VOMITING

	FR	EMT	Enh.	Int.	P
Preform pt assessment.	S	S	S	S	S
Establish IV/IO of normal saline KVO.	-	-	S	S	S
If Pt has prolonged vomiting, active vomiting after EMS arrival or nausea causing significant discomfort administer Promethazine 12.5 mg IV or 25 mg IM.	-	-	-	S	S
If pt has recurrent of persistent nausea and/or vomiting after 15 min have elapsed since initial dose, a second dose of Promethazine 12.5 mg IV or 25 mg IM may be administered.	-	-	-	S	S
If pt presents with evidence of symptomatic dehydration/hypotension administer 250ml bolus of normal saline. Repeat as needed.	-	-	S	S	S
Transport and contact medical control.	-	S	S	S	S
If onset of acute Dystonia administer 25 mg of Benadryl IM.	-	-	-	S	S

Hypertensive Crisis

There are a number of causes of Hypertensive Crisis. In the patient who has a diastolic blood pressure > 120 mm Hg, and who has following symptoms: dizziness, headache, neurological deficits, chest pain, or dyspnea.

	FR	EMT	Enh.	Int.	P
Evaluate LOC, obtain VS, obtain history, medications	S	S	S	S	S
Administer high flow oxygen by appropriate means.	S	S	S	S	S
Attach monitor, evaluate EKG rhythm.	-	-	-	S	S
Establish INT or IV of D5W to KVO.	-	-	S	S	S
Assist Pt in taking thier sublingual Nitro	-	S	S	S	S
Administer NTG 0.4 mg by sublingual tablet or spray.	-	O*	S	S	S
Contact Medical Control.	S	S	S	S	S
Additional NTG 0.4 mg sublingually (if diastolic blood pressure > 100 mm Hg) every 5 minutes X 2 doses.	-	-	O*	S	S
Apply NTG paste 2" to skin. If diastolic becomes <110, paste is to be removed.	-	-	O*	O*	S
Monitor VS closely every 3-5 minutes during transport.	-	S	S	S	S

Hypotension

There are many causes of hypotension. This protocol offers a way to attempt to deal with the many causes of hypotension when the specific cause is unknown. It is always best to know the specific reason for hypotension, but in the field this knowledge may be difficult to obtain. Ultimately the causes of hypotension will be: Volume loss, ineffective pumping action of the heart, loss of control over blood vessel size, or a mixture of these reasons.

Hypotension shall be considered as a systolic BP of <80 mm Hg, or <100 mm Hg in the presence of other symptoms of shock (diaphoresis, nausea, decreased level of consciousness, weak and thready pulse, delayed capillary refill).

	FR	EMT	Enh.	Int.	P
Evaluate airway, breathing, circulation. Use appropriate advanced airways based on certification and patient's condition.	S	S	S	S	S
Provide 12-15 Liters oxygen via non-rebreather mask if ventilations adequate, or via BVM when there is a need to assist ventilation.	S	S	S	S	S
Listen to breath sounds.	-	S	S	S	S

Hypotension (cont.)

	FR	EMT	Enh.	Int.	P
Treat significant bradycardia or tachycardia before giving fluid bolus.	-	-	-	S	S
Initiate IV of NS with a large bore catheter. If breath sounds were clear, and there is no reason not to give a rapid fluid bolus, deliver 300-500 cc's of fluid rapidly.	-	-	S	S	S
Begin transport, notify medical control	-	S	S	S	S
If hypotension persists, additional fluid boluses of NS up to a total of 4000 cc's (may require placement of additional large bore catheter) so long as breath sounds remain clear.	-	-	O*	S	S
Dopamine** drip titrated to raise blood pressure to 100 mm Hg systolic.	-	-	-	O*	S

**Intropic support is not indicated in the patient who is volume depleted. Initial attempts should be at replacement of fluids.

Altered Mental Status

There are many factors which may cause a change in mental status. Some of the more common causes of altered mental status are: Head injury, seizures, hypoxia, acidosis, diabetes, drug overdose, metabolic abnormalities, meningitis, infections, ETOH abuse, and psychological disturbances. In many cases, it will be difficult to obtain an appropriate history. In this case, you consider the possibilities of cervical spine and other hidden injuries.

	FR	EMT	Enh.	Int.	P
Assess scene for dangers to rescuers, consider the mechanisms of injury. Consider the potential of C-Spine and other hidden injuries.	S	S	S	S	S
Assess Airway, Breathing. If necessary, secure airway by mechanical airway based on level of training. Assist ventilations as indicated.	S	S	S	S	S
Administer Oxygen at 10 to 12 liters by non-rebreather mask.	S	S	S	S	S
Assess circulation.	S	S	S	S	S
Apply monitor.	-	-	-	S	S
Obtain history, if possible, from reliable sources.	S	S	S	S	S

Altered Mental Status (cont.)

	FR	EMT	Enh	Int	P
Do glucose level check by dextrostix, chemstrip, etc.	-	S	S	S	S
If glucose is < 60, give one amp D50W (25 grams) IV. Consider Thiamine 100 mg IV/IM if a suspected chronic alcoholic before D50W. Note: PEDS should be diluted to D25 give 2-4ml/kg.	-	-	S	S	S
If unable to establish IV, 1 mg Glucagon IM.	-	S	S	S	S
If not certified to administer D50W IV, give oral glucose only if pt has a good gag reflex	S	S	-	-	-
If no response to glucose, give Narcan 0.4 to 2 milligrams IV slowly.	-	-	S	S	S
Effect immediate transport.	S	S	S	S	S
Contact Medical Control.	S	S	S	S	S
Monitor VS every 3-5 minutes en route to hospital. Evaluate status of airway and respiration closely.	S	S	S	S	S

Seizures/Convulsions

	FR	EMT	Enh.	Int.	P
Protect the patient from further injury.	S	S	S	S	S
Maintain airway as able (DO NOT INSERT ANYTHING INTO THE MOUTH!!!).	S	S	S	S	S
Protect C-spine. Place Patient on their side, prep suction for use. If patient is vomiting.	S	S	S	S	S
Administer High flow Oxygen (by NRB mas at 10-12 liters) or assist ventilations with BVM.	S	S	S	S	S
Establish an IV of NS.	-	-	S	S	S
Obtain blood sample for dextrostix, chemstrip, etc.	-	S	S	S	S
If glucose <60, administer one ampule of D50W (25 grams).	-	-	S	S	S
If unable to establish IV, give 1 mg of Glucagon IM.	-	O*	S	S	S
Contact Medical Control.					
Valium 2 to 10 mg IV slowly until seizure stops. Pediatric dose: 0.5 mg/kg pararectally if unable to start IV or 0.25 mg/kg IV	-	-	-	S	S
Transport and monitor VS every 3 to 5 minutes, closely evaluate respirations continuously after administration of Valium.	-	S	S	S	S

Stroke/CVA

	FR	EMT	Enh	Int	P
Assess LOC, Obtain Vitals, and History	S	S	S	S	S
Apply O2 high flow	S	S	S	S	S
Perform Cincinnati Stroke Scale evaluation. (see Stroke Scale) Obtain time of onset of symptoms	*	S	S	S	S
Contact Medical control and transport ASAP with goal to limit on-scene time to less than 10 min.	-	S	S	S	S
Apply cardiac monitor	-	-	-	S	S
Establish IV of Normal Saline at KVO	-	-	O*	S	S
Obtain blood glucose reading	S	S	S	S	S

CINCINNATI STROKE SCALE

1. Rapid recognition, transport, and receiving emergency department that you have a potential stroke (CVA) patient enables the receiving facility to utilize the most effective diagnostic and treatment tools available and possibly reduce or eliminate the devastation of a stroke. If a stroke is suspected, perform the CINCINNATI PRE-HOSPITAL STROKE SCALE evaluation.

