REQUEST FOR PROPOSALS
FOR EMERGENCY MEDICAL SERVICES

Notice is hereby given that the Santa Rosa County Board of County Commissioners is calling for and requesting proposals for Emergency Medical Services.

All proposals must be in writing and delivered by hand, mail, or Fed EX to the Santa Rosa County Procurement Department, 6495 Caroline Street, Suite G, Milton, Florida 32570, and must be received by 10:00 a.m., April 3, 2007. Proposals shall contain two separate proposals; one providing service for the entire county, and one providing service for the county excluding the Midway Fire District as indicated on Attachment 3 of the specifications, with each clearly identified.

Only proposals received by the aforestated time and date will be considered. All proposals shall be labeled, "**RFP- Emergency Medical Services.**" Please provide twelve (12) copies of the proposal.

Questions concerning this request should be directed in writing to Mr. Orrin L. Smith, Santa Rosa County Procurement Officer at the address above or Email orrins@co.santa-rosa.fl.us.

The Board of County Commissioners reserves the right to accept or reject any and all proposals in whole or in part, and to waive all informalities.

Santa Rosa County does not discriminate on the basis of race, color, national origin, sex, religion, age, or handicapped status in employment or provision of service.

By order of the Board of County Commissioners of Santa Rosa County, Florida.

Legal Notice

One Issue – February 3, 2007 – Press Gazette, February 8, 2007 Navarre Press

Bill and Proof to Santa Rosa County Procurement Department, Attention: Orrin L. Smith, 6495 Caroline Street, Suite G, Milton, Florida 32570

February 3, 2007

MEMORANDUM

TO: Company Addressed

FROM: Santa Rosa County Procurement Department

SUBJECT: Request for Proposals for Emergency Medical Services

Notice is hereby given that the Santa Rosa County Board of County Commissioners is calling for and requesting proposals for Emergency Medical Services.

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Specifications may be secured from Santa Rosa County Website (www.santarosa.fl.gov/bids) or at the Santa Rosa County Procurement Department at the above address. Telephone (850) 983-1833. Only proposals received by the aforestated time and date will be considered. All proposals shall be clearly labeled, "**RFP- Emergency Medical Services.**" Please provide twelve (12) copies of the proposal.

Questions concerning this request should be directed in writing to Mr. Orrin L. Smith, Santa Rosa County Procurement Officer at the address above or Email orrins@co.santa-rosa.fl.us.

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I.
System Design Summary

A. Overview

Fifteen fire departments and fire districts provide varying levels of first response to medical emergencies in Santa Rosa County through both paid and volunteer services. Fire departments' medical skills vary and include certified first responders, emergency medical technicians (EMT) and paramedics. The County currently contracts with a private entity for paramedic ambulance response to 911 calls and, if medically necessary, patient transport. As part of the contract with the County, the Contractor also provides non-emergency (inter-facility) patient transfers. The County Ambulance Contractor answers 911 and non-emergency calls countywide. The County Emergency Management Communications Center (EMC) dispatches Fire Departments and the County's Contractor on all emergency medical calls; the EMC also dispatches the Contractor on non-emergency medical calls. The current County agreement provides no subsidy payments to the Contractor and expires in May 2007.

The County is soliciting proposals for the provision of paramedic ambulance response and transport for 911 emergency calls and non-emergency calls via a Contract Provider (Contractor).

The purpose of the procurement process is to provide a high performance EMS system. Essential elements of a high performance system commonly include:

- Prevention and early recognition
- Bystander action/system access
- Medical Dispatch
  —Telephone protocols and pre-arrival instructions
  —First responder and ambulance dispatch
- First responder services
- Transport ambulance services
- Direct (on-line) medical control
- Receiving facility interface
- Indirect (off-line) medical control
- Independent monitoring

The County desires the provision of high quality EMS service within the Service Area in order to provide for the public health and safety. Response times are one measure of a high performance system. A comprehensive systems approach requires clinically appropriate response times to medical emergencies. Both the response time and medical skill level of the fire department first response to medical calls varies widely across the County depending on the particular fire district, the priority level of the call, call location and time of day. In some areas and on Alpha and Bravo calls, there may be no fire first responders dispatched.

The system's overarching response goal is to place paramedic level care resources on the scene of emergency response requests within a defined system time period of 12 minutes: zero seconds /90 percent reliability in urban areas and 20 minutes: zero seconds /90 percent reliability in less densely populated and rural areas.

The Contractor's response time is currently measured from the point of its departure from a station or location to its arrival on scene. Under this procurement the system's total response time shall be measured. However, since the Contractor cannot be held accountable for the performance or non-performance of the County's communications center, the Contractor response time shall be measured from the point of notification to unit arrival.

For each response presumptively determined to be an emergency response (as categorized by National Academies of Emergency Dispatch standards as Echo, Delta, Charlie or Bravo level calls) the contractor shall:

Place transport capable paramedic unit on scene within 10 minutes zero seconds at 90 percent reliability for assignments in urban response areas and within 18 minutes zero seconds at 90 percent reliability for assignments in non-urban response areas.

For any assignment in which a First Response ALS unit (provided by the Contractor or by another County approved response agency) is on scene within the 10/90 percent Urban or 18/90 percent Rural, then the Contractor response time requirement for a transport capable ambulance for emergency responses are increased by four minutes.

For each response presumptively determined to be a non-emergency response (as categorized by National Academies of Emergency Dispatch standards as Alpha level calls) the contractor shall:

Place transport capable paramedic unit on scene within 20 minutes zero seconds at 90 percent reliability for assignments in urban response areas and within 25 minutes zero seconds at 90 percent reliability for assignments in non-urban response areas. Responses to Alpha level calls are made without the use of lights or sirens as approved by the Medical Director.

The County desires response times to medical emergencies that are optimal for patient outcome. Fire Departments will continue to respond to emergency medical calls utilizing the highest level of medical skills which may vary from department to department. The transport ambulance will be staffed with at least one paramedic and one EMT and will be licensed as an ALS unit under the State of Florida statutes/regulations.

The use of quick response vehicles staffed with one paramedic and equipped with advanced life support equipment is encouraged but not required as a means to facilitate response time compliance in outlying areas or at times of peak demand.

The current urban area map has been revised to include additional developed areas of the County. Response times will be redefined from the perspective of the patient and response time compliance will be measured from the time a call is received and verified by 911 Communications.

Response time standards to medical emergencies in the urban area generally defined as the areas of population density per *Attachment 1 — Service Areas and Response Time Standards). Response time standards are also displayed in Attachment 1*.

Currently, none of the Fire Departments in the rural designated areas provide ALS response; some departments throughout the County, as a matter of policy, do not respond to Alpha and Bravo calls; some departments do not have reliable responses to medical calls during weekdays and typical work hours.

While no specific response times are required under this procurement for responses presumptively determined to be non-emergent in nature, County expects Contractor to use its best efforts to minimize response times.

Santa Rosa County will maintain certain infrastructure items for the system in the public domain. The infrastructure necessary to receive 911 calls, prioritize medical calls (using National Academies of Emergency Dispatch Standards), and record first responder and Contractor unit arrivals at the emergency scene will be maintained by the County. The County will dispatch Fire units for first response to medical calls for all units except the City of Gulf Breeze and will dispatch ambulance units for the Contractor to both emergency and non-emergency calls.

The time of Contractor arrival on the scene must be transmitted to the County's 911 dispatch system. The County's 911 system will be the repository of County 911 call data from receipt of the call through delivery of the patient to a hospital. Official response time compliance reports will be derived from data stored in the County's 911 computer aided dispatch (CAD) system.

It is the County's desire to have an EMS system that ensures high quality clinical care, provides efficient and reliable EMS services at a reasonable cost to consumers, and provides the community with an operationally and financially stable system.

The County intends for the Contractor to be the County's exclusive holder of its Emergency and Non-Emergency Ambulance Transport Certificate of Public Convenience and Need (COPCN) within all of Santa Rosa County.

B. County's Functional Responsibilities

In this performance-based approach it is the County's responsibility to:

- Select the method of funding and model of competition to be utilized in competitively procuring Ambulance services;
- Contract with an Ambulance Provider for provision of ALS ambulance response to emergency 911 medical calls and non-emergency patient transfers;
- Provide a high quality Medical Priority Dispatch system at the County's 911 Public Safety Answering Point or Emergency Management Communications Center (EMC) for the System's use, including deploying resources in accordance with Contractor's plan;
- Facilitate provision of Medical Control;
- Monitor compliance with contractual terms; and,
- Secure or provide, in the event of the EMS Contractor's default, an EMS delivery system, which represents the interests of its taxpayers and the general public as consumers of EMS services within the County.

In essence, the County, in procuring an Ambulance Contractor, represents the interests of its taxpayers and the general public as consumers of Emergency and Non-emergency Ambulance services within municipalities, the dependent and independent fire districts and all areas within the County.

C. Contractor's Functional Responsibilities

The Contractor shall furnish and manage, or cause to be furnished or managed ALS ambulance operations, billing and collection services including but not limited to employing field, billing and office personnel; equipment and vehicle maintenance; in-service training; quality improvement monitoring; purchasing and inventory control, community education, mutual assistance, and support services.

The requirements include responding to each and every request for Emergency Ambulance service within the Service Area (see *Attachment 1 – Service Area and Response Time Standards*). The requirements for operations are delineated throughout these specifications and will become the basis of the performance based Agreement between the County and the Contractor.

All equipment and supplies, (e.g. on-board durable and reusable medical equipment, billing computer system hardware and software, and other equipment and software employed by the Contractor in the delivery of these services) shall be furnished by the Contractor. Billing and collection services shall be a Contractor's responsibility and shall be conducted according to the professional guidelines outlined in the Agreement.

As compensation for services rendered, the Contractor receives:

- Market rights as the County's exclusive Emergency and Non-emergency (inter-facility) Ambulance Contractor within the County's Service Area (*see Attachment 1 — Service Area and Response Times*);
- First Responder support from municipal Fire Departments' and Fire Districts' First Response units within the County;
- Income from fee for service revenues; and
- Subsidy, as may be approved by the County Commission, if required.[1]

The Contractor is responsible for the day-to-day operation and management of the EMS system. The County's primary role, once the EMS system is operational — and so long as quality of service, Response Time performance, and user fees remain consistent with Agreement requirements — is to provide communications services and monitor the system to ensure Agreement compliance. Should problems develop, mechanisms are provided to allow the County to effect corrective action as appropriate, even to the extent of naming a replacement for the Contractor's operation should such an action be required.

In awarding this Agreement, the County recognizes that an Ambulance Contractor may, through poor business planning, mismanagement, or general lack of performance, fail to provide for the minimum services specified in the Agreement. Such failure may constitute a Default of the Agreement. In such case, the County intends to replace the Contractor in order to ensure the public health and safety. Prospective Contractors should assume that the County is likely to select a replacement should the Contractor fail to provide adequate EMS services.

[1] Note: The County desires that this business relationship be structured in a manner that does not require direct subsidy.

D. Schedule of Events

Unless notified in writing by the Procurement Office of a schedule change, Proposers should assume that this procurement would adhere to the following schedule:

- December 11, 2006 – The County Commission reviews the EMS system specifications and criteria.
- On February 3, 2007 – The County's "Request for Proposal" document is released. (This document and its attachments constitute the County's request for proposal).
- February 23, 2007– Deadline for Proposers to submit written questions for clarification.
- April 3, 2007 – The Request for Proposals is due at 10:00 a.m. CST. All proposals must be in writing and delivered by hand, mail or Fed Ex to the Santa Rosa County Procurement Department, 6495 Caroline Street, Suite G, Milton, FL 32570, and must be received by 10:00 a.m., CST, April 3, 2007. Only proposals received by the aforestated time and date will be considered. All proposals shall be clearly labeled "Santa Rosa County Emergency Medical Services Proposal".
- April/May 2007 –County reviews Request for Proposals and hear oral presentations and hears oral presentations. Oral presentations are mandatory
- First Commission Meeting in June, 2007 – Commission awards contract for services.
- October 1, 2007 – Contractor Agreement start date.

E. Definitions

Industry specific terminology is used throughout this document. Defined terms are capitalized in the body of the text. Definitions are provided at *Attachment 2 – Definitions.*

II.
Background and Service Area Summary

A. Background

EMS in Santa Rosa County evolved in a manner similar to other communities across the nation. Volunteer Fire Departments long provided response to fire and other emergencies. Maintaining a roster of active volunteers is an ongoing challenge. More recently, municipal benefit service units, municipal taxes, and independent taxing districts provide varying levels of funding and oversight to Santa Rosa's 15 volunteer, combination and paid departments. Medical skill levels of the first responders range from certified first responders to emergency medical technicians and paramedics.

Early on, the County contracted for ambulance and emergency medical services and since 1996, has contracted with Rural/Metro Corporation for paramedic response and ambulance transport. The present contract expires in May 2007. The Contractor transports both Emergency (911) patients and Non-emergency patients. The Contractor also responds to calls on Pensacola Beach under contract with Escambia County. The Contractor receives no tax subsidies for these services and retains the right to bill patients for services and collect those fees. The County will approve the user fees under this agreement. Beginning January 2008, the Contractor is allowed annual increase without the County's approval such increases being equal to the increase in the Consumer Price Index for All Urban Consumers – US City Average, all Items reported by the United States Bureau of Labor Statistics, for the most recent calendar year.

The 15 Fire Departments throughout the County augments the EMS system and provides first response to medical emergencies within their fire districts. The Fire Departments may be the first unit on the scene but some departments do not respond to alpha and bravo calls. Many of the Fire Departments rely on volunteer personnel and may not be capable of providing a response. Fire Departments respond with varying skill levels. *Attachment 3* is a map of the 15 Fire Districts and *Attachment 4* is a table indicating the current medical skill levels of the first response personnel.

B. Service Area Summary

Santa Rosa County covers a land area of approximately 1,100 square miles and is located in the western panhandle of Florida. The geography and development are uniquely diverse ranging from coastline and inlet residential communities in the south, residential suburban areas in the central portion, to rural/agricultural and pineland areas in the northern part of the County. The County experienced dramatic growth between 1990 and 2000 (44 percent) compared to a 24 percent growth rate for the remainder of Florida. Santa Rosa's estimated population for 2005 is 143,105 and growth is projected to continue at a rapid rate. Trauma centers and major hospitals are located in Escambia County the western, adjacent county. *Attachment 4* is a listing of the hospitals and medical centers that are frequent destinations for Santa Rosa patients.

Santa Rosa's coastal areas continue to experience rapid growth in the number and size of residential developments despite the ongoing threat of hurricanes. Beach areas in the south experience weekend and

seasonal influx of visitors while river and forest areas in the northern county also attract weekend visitors. The most heavily developed areas are in the southern most and central parts of the County.

The US Naval Air Base, Whiting Field is located in the center of Santa Rosa County. Whiting provides its own EMS services and but relies on the Santa Rosa County ambulance provider for off base ambulance transports.

Historic Service Volumes—

The system responded to 13,019 requests via 911 for emergency service in CY2005 resulting in approximately 7,475 emergency transports and 2,777 non-emergency, inter-facility transports. The County makes no representations about other non-emergency incidental transport volumes.

Patient Mix—

Patient mix is reported by the current provider as: 41 percent Medicare 9 percent Medicaid, 16 percent insurance, 21 percent self-pay patients. The remainder is classified as indigent.

Current System Performance—

The Santa Rosa Fire Departments utilizes a static deployment system responding from fixed station locations. Staffing varies from district to district. The City of Milton and Midway Fire Districts are the only services with a full complement of paid employees working 24 hours a day, seven days a week.

The current ambulance services contract calls for a level of effort and requires that Rural/Metro provide ambulances in no fewer than three locations (north, central and south County) and four ambulances at all times. While the County is primarily concerned with results, the large Service Area and relatively low call volume make the level of effort provision an important one for community confidence in the EMS system.

The current dispatch system has provided Priority Dispatch in accordance with NAED standards for a number of years. Times are recorded to the nearest one hundredth of a second; fractile response time compliance is calculated by a rank percentile method. The present system records dispatch and arrival times for fire departments and the ambulance service provider and records all increments of the call from call receipt until the unit clears from transport destination.

III.
Operations Management Provisions

A. Scope of Services

The Contractor shall furnish all Emergency and Non-emergency Ambulance service for the entire population of Santa Rosa County and the areas of the County per *Attachment 1 — Service Area and Response Time Standards*. All Contract Ambulance services shall be provided at the EMT-Paramedic level. Additionally, the Contractor shall furnish stand-by Special Events coverage, limited long-distance transfer service, reasonable mutual aid services, and special contract services, and communication services, as specified in this proposal.