2. The CINCINNATI PRE-HOSPITAL STROKE SCALE should not be used on the following:

A. Patients that are victims of multiple trauma.

B. Patients that have isolated minor injuries.

C.

Critically ill patients (systolic BP less than 80, intubated pts, etc.)

3. Have the patient perform the following three activities.

Transport and notify the hospital immediately if the patient scores abnormal in any one activity:

A. Facial Droop (ask the patient to show teeth or smile)

Normal: (both sides move equally well)

Abnormal: (one side of the face doesn't move as well as the other)

B. Arm Drift (ask the patient to hold their arms straight forward and away

from the body at 90 degrees to the torso)

Normal: (both arms move the same or both don't move at all)

Abnormal: (one arm doesn't move or one arm drifts down independent of the other)

C. Speech (ask the patient to say "you can't teach an old dog new tricks")

Normal: (patient says correct words with no slurring noted)

Abnormal: (patient slurs words, says the wrong words, or can't speak)

**If patient fails one or more of the Cincinnati Pre-Hospital Stroke Scale Tests, Contact
Aeromedical Transport for Patient!!!**

Anaphylaxis

	FR	EMT	Enh	Int	P
Assess level of Consciousness.	S	S	S	S	S
Ensure Patent Airway, consider mechanical airway if indicated by level of consciousness.	S	S	S	S	S
If life threatening systemic reaction is present including decreased blood pressure, angioedema, laryngoedema (as evidenced by stridor or upper airway occlusion), or bronchospasms, administer high flow oxygen at 10-12 liters by nonrebreather mask.	S	S	S	S	S
Assess breath sounds.	-	S	S	S	S
If life threatening systemic reaction (as defined above) persists, administer Epinephrine 1:1,000, 0.3 to 0.5 mg IM. Ped 0.01mg/kg IM.	-	O	S	S	S

Anaphylaxis (cont.)

	FR	EMT	Enh	Int	P
Give Benadryl 50 mg IM/IV if severe.	-	-	S	S	S
Apply monitor.	-	-	S	S	S
Establish IV of normal saline	-	-	S	S	S
Contact Medical Control.	S	S	S	S	S
Albuterol 2.5 mg in 3 cc NS via aerosol, if severe bronchospasm. Repeat in 15 minutes.	-	S	S	S	S
Transport rapidly continuing treatments en route, monitor and record vital signs every 3-5 minutes, notify Medical Control of any changes in patient status.	S	S	S	S	S
If life threatening systemic reaction occurs, only after above interventions have occurred, and patient is in transport, administer Solumedrol 125 mg IV up to 250 mg.	-	-	-	S	S
Pt on Beta Blockers or who are refractory to previous EPI, give 1mg Glucagon IV/IM.	-	O*	O	S	S

Difficulty Breathing

	FR	EMT	Enh.	Int.	P
Administer oxygen, if altered level of consciousness, consider assisting ventilations or higher concentration of oxygen.	S	S	S	S	S
Assess vital signs, pulse oximetry, obtain complete history to include medications, previous hospitalizations.	S	S	S	S	S
Assist patient in taking their inhalant medication.	-	S	S	-	-
Apply heart monitor.	-	-	-	S	S
Administer Albuterol 2.5 mg in 3 cc NS via nebulizer, if wheezes auscultated or absent lung sounds in a known asthmatic.	-	S	S	S	S
Establish IV or NS at KVO rate.	-	-	S	S	S
Contact Medical Control.	-	S	S	S	S
May repeat Albuterol nebulizer treatment in 15-30 minutes after initial treatment.	-	*	S	S	S
Consider Solu-Medrol 125 mg for adult patient and 1mg/kg for pediatric patient.	-	-	-	S	S

Trauma Emergencies
Sandy Ridge Vol. Rescue Squad Inc.
Prehospital Care Protocols 2009

Burns (Minor)

MINOR BURNS-partial thickness: <10% BSA for adult, <5% BSA for child or elderly patient; full thickness: <2% BSA

MODERATE BURNS-partial thickness: 10 to 20% BSA for adult, 5-10% for child or elderly patient; full thickness: 2-5% BSA; suspected inhalation injury or circumferential burns.

MAJOR BURNS-partial thickness: >20% BSA for adult, >10% BSA for child or elderly patient; full thickness >5% BSA; any significant burn to face, eyes, ears, genitals, joints, or significant associated injuries.

	FR	EMT	Enh.	Int.	P
Remove the patient to a safe environment, assuring individual safety. Stop the burning process with available resources.	S	S	S	S	S
Maintain airway.	S	S	S	S	S
Administer high flow oxygen.	S	S	S	S	S
Remove material from around the burned areas which are not adhering to the wound.	S	S	S	S	S
Remove or loosen constricting items (rings, belts, collars, watches, etc.).	S	S	S	S	S
Cool burn with cold water if skin surface is intact. DO NOT immerse in ice or icy water.	S	S	S	S	S

Burns (Major)

	FR	EMT	Enh.	Int.	P
Remove patient to a safe environment, assuring individual safety. Protect patient from Hypothermia.	S	S	S	S	S
Cover burned areas with DRY burn sheet or clean sheet.	S	S	S	S	S
100% oxygen by NRB Mask or assist ventilation.	S	S	S	S	S
Establish 2 IVs of Lactated Ringers with large bore cannulas (16 or larger if possible).	-	-	S	S	S
Call Medical Control.	-	S	S	S	S
Morphine Sulfate 2-10 mg IV in 2 mg increments.	-	-	-	O	S
Transport rapidly to appropriate facility with monitoring of VS every 3-5 minutes.	-	S	S	S	S

Multiple System Trauma

	FR	EMT	EN	I	P
Assess scene for personal, personnel, and patient safety.	S	S	S	S	S
Control Cervical Spine	S	S	S	S	S
Secure and maintain airway using basic and advanced techniques as certified.	S	S	S	S	S
Administer high flow oxygen via nonrebreather mask if patient has adequate LOC, adequate ventilations. If decreased level of consciousness, inadequate ventilations 100% oxygen is to be delivered and ventilations assisted.	S	S	S	S	S
If respiratory distress continues after maintenance of airway and sealing of any chest wounds, consider the potential of tension pneumothorax. Check for jugular vein distension, tracheal deviation, breath sounds.	-	S	S	S	S
If signs of Tension Pneumothorax exist, decompress the chest via larger bore needle in the 2nd intercostal space, midclavicular line.	-	-	O*	S	S