The Contractor shall be the County's exclusive Emergency and Non-Emergency Ambulance Contractor within the County Service areas per *Attachment 1 — Service Area and Response Time Standards.*

B. Response Time Performance, Reliability and Measurement Methods

Response Times are a combination of dispatch operations and field operations. Because this Agreement is performance based, the County will not limit the Contractor's flexibility in the methods of providing EMS service other than the requirements described herein. However, the County reserves the right to review and approve Contractor's deployment plans and encourages a working relationship between County EMC and Contractor. This Agreement is based upon the Contractor's commitment to conform to the Response Time Standards. Therefore, an error on the Contractor's part in one phase of its operation (e.g. system deployment plan, Ambulance maintenance, etc.) shall not be the basis for an exception to the Contractor's performance in another phase of its operation (e.g. clinical performance or Response Time performance). Appropriate Response Time performance is the result of a coordinated effort of the Contractor's total operation and therefore, is solely the Contractor's responsibility. This system is unique in that that County processes requests for service and dispatches Contractor resources in accordance with the Contactor's plan. Contractor shall not be held responsible should the County Communications Center fail to perform its services in a timely fashion. Response Time shall be measured in minutes and integer seconds, and shall be "time stamped" by the County provided computer aided dispatch system.

1. Response Time Requirements—

    a. Urban Zone
    The area designated Urban is generally described as the central developed area of the County around Pace and the City of Milton plus the south end of the County from Gulf Breeze to Navarre. The area is specifically delineated as the Urban Zone on *Attachment 1 — Service Area and Response Time Standards*.

For each response presumptively determined to be an emergency response (as categorized by National Academies of Emergency Dispatch standards as Echo, Delta, Charlie or Bravo level calls) the contractor shall place transport capable paramedic unit on scene within 10 minutes zero seconds at 90 percent reliability for assignments in urban response areas

For any assignment (NAED categorized B>E) in which a First Response ALS unit (provided by the Contractor or by another County approved ALS response agency) is on scene within the Urban zone, then the Contractor response time requirement for a transport capable ambulance for emergency responses shall be 14 minutes.

For each response presumptively determined to be a non-life threatening emergency response (as categorized by National Academies of Emergency Dispatch standards as Alpha level calls) the contractor shall place transport capable paramedic unit on scene within 20 minutes zero seconds at 90 percent reliability for assignments in urban response areas. Responses to Alpha level calls are made without the use of lights or sirens as approved by the Medical Director.

Attachment 1—Service Areas and Response Time Standards includes a summary of the response time standards described above.

b. Rural Zone

The area designated Rural is generally described as the less densely developed areas of the County. The area is specifically delineated as the Rural Zone on *Attachment 1 — Service Area and Response Time Standards*.

For each response presumptively determined to be an emergency response (as categorized by National Academies of Emergency Dispatch standards as Echo, Delta, Charlie or Bravo level calls) the contractor shall place transport capable paramedic unit on scene within 18 minutes zero seconds at 90 percent reliability for assignments in a rural zone.

For any assignment (NAED categorized B>E) in which a First Response ALS unit (provided by the Contractor or by another County approved ALS response agency) is on scene within the Rural zone, then the Contractor response time requirement for a transport capable ambulance for emergency responses shall be 22 minutes.

For each response presumptively determined to be a non-life threatening emergency response (as categorized by National Academies of Emergency Dispatch standards as Alpha level calls) the contractor shall place transport capable paramedic unit on scene within 25 minutes zero seconds at 90 percent reliability for assignments in a rural zone. Responses to Alpha level calls are made without the use of lights or sirens.

For every emergency call exceeding the Response Time Standard defined herein, Contractor shall document in writing the cause of the extended Response Time and the Contractor's efforts to eliminate recurrence and forward to the County Agreement Administrator within five days.

Attachment 1—Service Areas and Response Time Standards includes a summary of the response time standards described above.

2. Response Time Measurement Methodology—
The Response Time measurement methodology employed can significantly influence operational requirements for the EMS system. The following are applicable:

a. Time intervals
System response times are measured from the time the call is received until the first arriving transport capable ambulance is on scene. System Response Times include the County Communications call processing component and the contractor response time component. However, for purposes of independently measuring the Contractor's performance under this Agreement, the times the Contractor controls (and excluding County call processing time) will also be reported. Contractor performance shall be judged based upon the Notification to Arrival time interval.

For the purposes of this RFP and the Agreement, Contractor's Emergency Response Times shall be measured from the time the Contractor is notified by radio, telephone, data link or other means that its services are required at a particular location until unit arrival at incident location by the Contractor's first arriving ALS Ambulance. The time stamp that will be used is the time the vehicle is assigned by the dispatch center, the marker is referred to as a "dispatch" in the computer aided dispatch (CAD) system.

Arrival at incident location means the moment an Ambulance crew notifies the County's Emergency Management Communications Center that it is fully stopped at the location where the Ambulance shall be parked while the crew exits to approach the Patient. In situations where the Ambulance has responded to a location other than the scene (e.g. staging areas for hazardous materials/violent crime incidents or Non-secured scenes), arrival at scene shall be the time the Ambulance arrives at the designated staging location. The Medical Director may require Contractor to log time "Patient Contacted" for medical research purposes. However, during the initial term of the Agreement, arrival time for patient contact intervals shall not be considered part of the contractually stipulated Response Time.

In instances when Ambulances fail to report "at scene," the time of the next communication with that Ambulance shall be used as the "at scene" time (e.g. time at Patient). However, the Contractor may appeal such instances when it can document the actual arrival time through another means (e.g. AVL, First Responder, communications tapes/logs, etc.).

b. Turn arounds and canceled responses
From time to time special circumstances may cause changes in call classification. Response Time calculations for determination of compliance with Agreement standards and penalties for Non-compliance will be as follows:

i. Reassignment Enroute.
Only the County's Emergency Communications Center can reassign an Emergency Ambulance in accordance with approved medical protocols. If an Ambulance is reassigned enroute prior to arrival on the scene of the Ambulance, then the incident response time for the original call and purposes of determining compliance may be an exception. Diversions will only occur when the ambulance is the closest unit to a higher priority calls.

ii. Canceled Calls.
The Contractor can determine to cancel from a call prior to arrival in accordance with approved medical protocols and based on information received from first response units on scene or the Communications Center. If an assignment is canceled prior to arrival on the scene of the Emergency Ambulance, the Contractor's compliance will be calculated based on the elapsed time from receipt of call to the time the call was canceled.

c. Response times outside defined Service Area excluded
The Contractor shall not be held accountable for Emergency Response Time compliance for any assignment originating outside the defined limits of the Service Area. Responses to requests for service outside the Service Area will not be counted in the total number of calls used to determine compliance for the County Response Times.

d. Each incident a separate response
Each incident will be counted as a single response regardless of the number of units, which are utilized. The Response Time of the first arriving ALS transporting Emergency Ambulance will be used as appropriate to compute the Response Time for that incident.

e. Response Time exceptions and exception requests
The Contractor shall maintain mechanisms for backup capacity, or reserve production capacity to increase production should a temporary system overload persist. However, it is understood that from time to time unusual factors beyond the Contractor's reasonable control affect the achievement of specified Response Times Standards. These unusual factors are limited to unusually severe weather conditions, declared, mass casualty incidents, disasters, or periods of unusually high demand for Emergency services. Exceptions require approval of the County. High demand is defined as those periods when five (5) or more Emergency responses are in progress simultaneously. This number shall be adjusted annually in proportion to the annual emergency volume, however should any future calculation result in less than a whole number, it shall be rounded up to the next whole number.

If the Contractor feels that any response or group of responses should be excluded from the calculation of Response Time Standards due to "unusual factors beyond the Contractor's ability to reasonably control," the Contractor may provide detailed documentation to the County Agreement Administrator (or designee) and request that the County exclude these runs from calculations and late penalties. Any such request must be in writing and received by the County Agreement Administrator within five business days of the end of each month. Should the Contractor dispute the County's Response Time decision, the Contractor may appeal the County's decision to the County Administrator in writing within five (5) days of the receipt of Response Time calculations summary for a definitive ruling. The County ruling shall be final and binding on both parties.

Equipment failure, traffic congestion, Ambulance failure, or other causes shall <u>not</u> be grounds to grant an exception to compliance with the Response Time Standard.

3. Deviations from Response Time—
Isolated instances of individual deviations of Response times are considered instances of minor non-compliance with the Agreement. However, deviations of Response Time compliance, which are severe or chronic, may constitute a Default of the Agreement as defined by these Specifications.

C. Vehicles and Equipment

Except as provided herein, the Contractor is required to provide and maintain all Ambulances, support vehicles, on-board medical supplies and equipment, office facilities and equipment to be used by the Contractor to perform the Agreement.

1. Ambulances —
   Ambulances furnished under the Agreement shall be a Type I**,** Type II, or III, shall be in good condition, and shall meet or exceed the current federal Department of Transportation K.K.K. standards. New or replacement Ambulances shall meet the equivalent federal K.K.K. standards, at the time the Ambulance is placed into service. Vehicles shall not remain in the fleet beyond 350,000 miles or four years of age, whichever occurs first.