	FR	EMT	Enh.	Int.	P
Control severe bleeding.	S	S	S	S	S
Call for helicopter transport/ intercept unless otherwise indicated.	S	S	S	S	S
Establish 2 large bore IVs (16ga or larger if possible) with Lactated Ringers en route to Medical Facility, which is to be chosen based on trauma destination guidelines. If extrication will take longer than 20 minutes IVs may be placed while entrapped.	-	-	S	S	S
Monitor cardiac rhythm.	-	-	-	S	S
Monitor VS every 3-5 minutes.	S	S	S	S	S
Contact Medical Control ASAP with number, severity and ETA of patients from the incident.	-	S	S	S	S

Spinal Cord Trauma

	FR	EMT	Enh	I	P
Assess scene for personal, personnel, and patient safety.	S	S	S	S	S
Control Cervical Spine.	S	S	S	S	S
Secure and maintain airway using basic and advanced techniques as certified.	S	S	S	S	S
Administer high flow oxygen via non-rebreather mask if patient has adequate LOC, adequate ventilations. If decreased level of consciousness, inadequate ventilations 100% oxygen is to be delivered and ventilations assisted.	S	S	S	S	S
Perform Pt Assessment looking for Neuro deficits. If Neuro deficits are found and injury is less than 8 hours old administer Solu-Medrol 30 mg/kg slow IV push over 510 min.	-	O*	O*	S	S

Simple Triage and Rapid Treatment (S.T.A.R.T.)
Use for primary triage

BREATHING?

YES NO

>30/Min.? 10-30/Min.? Position Airway Ventilation?

TAG RED

NO

TAG BLACK

YES

TAG RED

<10/ Min

RADIAL PULSE?

NO YES

Control Bleeding

TAG RED CHECK MENTAL STATUS

Follows Simple Commands?

YES

TAG YELLOW

NO

TAG RED

S.T.A.R.T.

REVISED TRAUMA SCORE (RTS)

The trauma score is a numerical grading system for estimating the severity of injury. Any patient with a score 11 or less should be considered a potential priority 1 trauma and directed to a Level 1 Trauma Center.

SCORE

SYSTOLIC BLOOD PRESSURE

>89	4
75-89	3
50-74	2
1-49	1
0	0

RESPIRATORY RATE

10-29	4
>29	3
6-9	2
1-5	1
0	0

GLASGOW COMA SCALE

13-15	4
9-12	3
6-8	2
4-5	1
3	0

TOTAL

0-12

GLASGOW COMA SCALE

EYE OPENING Spontaneous

To Voice

4

3

To Pain 2

None 1

VERBAL RESPONSE Oriented 5

Confused 4

Inappropriate Words

Incomprehensible Words

None

3

2

1

MOTOR RESPONSE Obeys Command

Localizes Pain

6

5

Withdraw (pain)

Flexion (pain)

Extension (pain)

None

4

3

2

1

TOTAL 3-15

TRAUMA SCORE/GLASGOWCOMA SCALE

**Medication
Reference**

PEDIATRIC MEDICATIONS

Early establishment of medical control is imperative especially with the pediatric patient. Their causes of cardiac arrest are much different than adult patients. Any on-line orders should be followed, as the doses below only serve as guidelines.

Refer to AHA PALS 2006 provider manual for medication reference.

ALBUTEROL: .15 mg/kg by nebulizer.

ATROPINE: 0.02 mg/kg. Absolute minimum dose is 0.1mg. Maximum single dose is 0.5 milligrams in the child, 1.0 milligrams in the adolescent. Maximum total dose is 1 milligram for a child, 2 milligrams in an adolescent.

DEXTROSE 50% (D50): 0.5 to 1.0 gram/kg slowly. In children this should be diluted 1:1 with Sterile Water creating D25 and give slowly. 1 Amp=25 grams.

DIAZEPAM (VALIUM): 0.25 mg/kg IV very slowly. Careful evaluation of respiration and airway mandatory.

ADENOCARD (ADENOSINE) 0.1 mg/kg second dose of 0.2 mg/kg third dose of 0.2mg/kg.

PEDIATRIC MEDICATIONS (continued)

PEDIATRIC MEDICATIONS (continued)

EPINEPHRINE (1:10,000 conc.): .01 mg/kg of 1:10,000 for first IV/IO dose, then .1 mg/kg of 1:1,000 every 5 minutes for subsequent dose.

FUROSEMIDE (LASIX): 1mg/kg IV slowly.

LIDOCAINE: 1mg/kg, maximum dose 3mg/kg.

MORPHINE: 0.1 - 0.2mg/kg slowly.

NALOXALONE (NARCAN): 0.1mg/kg IV titrated to effect.

SODIUM BICARBONATE: 1meq/kg IV only after aggressive hyper

ventilation through a patent airway.

DEFIBRILLATION: 2 J/kg > 4 J/kg > 4 J/kg

SYNCRONIZED CARDIOVERSION: 1J/Kg > 2J/Kg > 2J/Kg

PEDIATRIC MEDICATIONS

ADULT MEDICATIONS

ADENOCARD
(Adenosine)

THERAPEUTIC EFFECTS

Antiarrhythmic. Slows conduction time through the AV node and can interrupt the re-entry pathways through AV node.

INDICATIONS

Paroxysmal supraventricular tachycardia (PSVT).

CONTRAINDICATIONS

- 1). 2nd degree type II or 3rd degree
- 2). Sick sinus rhythm

SIDE EFFECTS

- 1). Transient dysrhythmias
- 2). Facial flushing
- 3). Dyspnea
- 4). Chest pressure
- 5). Hypotension
- 6). Headache
- 7). Nausea
- 8). Bronchospasm

ADENOCARD (continued)
(Adenosine)

ADENOCARD (continued)
(Adenosine)

HOW SUPPLIED

6mg in 2ml flip-top vials.

ADMINISTRATION AND DOSAGE

Give 6mg IV push - rapidly over 1 - 2 seconds. Via antecubital access.

Repeat dose: If no effect after 2 minutes, give 12mg rapidly over 1 - 2 seconds.

NOTE: Adenocard is blocked by Caffeine and Theophylline and is potentiated by Dipyrdamole (Persantine) and Tegratol. Consider reduceing dose when pts are on potentiating medications.

ADENOCARD
(Adenosine)

**ALBUTEROL -BRONCHODILATOR
AEROSOL (Ventolin, Proventil)**

CLINICAL PHARMACOLOGY

Albuterol relaxes smooth muscle of the bronchi and uterus and the vascular supply to skeletal muscle, but may have less cardiac stimulant effects than isoproterenol.