   No Ambulance, when *fully equipped* and containing a personnel/Patient payload of 750 pounds shall exceed the manufacturer's maximum G.V.W. rating for the Ambulance.

   The Contractor shall maintain, and provide to the County annually, the complete listing of all Ambulances (including reserve Ambulances) used in the performance of the Agreement, including their license and vehicle identification numbers, and mileage.

   The minimum number of Ambulances supplied for the fleet in the County shall equal at least 130 percent of peak load staffing requirements proposed by the Contractor. The specific intent of this provision is that Contractor has adequate reserve Ambulances to service the County. If reserve ambulances are to be part of a combined fleet, Contractor must document how the minimum reserve capacity requirement will be met.

2. Equipment—
   All on-board equipment, medical supplies and personal communications equipment utilized by Contractor will meet or exceed the minimum Ambulance stocking requirements established by the Medical Director. Proposer shall clearly indicate in their Proposal the procedures to be utilized to assure equipment readiness and any commitments to exceed minimum equipment standards. The minimum amount of major medical equipment items supplied shall equal at least 130 percent of the peak load requirements proposed by the Contractor. The specific intent of this provision is that Contractor has adequate reserve equipment to service the County.

   A listing of the on-board equipment and medical supplies required by the State of Florida and the Medical Director are included as *Attachment 6 —Listing of Required Equipment and Supplies.*

3. Equipment Maintenance—
   The Contractor shall have sole responsibility for furnishing all equipment necessary to provide required service. In addition, the Contractor shall be responsible for all maintenance of ambulances, support vehicles and on-board equipment used by the Contractor in the performance of its work. The County expects that all Ambulances and equipment used in the performance of the Agreement will be maintained in an excellent manner. Any Ambulance, support vehicle and/or piece of equipment with any deficiency that compromises, or may reasonably compromise its function, must immediately be removed from service.

   In addition, the appearance of Ambulances and equipment impact customers' perceptions of the services provided. Therefore, the County requires that Ambulances and equipment that have defects, even cosmetic damage, be removed from service for repair without undue delay.

The Contractor must ensure an Ambulance maintenance program which is designed and conducted so as to achieve the highest standard of reliability appropriate to a modern paramedic level Ambulance service by utilizing appropriately trained personnel, knowledgeable in the maintenance and repair of Ambulances, developing and implementing standardized maintenance practices, and incorporating an automated or manual maintenance program record keeping system. The Contractor shall comply with or exceed the maintenance standard as outlined in Standards—Accreditation of Ambulance Services published by the Commission on Accreditation of Ambulance services.

The Contractor shall maintain all bio-medical equipment to the then current and applicable Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) standard.

All costs of maintenance and repairs, including parts, supplies, spare parts and inventories of supplies, labor, subcontracted services and costs of extended warranties, shall be at the Contractor's expense.

4. Personal Safety Equipment—
   Personal safety equipment shall be provided for all employees in accordance with then current federal and state standards. It shall be the Contractor's responsibility to maintain or replace, or cause to be maintained or replaced any personal safety equipment required for the performance of the Agreement.

D. Communications System Management

The Contractor is required to utilize the County's Emergency Management Communications (Dispatch) Center. Dispatch services for Emergency responses originating at the 911 system will be provided at no cost to the Contractor. Dispatch services for Scheduled and Unscheduled Non-Emergency transports within the County will also be provided as part of the Contractor's compensation.

The County will furnish and manage on behalf of the Contractor, Ambulance dispatch and communications services, including a dispatch/medical communications facility, sufficient to handle all requests for Ambulance service within the Service Area. Such service shall include, but is not limited to, dispatch personnel, equipment, acquisition and maintenance, in-service training, quality improvement monitoring, purchasing and inventory control, and related support services. The County's Communications/Dispatch Center, will meet the following requirements.

1. Staffing—
   Staffing levels shall be such that Emergency lines should be answered on the Technical Standard Number 4 of Section 3.4.1.1 (State of Florida 911 Plan). This standard requires that 90 percent of all voice calls during the average busy hour be answered within 10 seconds of arrival at the PSAP and that 90 percent of all TDD calls be answered within 20 seconds of arrival at the PSAP. Also, as medically appropriate, callers with *Life Threatening* Emergency requests shall receive pre-arrival instructions with the medical communications center personnel remaining on the line until a first responder arrives on scene.

   The County shall use best efforts to dispatch Contractor units within 60 seconds with 90 percent reliability of the call's initial receipt. The interval between call answer and notification of Contractor shall be reported on a monthly basis.

2. Hardware—

All dispatch communications equipment and radios, telephone equipment, Computer Assisted Dispatch (CAD) system equipment, including hardware and software, proposed communications infrastructure enhancements (such as CAD upgrades) shall be furnished by the County. All other equipment and infrastructure enhancements (such as mobile data terminals, automatic vehicle locators, etc.), and all other equipment and software employed by the Contractor in the delivery of these services shall be furnished by the Contractor meeting the general requirements set forth in its proposal.

In addition, the County owns and operates certain components of a communication system infrastructure (authorization for the use of medical radio frequencies is under coordination and control of the County), which upon request will be provided for Contractor's use. Contractor's Ambulances must be capable of "mobile to mobile" communications with County First Responders (e.g. portable radios). Equipment needed to maintain interoperability due to upgrades to the County's Communications System will be the responsibility of the Contractor.

3. Computer Aided Dispatch System Required—
The County's computer aided dispatch (CAD) system will be utilized to record dispatch information for all Ambulance requests. The CAD time punching system shall include the date, hour, minutes and seconds. All radio and telephone communication including pre-arrival instructions and time track shall be recorded on tape and kept for a minimum of 180 days. The computer aided dispatch system shall meet the requirement for data reporting as specified herein.

4. Communications Center Personnel Qualifications—
Medical communications workers shall at a minimum have and maintain Emergency medical (EMD) certification and CPR certification.

The County shall provide a comprehensive internal orientation, testing, including EMD certification, CPR certification, CAD systems use, geography, dispatch priority system, First Responder notification protocols and procedures, air medical notification procedures, disaster management policies and procedures, voice radio system operation (including medical and field communications equipment), medical patch policies including monitoring to ensure a clear communications, paging system conventions and uses, data radio system operation, CAD, radio, telephone, electrical, and emergency operations center procedures.

5. First Responder Alert—
The County will promptly notify first responders in accordance with the response protocols approved by the Medical Director, but not to the detriment of the ambulance response.

6. Priority Dispatch Protocols and Pre-Arrival Instructions—
The County will utilize medical priority dispatch protocols and pre-arrival instructions approved by the National Academies of Emergency Dispatch. The dispatch priorities are subject to change by the Medical Director. While "priority dispatching" as defined by the National Academies of Emergency Dispatch is acceptable, the County does not allow the concept of "call screening." No Emergency or Non-Emergency transport request for service (excluding routine Long Distance transfer requests) shall be denied a response by the Contractor's ALS Ambulance, and no Patient requesting transport to a hospital will be refused transport.

Adherence to medical dispatch protocols is required. Thus, except where a deviation is clearly justified by special circumstances not contemplated within a dispatch protocol, such medical dispatch protocol shall be strictly followed. Compliance with dispatch questions and pre-arrival instructions shall be a routine part of the County's quality improvement processes and shall be

reported on a monthly basis with response statistics. The County shall endeavor to become an accredited Center of Excellence.

7. Retention of Communications Center Documentation—
The County shall maintain radio and telephone communications records, including pre-arrival instructions, computer aided dispatch for a period of not less than 180 days.

E. Data and Reporting Requirements

The long-term success of any EMS system is predicated upon its ability to both measure and manage its affairs. Therefore, the County will provide or require its Contractor to provide detailed operations, clinical and administrative data in a manner, which facilitates its retrospective analysis.

1. Dispatch computer—
The dispatch computer utilized by the County is recommended to be capable of the following:

   a. Electronic data entry of every response on a real time basis.

   b. Color coded prioritization of deployment planning, displaying calls received for runs pending, runs in progress, calls scheduled up to 2 hours in advance, and status of Ambulance resources available for service.

   c. Continuous display of unit time in each response status. Automatic display of units exceeding pre-determined "time in status" criteria for deployment and crew safety.

   d. Immediate recall on any current, previous, or pre-scheduled runs for inquiry by date, incident number, location or Patient name, vehicle, vehicle type, and paramedic.

   e. An electronic preprogrammed selection of the fire first responder.

   f. Automated integration with digital paging, mobile status messages, 911 ANI/ALI displays and primary first response agencies.

   g. Simultaneous and continuous printed log of deployment.

   h. Mobile data system (MDS) unit interface.

   i. Security features preventing unauthorized access or retrospective adjustment and full audit trail documentation.

2. Mobile Data System (MDS) System—
The County currently has no Mobile Data System (MDS) to facilitate improved productivity for both Dispatch and field units. Should the County elect to provide MDS for emergency services dispatched by EMC, the Contractor must provide the mobile equipment for its units. Equipment must be compatible with and approved by the County. Such a system is recommended to:

- Interface to CAD/records system to transmit information to Ambulances,
- Allows Ambulance units to supplement Dispatch information and produce "basic" report for receiving facility,
- Allows ambulance units to complete reports while mobile.

3. Automatic Vehicle Locator (AVL) / Data System Capabilities—
The County's AVL/Data system has been designed to provide limited integration of AVL and CAD systems. An upgraded system is contemplated for installation during the term of this Agreement. At its option and expense, the Contractor may accelerate the installation of the AVL/Data system including automation of the County's deployment monitoring function. Should the County upgrade its AVL/Data system during the term of this Agreement, the Contractor must purchase AVL equipment for its units. The equipment must be compatible and approved by the County. At a minimum any new the AVL system is expected to:

- Keep CAD system apprised of where all units are in relation to the system service area in as close to real time as practical; updates are typically done every 10 seconds
- Provide prompts for the nearest unit(s) for call received on an "as the street lies" basis,
- Allow units to transmit status changes to CAD without Dispatch intervention,
- Provide units with location and call information on display,
- Provide units digital map display for routing to call in a navigable friendly fashion,
- Update Dispatch and Call Taker personnel on status changes as they occur,
- Provide Dispatch digital map display for tracking current location and historical location of units.
- Provide tools for map creation, modification and distribution.

4. Communication Center Data Capabilities—
The County's electronic data system must be capable of producing, at minimum, the following reports to be utilized in measuring Response Time compliance:

a. Emergency and Response Times by zone on a fractile basis.

b. Call received to dispatch time.

c. Calls with and without first response based on first response skill set.

d. Out of Chute Response Times by crew members.

e. On-scene times.

f. Hospital off load times by crew members.

g. Emergency and Non-Emergency response by hour and day.

h. Dispatch personnel Response Time reports.

i. Canceled run report.

j. Demand analysis report.

j. Call mode by hour and day.

k. Ambulance alert exception report by dispatcher.

l. Patient contact times.

In addition, the County shall fully complete a manual "dispatch card" for each dispatch of an Ambulance when the computer is inoperable. Additionally, manual dispatch cards shall be entered into the CAD system by County personnel following the resumption of normal service of the CAD system.

5. Records—
Contractor shall complete, maintain and as requested by County provide copies of records including:

- Each request for service,
- Equipment failure reports,
- Vehicle maintenance records,
- Patient account records
- Deployment planning reports, and
- Continuing education and certification records documenting training compliance.

6. Monthly Reports Required—
Contractor shall provide, within ten (10) days after the first of each calendar month, reports dealing with its performance during the preceding month as it relates to the clinical, operational and financial performance stipulated herein. The Contractor will rely on the County to produce operational (response time) reports from the CAD. Response time compliance and customer complaints/resolutions shall be reported monthly, the format and timing of other reports shall be subject to County approval.

7. Financial Reports—Contractor shall maintain its financial records in a manner to facilitate comparisons of dispatch and Patient account records to monitor the total maximum average charge per Patient. Total expenses and revenues, including all direct and indirect expenses and revenues, for the Contractor's Santa Rosa EMS operation shall be accounted separately and reported in a manner/format acceptable to County and in compliance with Florida law.

F. Coverage and Dedicated Ambulances

These specifications are for a performance Agreement. The County neither accepts nor rejects the Contractor's level of effort estimates, rather the County accepts the Contractor's financially guaranteed commitment to employ whatever level of effort is necessary to achieve the clinical Response Time and other performance results required by the terms of the Agreement as outlined in these specifications.

Notwithstanding the above, the proposals must include descriptions of *initial* Ambulance coverage plans to include geographic plans for the north, central and south County and deployment models estimated by the Proposer to be sufficient or even in excess of what may be necessary to meet the performance standards required herein. Acceptance by the County of the Proposer's offer shall not be construed as acceptance of the Proposer's proposed level of effort.

G. Integration of First Responders

Currently, the County's 15 Fire Departments provides varying level of medical response to medical emergencies within the County. While the Fire Department First Responders or other public safety agencies routinely maintain responsibility for controlling an incident scene, the primary responsibility for Patient care transfers to the transporting unit upon arrival, regardless of what agency has provided first response service. Fire personnel will support the care provided by the Contractor on-scene, and in those rare situations when required, will assist providing care en route to the hospital.

The Contractor will foster an integrated First Response program with the Fire Departments and shall at minimum provide the following:

1. First Responder Liaison—
   Contractor shall designate from among its employees a single individual as its contact person/liaison for the First Response agencies within the County.

2. First Responder Equipment and Supply Replenishment—
   The Contractor shall develop mechanisms to exchange re-usable orthopedic appliances, and re-stock disposable BLS medical supplies used by First Responders when treatment has been provided by First Responder personnel and Patient care is assumed by Contractor's personnel. Any such plan must be a community wide plan as defined by Medicare regulations. If the Contractor is canceled enroute, or at the scene and no Patient contact is made by the Contractor's personnel, the Contractor shall not be obligated to re-stock First Responder Contractor supplies.

3. Return to Station—
   In any situation in which First Response personnel assist the Contractor during transport to the hospital, the First Responder is committed to the ambulance to allow no disruption to the System Status Management, or the First Responder may arrange return transportation back to their station.

H. Internal Risk Management/Loss Control Program Required

The County believes that education and aggressive prevention of conditions in which accidents occur, is the best mechanism to avoid injuries to Contractor staff and Patients. Therefore, County requires Contractor to describe in its proposal its current risk management program and/or develop and implement within twelve (12) months an aggressive loss control program including, at a minimum includes, pre-screening of potential employees (including drug testing), initial and on-going driver training, randomized and significant event (e.g. motor vehicle accident with injuries or damage in excess of $1,000) drug screening lifting technique training, hazard reduction training. Such program shall involve employees in planning and executing its safety program.

I. Stand-By and Special Events Coverage

Upon request by law enforcement, Fire Departments, or Search and Rescue, Contractor shall furnish courtesy stand-by coverage at Emergency incidents involving a potential danger to the personnel of the requesting Agency or the general public if such coverage can be provided with a Non-dedicated Ambulance. In the event the Contractor receives conflicting requests for such stand-by services and cannot meet all of the requests under its coverage plan, then Contractor shall provide such coverage at its own discretion.

Other community service oriented entities may request such stand-by coverage, and Contractor is encouraged to provide such non-dedicated standbys to events if possible and at the option of the Contractor. If the Contractor is requested to provide such services with a dedicated Ambulance, then the Contractor, at their option, may enter into a separate fee based agreement with the requesting party for such service.

J. Community Education / Access Education Requirements

The County desires that its Contractor take significant steps to improve prevention and system access through community education programs to be provided to the school system and community groups. It is the County's expectation that the Contractor will plan such programs working collaboratively with other public safety and EMS related groups such as the American Heart Association, the American Red Cross, Fire Departments and healthcare organizations.

The Contractor shall annually develop at least three local print and/or electronic media public service announcements, conduct an annual mass CPR training event, participate in EMS Week related activities, and provide at least 40 hours of community education or prevention event service per year. Community education hours may, at the Contractor's option, be provided by in-service units/personnel.

K. Participation in System Development

The County anticipates further development of its EMS system and regional efforts to enhance disaster and mutual-aid response. It currently participates in a variety of EMS related boards and committees. (e.g. quality improvement committees, regional EMS groups, etc.) Contractor shall support continuation of these relationships by its participation.

L. Mutual Aid

Contractor, at its option, may enter into Mutual Aid Agreements with other Emergency Ambulance agencies, provided however that:

1. Any mutual aid provided within the County Service Areas must be substantially medically equivalent services;

2. The responding entity agrees to the County's EMS system standards including clinical, insurance and other requirements for clinical review; and,

3. Written Agreements between the Contractor and other agencies are to be approved by the County Agreement Administrator and Medical Director. Neither the County nor the Medical Director shall unreasonably withhold its approval of such Agreement.

M. Disaster Assistance and Response

The Contractor shall be actively involved in planning for and responding to any declared disaster in the County. Disaster coordination is facilitated through County Emergency Management Director. Both a mass casualty incident plan and an emergency disaster plan following incident command system guidelines have been developed. The Contractor's supervisory personnel will be required to complete incident command training and hazardous material training as required by the County's emergency management staff. Contractor involvement shall include participation in training, drills and exercises.