INDICATIONS

Albuterol is indicated for the relief of bronchospasm in patients with reversible obstructive airway disease and for the prevention of exercise-induced bronchospasm.

CONTRAINDICATIONS

Contraindicated in patients with a history of hypersensitivity to any of its components. Should not be used concomitantly with epinephrine or other sympathomimetic aerosol bronchodilators.

SIDE EFFECTS

The potential for paradoxical bronchospasm should be kept in mind. If it occurs, the preparation should be discontinued immediately and alternative therapy instituted.

ADMINISTRATION AND DOSAGE

Unit dose is 2.5mg in 3 cc's of NS. Place Albuterol in Nebulizer and connect to O₂ flowmeter. Set flowmeter at 10 L/min. and place mask or mouthpiece on patient. Instruct patient to take slow, deep breaths with an inspiratory hold. Monitor if available equipment and staff.

**Place patient on cardiac monitor if available.

**ALBUTEROL - BRONCHODILATOR
AEROSOL (Ventolin, Proventil)**

AMIODARONE

THERAPEUTIC EFFECTS

Anti-dysrhythmic which prolongs the duration of the action potential and effective refractory period.

INDICATIONS

Initial treatment and prophylaxis of frequently recurring VF and hemodynamically unstable VT in patients refractory to other therapy.

CONTRAINDICATIONS

- 1.) Pulmonary congestion.
- 2.) Cardiogenic shock.
- 3.) Hypotension
- 4.) Sensitivity to amiodarone

SIDE EFFECTS

- 1.) Hypotension
- 2.) Headache
- 3.) Dizziness
- 4.) Bradycardia
- 5.) AV conduction abnormalities
- 6.) Flushing
- 7.) Abnormal salivation

continued next page

AMIODARONE (continued)

HOW SUPPLIED

150 MG/ML Vials

DOSAGE AND ADMINISTRATION

Adult: Loading dose for cardiac arrest: 300 mg IV push; flush with 10 ML D5W or NS. Supplemental bolus dose for cardiac arrest: 150 MG IV push; flush with 10 ML of D5W or NS. Loading infusion after reestablishment of spontaneous circulation: 360 MG (diluted) over 6 hours. Maintenance infusion: 540 MG (diluted) over 18 hours. For profussing rythums give 150 mg over 10 min IV.

Pediatric: Safety has not been established.

AMIODARONE

ATROPINE SULFATE

THERAPEUTIC EFFECTS

By blocking parasympathetic (vagal) action on the heart, atropine enhances conduction through the AV junction and accelerates the heart rate, thereby improving cardiac output. In addition, by speeding up a slow heart to a normal rate, atropine reduces the chances of ectopic activity in the ventricles and thus of Ventricular Fibrillation. Atropine is most effective in reversing bradycardia due to increased parasympathetic tone or to morphine; it is less effective in treating bradycardias due to actual damage to the AV or SA node.

INDICATIONS

- 1). SYMPTOMATIC BRADYCARDIA
- 2). As an antidote in ORGANOPHOSPHATE POISONING.

CONTRAINDICATIONS

- 1). Atrial flutter or atrial fibrillation where there is a rapid ventricular response.
- 2). Glaucoma.
- 3). Use with extreme caution in myocardial infarction.

SIDE EFFECTS

The patient should be warned that he or she may experience some of the following side effects and that these side effects are part of the drug's usual and expected actions:

- 1). Blurred vision, headache, pupillary dilatation.
- 2). Dry mouth, thirst.

continued next page

ATROPINE SULFATE (continued)

SIDE EFFECTS (continued)

- 3). Flushing of the skin.
- 4). Difficulty in urinating (especially older men).

HOW SUPPLIED

Prefilled syringes containing 1mg in 10ml.

ADMINISTRATION AND DOSAGE

In the field, atropine is usually given intravenously for bradycardia; for organophosphate poisoning, a combination of intravenous and intramuscular administration is commonly used. In resuscitation from cardiac arrest, if an intravenous route cannot be established, atropine may be given through the endotracheal tube.

- 1). For bradycardia: 0.5mg IV, repeat at 5 - minute intervals until the desired heart rate is achieved; the total dose should not, however, exceed .04 mg/kg. Doses smaller than 0.5 mg, or a dose given too slowly, may slow rather than speed up the heart rate. Excessive doses may precipitate ventricular tachycardia or fibrillation.
- 2). For organophosphate poisoning: 2mg IM and 1mg IV. The IV dose may be repeated every 5 to 10 minutes as needed until a decrease in secretions is observed.

ATROPINE SULFATE

BENADRYL (Diphenhydramine)

Therapeutic Effect

Antihistamine

Indications

Allergic reaction, extra pyramidal symptoms, such as caused by Phenergan.

Contraindications

Asthma, pregnant and lactating females.

Side Effects

Sedation, blurred vision, anti cholinergic effects.

How supplied

2 ml vial (50 mg/ml.)

Dose

25-50 mg IV or deep IM

BENADRYL (Diphenhydramine)

50% DEXTROSE (D50)

THERAPEUTIC EFFECTS

Restores circulating blood sugar level to normal in states of hypoglycemia.
Acts transiently as an osmotic diuretic.

INDICATIONS

- 1). To treat coma caused by HYPOGLYCEMIA.
- 2). To treat COMA OF UNKNOWN CAUSE.
- 3). To treat STATUS EPILEPTICUS OF UNCERTAIN CAUSE.
- 4). Some cases of REFRACTORY CARDIAC ARREST.

CONTRAINDICATIONS

Intracranial hemorrhage.
Acute CUA

SIDE EFFECTS

- 1). May precipitate severe neurologic symptoms in alcoholics. For this reason, when given to a known alcoholic, should be accompanied by thiamine, 100mg IM, which will prevent this neurologic syndrome.
- 2). Will cause tissue necrosis if it infiltrates; should therefore be given only through a good, rapidly flowing IV line.

HOW SUPPLIED

Prefilled syringes and vials containing 50ml of 50% dextrose (=25 grams of dextrose).

continued next page

50% DEXTROSE (D50) (continued)

ADMINISTRATION AND DOSAGE

Given intravenously, through a free-flowing intravenous line, preferably in a large vein. If possible, draw blood for serum glucose determinations before administering the dextrose.

Dosage: 50ml of 50% dextrose (25gm) as a bolus IV.

50% DEXTROSE (D50)

DIAZEPAM (Valium)

THERAPEUTIC EFFECTS

Through its depressant action on the central nervous system, can terminate some seizures. Also has a calming effect in anxiety.

INDICATIONS

- 1). To treat STATUS EPILEPTICUS.
- 2). Given as a sedative prior to CARDIOVERSION in conscious patients.
- 3.) Facilitation of Intubation

RELATIVE CONTRAINDICATIONS

- 1). Should not be given during pregnancy because of possible toxic effects on the fetus.
- 2). Should not be given to patients who have taken alcohol or other sedative drugs.
- 3). Should not be given to patients with hypotension.