1. In the event a disaster within the County, or in the event the County directs the Contractor to respond to a disaster in a neighboring jurisdiction, normal operations shall be suspended and the Contractor shall respond in accordance with the County's disaster plan. The Contractor shall use best efforts to maintain primary Emergency services. During the period of the declared disaster, performance requirements for Response Times will not be imposed by the County.

2. Any additional direct marginal costs resulting from the performance of disaster services that are non-recoverable from third parties, may be invoiced for payment by the County consistent with the then current Federal guidelines. This shall not include any cost for maintaining normal levels of service during the disaster, but shall be limited to the reasonable and verifiable direct marginal cost for these additional services.

N. Deployment Planning and Initial Plan

During the first calendar quarter of operations, the Contractor shall adhere to or exceed the initial coverage plan submitted in its proposal unless otherwise directed and agreed to by the County's Contract Agreement Administrator. It is anticipated that the Contractor's initial coverage plan may require more unit hours than may be necessary after the Contractor has gained additional experience. The County may elect to utilize an event deployment (System Status Management) plan.

Subsequent Contractor coverage plan modifications including any changes in post locations, priorities, around the clock coverage levels, may be made only in collaboration with and reasonable notification of the County Emergency Communications Center Staff.

O. Handling Service Inquiries and Complaints

The Contractor shall log all inquiries and service complaints. The Contractor shall provide prompt response and follow-up to such inquiries and complaints. Such responses shall be subject to the limitations imposed by patient confidentiality restrictions.

Contractor shall on a monthly basis submit to the County a list of all complaints received and their appropriate disposition/resolution. Copies of any inquiries and resolutions of a clinical nature shall also be referred to the Medical Director within twenty-four (24) hours.

P. Accreditation

Accredited by the Commission on the Accreditation of Ambulance Services is recognized as adding value to the Contractor's organization. The County encourages the Contractor to obtain accreditation status for its local operation. Achievement of CAAS Accreditation is a consideration for renewal of this Agreement in future procurement cycles.

IV.
Clinical and Employee Provisions

A. Medical Oversight

The County shall furnish and fund medical control services including the services of a Medical Director for all system participants (e.g. First Responder agencies and transport agency) through an independent Contract with a local emergency physician.

1. Duties of the Medical Director—

   a. Establish a uniform and appropriate system standard of care, as defined herein.

   b. Subsequently enhance the system standard of care by incorporating advancements, which become known and available from time to time, or to correct defects in the system standard of care discovered as a result of the quality improvement program. However, no change shall be made in the system standard of care, which results in a standard that is less than or in contravention of the minimum standards required by the laws of the State of Florida.

   c. Review and approve local medical control standards and requirements (including if necessary, written and practical tests) for EMS personnel providing care under the Medical Director's authority in accordance with the then current System Standard of Care. Personnel subject to such requirement may include:

      - Persons receiving telephone requests for Ambulance services;
      - First Responders;
      - Ambulance personnel;
      - Field training personnel; and
      - On-line medical control physicians.

   d. Administer the approval, testing (if necessary) and authorization of EMS system personnel, and to establish and promulgate written guidelines in connection therewith.

   e. Develop guidelines for on-line medical control, transport destination policies and use of air medical services in support of the EMS system’s mission.

   f. In consultation with the County and the Contractor develop standards applicable to on-board equipment used in the delivery of First Response services and Emergency Ambulance services within the Service Area. Such standards may be approved by the Medical Director and the County Agreement Administrator following consideration of a fiscal impact statement.

   g. No less frequently than one time every three months, report on the clinical aspects of the quality of care and on the Response Time performance being provided by the Contractor and First Response agencies to the County Manager.

h. Report once each year, in writing, to the County Commission Council on the quality of care and Response Time performance being provided by all components of the EMS system.

i. Monitor all aspects of system performance including clinical quality of care and verification of Response Time performance reported by First Responders and Contractor.

j. Attend meetings of the, local medical society meetings, and represent the EMS system at appropriate EMS meetings, seminars, and conferences in order to stay abreast of developments in emergency medical care.

k. Make final determinations in consultation with the County Agreement Administrator regarding requests by Contractor for relief from Response Time compliance in accordance with applicable provisions for such relief defined in the Agreement.

Minimum qualifications for the Medical Director shall be a Board Certified Physician. The Medical Director is encouraged to complete the National EMS Medical Director's Course as approved by the National Association of EMS Physicians.

2. Medical Protocols—
Contractor shall comply with Medical Protocols and other requirements of the System Standard of Care as established by the Medical Director. Current Medical Protocols are included as *Attachment 7 — Medical Protocols.*

3. Direct interaction with medical control—
Field and communications personnel have the right and responsibility to interact directly with the system's medical leadership on all issues related to Patient care. This personal professional responsibility is essential. Particular attention has been given to including safeguards against the Contractor's participating organizations preventing or discouraging this interaction from occurring.

4. Medical review/audits—
The goal of the medical audit process is to improve Patient care by providing feedback on the system and individual performance. If the audit process is to be positive, it routinely must produce improvement in procedures, on-board equipment, and medical practices. It is the Contractor's responsibility to operationalize this corrective feedback.

The Medical Director *may* require that any Contractor employee or first responder attend a medical audit when necessary. Employees, at their option and expense, may attend any audit involving any incident in which they were involved that is being formally reviewed but must maintain the confidentiality of the medical audit process. Attendance of every certificate holder involved in a case being reviewed is not required, unless mandated by the Medical Director.

B. Transport Requirement Limitations

1. Destinations—
Contractor shall be required to transport Patients from the all areas of the Service Area, in accordance with Medical Control Destination Protocols, to appropriate medical facilities within Santa Rosa County, Okaloosa County, Escambia County, FL or Escambia County, AL. Contractor may transport Patients to hospitals beyond Santa Rosa County, Okaloosa County, Escambia County, FL and Escambia County, AL as long distance transports at its own discretion.

2. Provision to restrict service based upon demonstrated abuse—
   Should Contractor determine that specific individuals have chronically abused the required transport provision of the EMS service, they shall report the names of those individuals to the Medical Director. The Medical Director shall establish, within the standard of care, reasonable procedures to enable the Contractor to decline to transport such abusers after contact with on-line medical control.

C. Minimum Clinical Levels and Staffing Requirements

All Ambulances rendering services under this Agreement shall be staffed and equipped to render paramedic level care. The paramedic shall be the primary caregiver for all Emergency Patients and shall accompany all Patients in the back of the Ambulance during any Patient transportation except as otherwise permitted under medical control protocols.

The Contractor is required to staff a minimum of one (1) EMT-P and one (1) EMT. At the Contractor's sole option, the requirement for EMT staffing levels on any or all units may be enhanced to higher levels of training without additional obligation of the County.

Any ALS First Response unit shall be staffed by at least one (1) EMT-P.

Personnel will be appropriately certified by the State of Florida at their level of qualification and will be specifically authorized by the Medical Director in accordance with Medical Control policies.

D. Character Competence and Professionalism of Personnel

The parties understand that Emergency Ambulance services are often rendered in the context of stressful situations. The County expects and requires professional and courteous conduct and appearance at all times from Contractor's Ambulance personnel, medical communications personnel, middle managers and top executives. Contractor shall address and correct any occasional departure from this standard of conduct.

All persons employed by the Contractor in the performance of work shall be competent and holders of appropriate licenses and permits in their respective professions and shall undergo a criminal record check conducted by Contractor.

It is the County's intent in requiring a criminal record check that the Contractor be aware of any felony or misdemeanor convictions that could be a factor related to an individual's performance in an EMS system. These should include, at a minimum, felony or misdemeanor convictions related to driving under the influence, drug related offenses, and sexual offenses including rape, child abuse, and spousal abuse. The Contractor must independently judge the employability and potential liability associated with employing any individual with a past history of such offenses.

The Contractor shall provide the County with its specific policies concerning drug and alcohol use and sexual harassment.

E. Key Personnel

The County will, in part, base the award of the Agreement upon the qualifications of the organizations, and upon the qualification of key personnel presented in the Proposer's proposal documents. The Contractor will be expected to furnish the personnel identified in the proposal submitted and throughout the term of the Agreement. The Contractor is expected to furnish the same personnel or replacement personnel with equal or superior qualifications. It is the specific intent of this provision to prevent "bait and switch" bidding practice whether intentional or not.

F. Evolving OSHA and Other Regulatory Requirements on Clinical Matters

It is anticipated, during the term of the Agreement awarded to Contractor, that certain regulatory requirements for occupational safety and health, including but not limited to infection control, blood borne pathogens and TB, may be increased. It is the County's expectation that the Contractor will adopt procedures, which meet or exceed all requirements for dealing with these matters.