SIDE EFFECTS

- 1). Possible hypotension.
- 2). Confusion, stupor.
- 3). In some patients, especially the elderly, the very ill, and those with pulmonary disease, may cause respiratory arrest and/or cardiac arrest.

HOW SUPPLIED

In prefilled syringes and ampules of 2ml and in vials of 10ml, in a concentration of 5mg/ml.

continued next page

DIAZEPAM (Valium)

ADMINISTRATION AND DOSAGE

For status epilepticus: given intravenously in slow, titrated doses. Before administering the drug, check and record the patient's vital signs. Then give 2.5mg (0.5ml) SLOWLY IV. Wait a few minutes and recheck the BP; if it has fallen, do not give any more of the drug. If the BP is stable, and the desired therapeutic effect has not been achieved, give another 2.5mg (0.5ml) IV. Then recheck the BP. Continue until the seizures have stopped or the BP drops, but do not exceed a total dose of 10 mg in the field.

DIAZEPAM (Valium)

DOPAMINE (Intropin)

THERAPEUTIC EFFECTS

Beta sympathetic drug - hence causes an increase in the force and rate of cardiac contractions as well as dilatation of renal and mesenteric arteries. This latter effect promotes urine flow, and for this reason, dopamine is sometimes preferred over norepinephrine (which constricts renal arteries) in shock. Dopamine causes less increase in oxygen consumption by the myocardium than does isoproterenol. At low doses, the beta effects of dopamine predominate; at high doses, dopamine has alpha effects as well and thus will cause vasoconstriction.

INDICATIONS

To increase cardiac output in **CARDIOGENIC SHOCK** while maintaining good renal perfusion.

Symptomatic Bradycardia

CONTRAINDICATIONS

- 1). Should not be used as first - line therapy in hypotension caused by hypovolemia (e.g., hemorrhagic shock), where volume replacement should precede the use of vasopressors.
- 2). Pheochromocytoma (a tumor that produces epinephrine and/or related substances).
- 3). Should not be given in the presence of uncorrected tachyarrhythmias or ventricular fibrillation.

continued next page

DOPAMINE (Intropin)

SIDE EFFECTS

- 1). Ectopic beats, palpitations, tachycardia.
- 2). Nausea, vomiting
- 3). Dyspnea, angina
- 4). Headache

HOW SUPPLIED

10 ml prefilled additive syringe containing 400mg (40mg/ml)

ADMINISTRATION AND DOSAGE

Given by titrated intravenous infusion (microdrip infusion set).

Dosage: Inject contents of prefilled syringe (400mg) into 500ml bag of D5W to yield a concentration of 800mcg/ml. Start the infusion at a rate of 5 mcg/kg/min. (e.g., 140-320mcg/min. for a 70-kg man, or roughly 0.25ml/min. of above dilution).

Titrate the infusion according to the state of consciousness, blood pressure, and urine flow. Not to exceed 20mcg/kg/min.

DOPAMINE (Intropin)

EPINEPHRINE (Adrenalin)

THERAPEUTIC EFFECTS

- 1). In cardiac arrest, may restore electric activity in asystole; increases myocardial contractility; and decreases the threshold for defibrillation - all through its actions as a beta sympathetic agent. In addition, the alpha effects of epinephrine, causing vasoconstriction, elevate the perfusion pressure and may thus improve coronary blood flow during external cardiac compressions.
- 2). In anaphylaxis, acts as a bronchodilator (beta effect) and helps maintain blood pressure (alpha effect).

INDICATIONS

- 1). In **CARDIAC ARREST**, to restore electric activity in asystole or to enhance defibrillation potential in ventricular fibrillation; also to elevate systemic vascular resistance and thereby improve perfusion pressure during resuscitation.
- 2). To treat the life-threatening symptoms of **ANAPHYLAXIS**.
- 3). To treat acute attacks of **ASTHMA**.

CONTRAINDICATIONS

- 1). Must be used with caution in patients with angina, hypertension, or hyperthyroidism.
- 2). **THERE ARE NO CONTRAINDICATIONS TO THE USE OF EPINEPHRINE IN THE SITUATION OF CARDIAC ARREST OR ANAPHYLACTIC SHOCK.**

SIDE EFFECTS

In a conscious patient, may cause palpitations, from tachycardia or ectopic beats, and elevations of blood pressure (which may not

continued next page

EPINEPHRINE (Adrenalin) (continued)

SIDE EFFECTS (continued)

be desirable if the patient is already hypertensive). The asthmatic with preexisting heart disease may experience dysrhythmias if treated with epinephrine.

HOW SUPPLIED

- 1). Prefilled syringes containing 1mg of epinephrine in 10ml (1:10,000 solution).
- 2). Prefilled Tubex syringe containing 1mg epinephrine in 1ml (1:1,000 solution).

ADMINISTRATION AND DOSAGE

- 1). In cardiac arrest, epinephrine is given intravenously. Dosage: 1 mg IV. (1:10,000 solution); repeat at 3-minute intervals throughout resuscitation, (higher dose EPI is option of Med. Control.)
- 2). For anaphylatic reactions:

Moderate to severe reactions, with shock: 0.3 to 0.5mg (5ml of a 1:10,000 solution) is given slowly IV.

- 3). For sever asthmatic attacks: Consider given SQ in a dose of 0.3 to 0.5ml of a 1:1,000 solution.

EPINEPHRINE (Adrenalin)

FUROSEMIDE (Lasix)

THERAPEUTIC EFFECTS

Potent diarrhetic, causing the excretion of large volumes of urine within 5 to 30 minutes of administration, thus useful in ridding the body of excess fluid in conditions such as congestive heart failure (CHF). Not used often in the field when the distance to the hospital is short. However, furosemide may be useful in long-range transports of patients in marked heart failure (especially catheterized patients) where there is a need to begin definitive therapy before the patient arrives at the hospital.

INDICATIONS

To reverse fluid overload associated with CONGESTIVE HEART FAILURE and PULMONARY EDEMA.

CONTRAINDICATIONS

- 1). Should not be given to pregnant women.
- 2). Should not be given to patients with hypokalemia (low potassium). Hypokalemia may be suspected in a patient who has been on chronic diuretic therapy or whose ECG shows prominent P waves, diminished T waves, and the presence of U waves.

SIDE EFFECTS

Immediate side effects may include nausea and vomiting, potassium depletion (with attendant cardiac dysrhythmias), and dehydration.

continued next page

FUROSEMIDE (Lasix) (continued)

ADMINISTRATION AND DOSAGE

In the field, furosemide is given intravenously. If at all possible, the patient should have a urinary catheter in place.

Dosage: 40mg SLOWLY IV (injected over 1 - 2 min.). If a response is not obtained, a second dose of 40 to 80mg may be given, but only at the discretion of Med. Control.