G. Discrimination Not Allowed

During the performance of the Agreement, the Contractor agrees that it will comply with all applicable provisions of federal, state and local laws and regulations prohibiting discrimination. Specifically, Contractor warrants that it will fully comply with Title VI and VII of the Civil Rights Act of 1964, as amended, the Americans with Disabilities Act (ADA), and all other regulations promulgated thereunder. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, disability, national origin, sex, or age. Contractor will take affirmative action to ensure that employment is offered and that employees are treated during employment without regard to their race, religion, color, disability, national origin, sex, or age. Such action shall include but is not limited to the following: employment, upgrade, demotion or transfer; recruitment or recruitment advertising; lay-off or termination; rates of pay or other forms of compensation; and selection, including apprenticeship.

H. Work Schedules and Human Resource Issues - An Employer Matter

Although this is a performance-based Agreement and the Contractor is encouraged to be creative in delivering services, the Contractor is expected to employ reasonable work schedules and conditions. Specifically, Patient care must not be hampered by impaired motor skills of personnel working extended shifts, part-time jobs, voluntary overtime, or mandatory overtime without adequate rest.

It is the County's intent that the Contractor meet the standards of the Fair Labor Standards Act (FLSA) with particular regard to work schedules. Proposers claiming exemptions from FLSA standards are advised to provide legal opinions as to the exemption's validity.

The County emphasizes that the Contractor is responsible for conducting the employment matters with its employees, including managing personnel and resources fairly and effectively in a manner that ensures compliance with the Agreement ultimately executed by the Contractor. The County will not otherwise be involved in the Contractor's management/employee relationships.

V.
Financial and Administrative Provisions

A. Term and Renewal Provisions

The initial term of the Agreement ultimately executed by Contractor shall be for a period of five (5) years beginning October 1, 2007. The County may offer, at their sole option, and based in part upon Contractor's superior performance, grant two (2) three (3) year renewals. The offer of extension shall be made to the Contractor by the County at least nine months prior to the scheduled end of the term of the Agreement or previously granted extension.

B. Methods and Form of Compensation

The Contractor receives a variety of compensation for providing services. The following are the specific types of compensation available to the Contractor in this procurement:

1. Market rights—
   The County, except as otherwise outlined in these specifications, shall utilize the Contractor exclusively for the performance of Emergency and Non-emergency Ambulance services within the Service Area as defined in *Attachment 1 - Service Area and Response Time Standards.*

2. User fees—
   The primary financial compensation for the Contractor for services rendered under this Request for Proposal will be from funds received for fee-for-service billings and collections and contractual arrangements with insurance organizations and other Payers.

3. Local tax subsidy—
   Subsidies and user fees are linked and each Proposer is required to project a variety of subsidy and user fee levels. The County Commission shall determine the final subsidy user fee mix at the time the Agreement is approved. The County desires a no subsidy agreement.

4. First Responder assistance—
   Contractor shall have the benefit of ALS level First Responder services where available and basic first response for life-threatening calls throughout the County. (ALS First Response is currently provided only within the Midway Fire District).

5. Communications infrastructure—
   The use of the County's Emergency Communications/EMS Dispatch Center infrastructure is provided at no cost to the Contractor for 911 related and Non-Emergency Transports.

6. Medical control furnished—
   Contractor shall have the benefit of quality improvement services and Medical Director services furnished by the County.

7. Extensions—
   By furnishing services clinically superior to the requirements of this specification, the County may grant certain rights to extensions.

C. User Fees and User Fee Regulation Process

1. Relationship between subsidy and user fees—
   The County and the Contractor acknowledge that the subsidy required, if any, and the average rate per transport are linked and must be considered together to facilitate an accurate system cost comparison. The maximum average fee per transport will be calculated semi-annually (including the base rate, mileage, and all add on charges for Ambulance services within the County but excluding any long-distance transports and divided by the total number of local transports per year). Documentation of calculation methodologies and supporting materials will be submitted to the Contract Administrator semi-annually.

   Should the maximum average fee per transport, when calculated for any six (6) month period, exceed the maximum average fee per transport authorized under the Agreement, then the maximum average fee shall be adjusted downward for a period sufficient to rectify the aggregate amount overcharged in the previous reporting period.

2. Annual subsidy and user fee increase—
   The annual Maximum Average User Fee per transport resulting from this Agreement shall be increased annually in an amount equal to the Consumer Price Index for All Urban Consumers—US City Average, all Items reported by the United States Bureau of Labor Statistics, for the most recent calendar year.

3. Annual renegotiations of certain factors permitted—
   The County understands that certain economic variances occur beyond the control of the Contractor. It is the County's intent to reduce the risk of economic loss to the Contractor for these factors as much as possible. The County considers all factors related to labor and equipment to be within the control of the Contractor, and therefore no negotiated annual cost increases other than as provided in section 2 above for those factors shall be allowed.

   The County shall allow negotiated cost increases to the extent of documented increases in the Contractor's actual costs of production directly resulting from increases in prices paid by the Contractor for major changes in the standard of care (consistent with industry practice and as may be approved by the County), or federal or state regulatory requirements which increase the Contractor's production costs. County shall also allow negotiated subsidy (if any) and/or user fee increases in the event that there are substantial changes in federal reimbursement policy, which materially adversely affect the Contractor's operation. Increases shall be considered only at the end of the first twelve (12) months of the Agreement and each twelve (12) month period thereafter, to coincide with the County's budgetary process. Subsidy, if any, and user fee increases to offset negotiated production cost adjustments shall be allowed on a prospective basis only and shall not be allowed retroactive.

Should the County and the Contractor reach an impasse in negotiated rate increases, as outlined in this section, either party may require that the matter be submitted to binding arbitration as defined herein.

D. Billing System Professionalism

The Contractor shall conduct all billing and collection functions for the EMS system in a professional and courteous manner. The County's goal is for the Contractor to collect the maximum amount available from Patients and third party payers, without unduly pressuring those who legitimately cannot pay.

The Proposer must fully outline its billing and collection policies and procedures in its Proposal. This should include samples of invoices, reminders, telephone collection methods and handling of accounts turned to collection. Policies about acceptance of assignment and write off should be specifically addressed.

1. Local access—
   A specified local phone number for inquiries from Patients and third party payers will be provided by the Contractor for Patient's use. Should the Contractor elect to manage its account receivables from a location other than the metropolitan area, a local access number still must be provided.

2. On scene collections prohibited—
   For services provided within the Service Area, the Contractor shall not engage in on-scene collections for local services at scene, enroute, or upon delivery of the Patient.

   On any Patient transfer originating in the Service Area and terminating outside of Santa Rosa County, Okaloosa County, Escambia County, FL and Escambia County AL shall be defined as a Long Distance transport and the Contractor may at Contractor's sole option, require payment prior to rendering service.

E. Insurance Indemnity Provisions

Throughout the term of the Agreement, Contractor shall meet or exceed the following requirements:

1. Prior to the time the Contractor is entitled to commence any part of the project, work or services under the Agreement, Contractor shall procure, pay for and maintain the minimum insurance coverages and limits as provided for herein. Said insurance shall be evidenced by delivery to the County of (a) certificates of insurance executed by financially stable insurance carrier(s) acceptable to the County and licensed or permitted to write insurance by the Florida Department of Insurance listing coverages and limits, expiration dates and terms of policies, and listing all carriers issuing or reinsuring said policies; and (b) a copy of each policy, including all endorsements. Insurance requirements shall remain in effect throughout the term covered in the Agreement and any extensions.

   a. Commercial general liability insurance, including but not limited to, contractual, liability assumed under the Indemnity provision of this Agreement, premises, operations, products, completed operations, personal injury, and advertising injury. The amounts of such insurance shall be not less than $1,000,000 bodily injury and property damage combined single limits; and $2,000,000 aggregate. This insurance shall include fire legal liability of not less than $50,000 per occurrence, unless otherwise stated by exception herein.

b. Professional medical malpractice insurance (Ambulance attendants malpractice) including errors and omissions with minimum limits of $1,000,000 per occurrence and $2,000,000 annual aggregate, on a claims made basis.

c. Worker's compensation coverage to statutory limits as required by law; employers liability insurance of not less than $1,000,000 bodily injury by incident; $1,000,000 bodily injury by disease for each employee; and $1,000,000 bodily injury by disease.

d. Commercial automobile liability — Bodily injury and property damage covering all vehicles used under the Agreement for owned, hired, and non-owned vehicles with limits of not less than $1,000,000 combined single limits bodily injury and property damage. Policy shall include coverage for loading and unloading hazards unless covered under the general liability or professional liability above. Contractor shall provide the primary coverage regardless of actual vehicle ownership.

e. Uninsured and underinsured motorist coverage of at least $250,000 shall be provided.

f. "Umbrella" Coverage in the amount of at least $5,000,000 shall be provided as additional coverage to all underlying liability policies. This policy may be written as a form following basis.