FUROSEMIDE (Lasix)

GLUCAGON

THERAPEUTIC EFFECTS

Glucagon causes an increase in blood glucose concentration and is used in the treatment of hypoglycemic states. Glucagon acts only on liver glycogen, converting it to glucose. Parenteral administration of glucagon produces relaxation of the smooth muscle of the stomach, duodenum, small bowel, and colon.

INDICATIONS

Glucagon is useful in counteracting severe hypoglycemic reactions in diabetic patients or during insulin shock therapy in psychiatric patients. Glucagon is helpful in hypoglycemia only if liver glycogen is available. It is of little or no help in states of starvation, adrenal insufficiency, or chronic hypoglycemia. Glucagon is also indicated in patients with life-threatening anaphylaxis, who are refractory to epinephrine or use beta blockers.

CONTRAINDICATIONS

Since glucagon is a protein, hypersensitivity is a possibility.

DOSE

0.5 - 1 mg IM/SQ or IV.

SIDE EFFECTS

Glucagon is relatively free of adverse reactions except for occasional nausea and vomiting, which may also occur with hypoglycemia.

GLUCAGON

LIDOCAINE (Xylocaine)

THERAPEUTIC EFFECTS

Suppresses ventricular ectopic activity by decreasing the excitability of heart muscle and the cardiac conduction system.

INDICATIONS

To SUPPRESS PREMATURE VENTRICULAR CONTRACTIONS (PVC's) when:

- a. They occur in the context of myocardial ischemia.
- b. They are frequent (more than 6/min.).
- c. They occur in salvos (two or more in a row).
- d. They fall on the T wave (R-on-T phenomenon).
- e. They are multifocal (of different shapes and sizes).

CONTRAINDICATIONS

- 1). Known history of allergy to lidocaine or local anesthetics (e.g., Novocain).
- 2). Second - or third - degree heart block.
- 3). Sinus bradycardia or sinus arrest.
- 4). Idioventricular rhythm.

SIDE EFFECTS

- 1). By decreasing the force of cardiac contractions as well as decreasing peripheral resistance, may cause a fall in cardiac output and blood pressure.

continued next page

LIDOCAINE (Xylocaine) (continued)

SIDE EFFECTS (continued)

- 2). May cause numbness, drowsiness, or confusion.
- 3). When given in high doses, especially to the elderly or to patients in heart failure, may cause seizures.

HOW SUPPLIED

- 1). Prefilled syringes containing 100mg in 5ml (20mg/ml) for bolus injection.
- 2). Prefilled additive syringe 2gm for making up infusion solution.

ADMINISTRATION AND DOSAGE

Given by intravenous bolus and infusion. If an intravenous route cannot be established, lidocaine may be given via the endotracheal tube and the dosage increased to 3mg/kg.

Dosage: 1.5 mg/kg IV push followed by infusion of 2mg/min. To prepare the infusion, add 2gm of lidocaine to 500ml D5W, yielding a solution of 4mg/ml. Use a microdrip infusion set for administration. Reduce the dosage (both bolus and infusion) by half for patients in congestive heart failure or shock and for patients over 70 years old.

Lidocaine Drip Rates

Bolus Drip

- 1mg/kg 2mg/min.
- 2mg/kg 3mg/min.
- 3mg/kg 4mg/min.

LIDOCAINE (Xylocaine)

MORPHINE SULFATE

THERAPEUTIC EFFECTS

- 1). Decreases pulmonary edema by pooling blood in the peripheral circulation thereby reducing venous return to the heart; helps as well to allay the anxiety associated with pulmonary edema.
- 2). Potent analgesic, providing significant relief of pain in acute myocardial infarction and other conditions.

INDICATIONS

To RELIEVE PAIN in myocardial infarction and other selected conditions.

CONTRAINDICATIONS

- 1). Marked hypotension.
- 2). Respiratory depression, except that caused by pulmonary edema, where the drug may be used if ventilatory support is provided.
- 3). Asthma and chronic obstructive pulmonary disease.
- 4). In patients who have taken other depressant drugs, such as alcohol or barbiturates.
- 5). Head injury.
- 6). Undiagnosed abdominal pain.

continued next page

MORPHINE SULFATE (continued)

SIDE EFFECTS

- 1). Hypotension (most likely in volume-depleted patients).
- 2). Increased vagal tone, leading to bradycardia. (This effect can be reversed with atropine.)
- 3). Respiratory depression. (This effect can be reversed with naloxone.)
- 4). Nausea and vomiting.
- 5). Urinary retention.

HOW SUPPLIED

Prefilled (tubex) syringes containing 10mg.

ADMINISTRATION AND DOSAGE

Given by titrated intravenous injections.

Dosage: 2 to 5mg by IV push every 5 to 30 minutes until the desired therapeutic effect is achieved. Do not exceed 15mg in the field. If hypotension occurs, keep the patient flat, and do not give more of the drug. Watch for respiratory depression.

MORPHINE SULFATE

NALOXONE (Narcan)

THERAPEUTIC EFFECTS

Specific antidote for narcotic agents. Reverses the actions of all narcotic drugs, including heroin, morphine, methadone, codeine, Demerol, Dilaudid, Darvon, paregoric, and Percodan. Naloxone is thus effective in counteracting the effects of overdose from any of these agents. Naloxone will reverse stupor, coma, respiratory depression, etc., when these are due to narcotic overdose. It is not effective in reversing coma from other causes.

INDICATIONS

To treat known NARCOTIC OVERDOSE or coma suspected to be due to narcotic overdose.

CONTRAINDICATIONS

None.

SIDE EFFECTS

- 1). Too rapid administration may precipitate projectile vomiting and ventricular dysrhythmias.
- 2). Administration to people who are physically dependent on narcotics may cause an acute withdrawal syndrome. For this reason, naloxone should be given very slowly, using improvement of respiratory status as an end point.

continued next page

NALOXONE (Narcan) (continued)

SIDE EFFECTS (continued)

3). In general, the duration of action of naloxone is shorter than that of the narcotics it is used to counteract. Thus, the patient who has been successfully roused with naloxone may fall back into stupor or coma as the naloxone wears off. These patients must therefore be watched closely, and the dose of naloxone should be repeated as necessary.

HOW SUPPLIED

10ml multi-dose vials, containing 4.0mg (0.4mg/ml).

ADMINISTRATION AND DOSAGE

In the field, given by slow intravenous injection.

Dosage: Draw up 0.4 -0.8mg (1 2ml) of naloxone in a 10ml syringe. Administer this solution **VERY SLOWLY IV** while monitoring the rate and depth of the patient's respirations. As soon as there is improvement in the respirations, stop giving the drug. It is preferable that the patient **NOT** wake up fully in the field, as these patients may be violent when brought abruptly out of coma. **USE RESPIRATIONS AS A GUIDE.** If there is no response to two doses, suspect overdose with another, non-narcotic drug.

NALOXONE (Narcan)

NITROGLYCERIN

THERAPEUTIC EFFECTS

The primary pharmacologic effect of nitroglycerin and related drugs is to relax smooth muscle, and the effects of nitroglycerin on the cardiovascular system are chiefly due to relaxation of vascular smooth muscle (hence vasodilation). Nitroglycerin provides relief of pain in angina, probably by dilating coronary arteries and thereby increasing blood flow through them as well as by decreasing myocardial oxygen demand. Through its vasodilating action on peripheral vessels, nitroglycerin promotes pooling of the blood in the systemic circulation and decreases the resistance against which the heart has to pump (the afterload); these effects may be useful in treating congestive heart failure and temporary treatment for severe Hypertension.

INDICATIONS

- 1). To relieve the pain of ANGINA.
- 2). To treat selected cases of PULMONARY EDEMA due to LEFT HEART FAILURE.

CONTRAINDICATIONS

- 1). Increased intracranial pressure.
- 2). Glaucoma.
- 3). Hypotension.
- 4). Recent Viagra use.

continued next page

NITROGLYCERIN (continued)
SIDE EFFECTS

- 1). Transient, throbbing headache. (If headache does not occur, suspect that the nitroglycerin is outdated and no longer potent).
- 2). Hypotension.
- 3). Dizziness, weakness.

HOW SUPPLIED

Sublingual spray, tablets, paste.

ADMINISTRATION AND DOSAGE

Given sublingually (under the tongue). the patient should be semisitting or recumbent.

Dosage: One 0.4mg tablet under the tongue or 1 metered dose of spray. 1-2cm of paste topically. May repeat once after 5 minutes.

NITROGLYCERIN

PROMETHAZINE (PHENERGAN)

THERAPEUTIC EFFECTS

Phenergan is most commonly used as an anti-emetic in the pre-hospital setting.

INDICATIONS

- 1). Nausea and vomiting.
- 2). Motion sickness.
- 3). To potentiate the effects of analgesics.
- 4). Sedation.

CONTRAINDICATIONS

- 1). Unresponsiveness.
- 2). Patients who have taken large amounts of depressants.

SIDE EFFECTS

- 1). Drowsiness.
- 2). Sedation.
- 3). Blurred vision.
- 4). Tachycardia.
- 5). Bradycardia.
- 6). Dizziness.
- 7). Acute Dystonia

Ampules and Tubex syringes containing 25 mg of the drug in 1 ml of solvent.

continued next page

PROMETHAZINE (PHENERGAN)

DOSAGE

Dosage is 6.25 to 12.5 IV or 12.5 to 25 mg deep IM. Take care to avoid accidental arterial injection. Should be diluted with 10 ml of saline.

If acute Dystonia occurs administer 25 mg of Benadryl IM.

PROMETHAZINE (PHENERGAN)

SODIUM BICARBONATE

THERAPEUTIC EFFECTS

By neutralizing excess acid, helps return the blood towards a physiologic pH, in which normal metabolic processes and sympathomimetic agents (such as epinephrine) work more effectively.

INDICATIONS

- 1). To treat METABOLIC ACIDOSIS, as in:
 - a. Certain POISONING (e.g., ethylene glycol).
 - b. SHOCK and other low-output states (e.g., after resuscitation from cardiac arrest).
- 2). To treat HYPERKALEMIA (high serum potassium).
- 3). To promote the excretion of some types of BARBITURATES taken in OVERDOSE.
- 4). Cardiac Toxicity due to TCA or Cocaine overdose.

CONTRAINDICATIONS

- 1). Hypokalemia (low serum potassium), sometimes detectable by large, prominent P waves and large U waves on the ECG.
- 2). Increased intracranial pressure.
- 3). Glaucoma.
- 4). Hypotension.

SODIUM BICARBONATE (continued)

SODIUM BICARBONATE (continued)

SIDE EFFECTS

- 1). Because each mEq of bicarbonate comes along with a mEq of sodium, sodium bicarbonate has the same effect as any other salt-containing infusion, i.e., it increases the vascular volume. Three 50ml syringes of sodium bicarbonate (1mEq/ml) contain approximately the same amount of salt as 1 liter of normal saline. Patients in borderline heart failure cannot tolerate salt loads of this magnitude.
- 2). Administration of sodium bicarbonate lowers serum potassium. In some cases, this is the desired effect, as when bicarbonate is used to treat hyperkalemia. However, in cardiac patients, if the potassium falls too low, the heart becomes irritable, and dysrhythmias may occur. This is especially likely in patients taking diuretics.
- 3). Sodium bicarbonate administration transiently raises the arterial carbon dioxide level, and thus its administration must be accompanied by controlled hyperventilation (e.g., with bag-valve-mask) to blow off this excess CO₂.

HOW SUPPLIED

Vials and prefilled syringes of 50ml, containing 1mEq/ml.

ADMINISTRATION AND DOSAGE

Given by intravenous bolus injection. As ordered by physician.

SODIUM BICARBONATE

SOLU-MEDROL
(METHYLPREDNISOLONE)

THERAPEUTIC EFFECTS

Effective as an anti-inflammatory agent used to manage asthma, anaphylaxis, and spinal cord injury.

INDICATIONS

- 1). Spinal cord injury.
- 2). Anaphylaxis.
- 3). Asthma.
- 4). Exacerbation on COPD.
- 5). Severe Head Injury or Spinal Cord injury

CONTRAINDICATIONS

There are no major contraindications for Solu-Medrol in an emergency setting.

SIDE EFFECTS

- 1). Fluid retention.
- 2). Congestive heart failure.
- 3). Hypertension.
- 4). Abdominal distention.
- 5). Vertigo.
- 6). Headache.
- 7). Nausea.
- 8). Malaise.
- 9). Hiccups.

SOLU-MEDROL
(METHYLPREDNISOLONE)

HOW SUPPLIED

Supplied in vials containing 125 and 250 mg. The drug must be reconstituted prior to administration. 2.5 grams required for adult spinal cord injury.

DOSAGE

Contact Medical Control for appropriate dosage prior to administration.

SOLU-MEDROL
(METHYLPREDNISOLONE)

COMMUNICATIONS
REFERENCE
AND
DIRECTORY

PATIENT ASSESSMENT REPORT GUIDELINES

The following guidelines should be used when presenting patient information to Medical Control or the Hospital:

- 1). Identify yourself and your level of training (or the highest level of training on the unit).
- 2). Patient Report should be no longer than 60 seconds and include a brief summary of:
 - Patient age and sex
 - Chief complaint / Mechanism of injury
 - LOC, Vital Signs, Skin Condition
 - Pertinent findings from survey
 - Medical History
 - Treatment being given
 - ETA to receiving Hospital
- 3). Orders from Medical Control that you feel are needed, should be requested.
- 4). Orders received from Medical Control should be repeated

continued next page

PATIENT ASSESSMENT
REPORT GUIDELINES(continued)

COMMUNICATION GUIDELINES FOR
MULTI-UNIT RESPONSE SITUATIONS

When a situation exists where several Units are responding to an incident, the following guidelines should be used:

- 1). Units responding to the incident should go to a secondary frequency, preventing gridlock of the main dispatch channel. In our region, 155.205 MHz has been reserved for this purpose.
- 2). An Incident Command System should be established and all radio traffic should be coordinated through the Command System.
- 3). In Multiple Injury Situations, local hospitals should be notified **AS SOON AS POSSIBLE** as to the number and severity of persons injured.
- 4). Individual ambulances should **NOT** call the hospital. Patient reports and ALS orders should be channeled through Incident Commands' Medical Officer.
- 5). Do **NOT** use patient care codes or 10 -codes in radio transmissions.

continued next page

PATIENT ASSESSMENT
REPORT GUIDELINES(continued)

* NOTE: In order to establish a Regional Mutual -Aid Channel, the Southwest VA EMS Council is requesting that all EMS Vehicles and Dispatch Centers install frequency 155.205 MHz with a PL tone of 88.5 Hz in their radios. This frequency should be programmed on Channel 3 if possible. It is also suggested that a higher channel be programmed for 155.205 MHz with No PL Tone if the frequency is to be used for Mobile -Portable talk - around traffic.
continued next page

HOSPITAL DIRECTORY
BLUEFIELD REGIONAL MEDICAL CENTER

500 Cherry Street, Bluefield, WV

ER Phone No. — (304) 327-1500

VHF Frequencies 155.340
VHF CTCSS N/A
VHF Dial N/A

BRISTOL REGIONAL MEDICAL CENTER
TRAUMA CENTER-LEVEL II

1 Medical Park Blvd., Bristol, TN 37620

ER Phone No. — (423) 844-2100

VHF Frequencies 155.340
VHF CTCSS 88.5
VHF Dial 023

MED Channels MED Tones
4, 7 179.9

BUCHANAN GENERAL HOSPITAL - SLATE CREEK

Route 5, P. O. Box 20, Grundy, VA 24614

ER Phone No. — (276) 935-1155

VHF Frequencies 155.340
VHF CTCSS 192.8

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HOSPITAL DIRECTORY (continued)
CLINCH VALLEY MEDICAL CENTER

2949 West Front Street, Richlands, VA

ER Phone No. — (276) 596-6153

VHF Frequencies 155.340
VHF CTCSS 82.5

DICKENSON COMMUNITY HOSPITAL

312 Hospital Dr, Clintwood, VA 24228

ER Phone No. — (276) 926-0312

VHF Frequencies 155.340
VHF CTCSS 229.1
VHF Dial N/A

HOLSTON VALLEY MEDICAL CENTER
TRAUMA CENTER - LEVEL I

130 W. Ravine Road, Kingsport, TN 37664

EMS Line — (423) 224-5121 (Most Direct)

VHF Frequencies
155.340
VHF CTCSS
VHF Dial

MED Channels
2, 4, 6, 8

N/A
026
MED Tones

173.8

HUMANA HOSPITAL - ST. LUKE'S

1333 Southview Drive, Bluefield, WV

ER Phone No. — (304) 325-7848

VHF Frequencies 155.340
VHF CTCSS N/A
VHF Dial N/A

INDIAN PATH HOSPITAL

2000 Brookside Drive, Kingsport, TN

ER Phone No. — (423) 392-7134

VHF Frequencies 155.340
VHF CTCSS N/A
VHF Dial 049

JOHNSON CITY MEDICAL CENTER HOSPITAL TRAUMA CENTER - LEVEL I

400 North State of Franklin Road, Johnson City, TN

ER Phone No. — (423) 431-6561

VHF Frequencies 155.340
VHF CTCSS MUST BE ACCESSED BY ENCODER, if you
have no encoder, CONTACT: “Johnson City Med Comm” on 155.205
to encode.
VHF Dial 03555

JOHNSTON MEMORIAL HOSPITAL

351 North Court Street, Abingdon, VA 24210

ER Phone No. — (276) 628-3821

VHF Frequencies 155.340 / 155.400
VHF CTCSS 88.5

LEE REGIONAL MEDICAL CENTER

Harrell Street, P. O. Box 70, Pennington Gap, VA 24277

ER Phone No. — (276) 546-1440

VHF Frequencies 155.340
VHF CTCSS N/A

LONESOME PINEHOSPITAL

Holton Avenue, Drawer I, Big Stone Gap, VA 24219

ER Phone No. — (276) 523-3111

VHF Frequencies 155.340

VHF CTCSS 110.9

NORTHSIDE HOSPITAL

401 Princenton Road, Johnson City, TN 37602

ER Phone No. — (423) 854-5880

VHF Frequencies 155.340

VHF CTCSS N/A

VHF Dial 04444

NORTON COMMUNITY HOSPITAL

100 15th Street, North West, Norton, VA 24273

ER Phone No. — (276) 679-9648

VHF Frequencies 155.340

VHF CTCSS 229.1

PULASKI COMMUNITY HOSPITAL

2400 Lee Highway, P. O. Box 759, Pulaski, VA 24301

ER Phone No. — (540) 980-6192

VHF Frequencies

VHF CTCSS

155.340

146.2

VHF Dial NONE

MED Channels MED Tones

1, 3, 4, 7, 9, 10 103.5

103.5 (Access on MED 9/10 via Pulaski SO)

RUSSELL COUNTY MEDICAL CENTER

Carroll & Tate Streets, Call Box 3600, Lebanon, VA 24266

ER Phone No. — (276) 883-8200

VHF Frequencies 155.385, 155.340

VHF CTCSS 88.5

MOUNTAIN VIEW REGIONAL MEDICAL CENTER

Third Street, North East, Norton, VA 24273

ER Phone No. — (276) 679-1151

VHF Frequencies 155.340

VHF CTCSS 229.1

SMYTH COUNTY COMMUNITY HOSPITAL

P. O. Box 880, Marion, VA 24354

ER Phone No. — (276) 782-1380

VHF Frequencies 155.340

VHF CTCSS 151.4

TAZEWELL COMMUNITY HOSPITAL

141 Ben Bolt Avenue, Rt. 1, P. O. Box 607, Tazewell, VA 24651

ER Phone No. — (276) 988-2506

VHF Frequencies 155.340

VHF CTCSS 82.5

VHF Dial 2222

TWIN COUNTY REGIONAL HOSPITAL

200 Hospital Drive, Galax, VA 24333

ER Phone No. — (276) 236-8181

VHF Frequencies 155.340

VHF CTCSS 114.8

VHF Dial 172-6822

VETERAN'S ADMINISTRATION MOUNTAIN HOME HOSPITAL

Johnson City, TN 37684

ER Phone No. — (423) 926-1171 Ext. 7521

VHF Frequencies 155.340

VHF CTCSS N/A

VHF Dial 03888

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HOSPITAL DIRECTORY (continued)

WYTHE COUNTY COMMUNITY HOSPITAL

600 West Ridge Road, Wytheville, VA 24382

ER Phone No. — (276) 228-0258

VHF Frequencies 155.340

VHF CTCSS 141.3