2. Endorsements required—
Each insurance policy shall include the following conditions by endorsement to the policy:

a. Each policy shall require that thirty (30) days prior to its expiration, cancellation, Non-renewal or any material change in coverages or limits, a notice thereof shall be sent to the County at its address of record by the insurer. Contractor shall also notify County in a like manner within twenty-four (24) hours after receipt, of any notices of expiration, cancellation, non-renewal or material change in coverage received by the Contractor from its insurer; and nothing shall absolve Contractor of this requirement to provide notice.

b. Companies issuing the insurance shall have no claims against the County for payment of premiums, assessments or deductibles, which are the sole responsibility and risk of the Contractor.

c. Except for Worker's compensation coverage all such policies shall name the County, its officers, employees, and the Medical Director, as additional insureds.

3. All insurance shall be maintained with companies: —
a. Holding a "general policy holders rating" of "B+" or better, as set forth in the most current issue of "Best Insurance Guide," the successful rating to "B+" or comparable rating from reputable rating organizations;

b. Licensed or permitted to operate in the State of Florida; and

c. In good standing with the Florida Department of Insurance or similar Agency.

4. Self-insured risk—
Any program of self-insurance risk employed by Contractor shall be subject to prior approval and on going monitoring by the County and their legal counsel. In addition to any assurances required by the

County under this provision, as initially agreed prior to final award of the Agreement, the following items shall at a minimum be met to the County's satisfaction:

a. Potential fiscal liability associated with the risk to be assumed by the Contractor must be reasonable and limited to an amount which would, if realized, not impair Contractor's ability to performance obligations under the Agreement:

b. The coverage contemplated shall at a minimum be equivalent to the coverage required under paragraph 1 above.

c. Throughout the term the County shall be immediately notified of any major claims, the amount reserved against potential claims, or other program changes, which may adversely affect the Contractor's ability to provide insurance against the risk as required in the Agreement.

d. The self-insured program meets and complies with all applicable laws and regulations.

5. Indemnification—
Contractor (as indemnitor) will be required to indemnify, save and hold County, its officers and employees, agents, successors and assigns (as indemnitee) harmless from and against and in respect of any act, judgment, claim, domain, suit, proceeding, expenses, orders, action, loss, damage, cost, charge, interest, fine, penalty, liability, reasonable attorney and expert fees, and related obligations (collectively, the "claims") arising from or related to acts and omissions of Contractor in its performance under the Agreement, whether direct or indirect including but not limited to, liabilities, obligations, responsibilities, remedial actions, losses, damages, punitive damages, consequential damages to third parties, treble damages, costs and expenses, fines, penalties, sanctions, interest levied and other charges levied by other federal, state and local government agencies on County by reasons of Contractor's direct or indirect actions. This indemnity will survive and remain in force after the expiration or termination of the Agreement and is unlimited; provided, however that the indemnity is not intended to cover claims against County arising solely of County's own negligence or intentional misconduct. For purposes of this section, the term County shall include County, officers and its employees, and the Medical Director.

The following provisions shall control the indemnity provided hereunder:

a. Indemnity defense. Contractor, at its cost and expense, shall fully and diligently defend County against any claims brought, investigations undertaken or actions filed which concern claims for which County is indemnified. Contractor may employ qualified attorneys of its own selection to appear and defend the claim or action on behalf of County upon County approval. Contractor, acting in good faith and in the best interest of County, shall have the sole authority for the direction of the defense, and shall be the sole judge of the acceptability of any compromise or settlement of any claims or actions against County so long as such compromise or settlement does not impose a liability on County not fully covered and satisfied by the indemnity provided by this section or, in County's judgment, subject to any material adverse order, judgment, or decree which impairs its image or ability to operate its business as previously conducted. Otherwise, County reserves the exclusive right to reject any such compromise or settlement and prosecute the claim, compromise or settlement. Contractor shall inform County, on a quarterly or more frequent basis, on the progress and proposed resolution of any claim and shall cooperate in responding to inquiries of County and its legal counsel.

b. Reimbursement for expenses. Contractor shall reimburse County for any and all necessary expenses, attorney's fees, interest, penalties, expert fees, or costs incurred in the enforcement of any part of the Agreement thirty (30) days after receiving notice that County has incurred them.

c. Cooperation of parties and notice of claim. Contractor and County shall provide the other prompt written notice of any such audit or review of any actual or threatened claim, or any statement of fact coming to that party's attention which is likely to lead to a claim covered by the indemnity. Each party agrees to cooperate in good faith with the other and respond to any such audit or review and defending any such claim.

F. Performance Security

1. Continuous Service Delivery —
Contractor expressly contracts that, in the event of a Default by the Contractor under the Agreement, Contractor will work with the County to ensure continuous and uninterrupted delivery of services, regardless of the nature or causes underlying such breach. Contractor agrees that there is a public health and safety obligation to assist the County in every effort to ensure uninterrupted and continuous service delivery in the event of Default, even if Contractor disagrees with the determination of Default.

2. Performance letter of credit or cash escrow account—
Contractor will deposit with the County's Director of Administrative Services an annually renewable performance letter of credit or cash escrow account in a form satisfactory to the County. The amount of the performance letter of credit or cash escrow account shall be $250,000 (Two hundred and fifty thousand dollars) and be issued by a federally insured (FDIC) banking institution with a debt rating of 1A or higher by the FDIC, A or higher by Standard and Poor's, or A or higher by Moody's investors or a comparable rating by a future comparable rating system. The federally insured banking institution, on which the performance letter of credit is drawn, shall be acceptable as determined by the Director of Finance.

   The performance letter of credit or cash escrow account, if applicable shall be used to ensure the operation of the Ambulance service after a "take-over" has been affected by the County including but not limited to, the cost of take-over by the County, including any necessary rebidding, renewal, negotiation, or related administrative expenses.

3. Notice of change is required for performance letter of credit —
Any performance letter of credit shall contain the following endorsement: "at least 60 (sixty) days prior to cancellation, replacement, failure to renew, or material alteration of this performance letter of credit, written notice of such intent shall be given to the County by the financial institution. Such notice shall be given by certified mail to the County's Administrative Services Director and County Attorney."

4. Cooperation with Takeover Required —
   In the event of a take-over by County pursuant to Section V. Subsection J. or in accordance with other terms of the Agreement, Contractor shall forfeit its performance security to enable the County to restore service immediately, the foregoing requirement shall not intend by the parties to fix an amount of damages to be recovered by County in the event of any Default by the Contractor, but merely to allow the County the financial ability to mitigate some of the damages that County will suffer by reason of such Default by Contractor. The County has estimated, and Contractor shall agree, that the damages in the case of Default shall in no case be less than $250,000**.**

5. Letter of Credit Disposition —
   The performance letter of credit or cash escrow account shall become the property of the County in the event that the Agreement is canceled by reason of Default of the Contractor. The performance letter of credit or cash escrow, if applicable, shall be retained by the County and returned to Contractor at the expiration of the Agreement, provided that there is no outstanding breach, unpaid penalties, fines, taxes or other Contractor payment deductions or adjustments due by Contractor or any other debts due to the County, or debts to other entities due by Contractor or debts due to Contractor's creditors.

6. Rights Reserved —
   The rights reserved to the County with respect to the performance letter of credit or cash escrow are in addition to all other rights of the County, whether reserved by the Agreement, or otherwise authorized by law, and no action, proceeding or right with respect to the performance letter of credit shall affect any other right the County has or may have.

G. Contractor Default and Provisions for Termination of the Agreement

Conditions and circumstances, which constitute Default of the Agreement, shall include the following:

1. Failure of the Contractor to operate the EMS system in a manner which enables County and the Contractor to remain in compliance with federal or state laws, rules, or regulations, medical control policies approved by the and/or related rules and regulations adopted pursuant thereto;

2. Failure of Contractor to meet the System Standards of Care as established by the Medical Director;

3. Falsification of information supplied by Contractor during or subsequent to this procurement process;

4. Failure of Contractor to provide data or falsification of data supplied during the course of operations, including by way of example but not by way of exclusion, dispatch data, Patient report data, Response Time data, financial data or falsification of any other data required under the Agreement;

5. Excessive and unauthorized scaling down of operations to the detriment of performance during a "lame duck" period by Contractor;

6. Failure of Contractor to maintain equipment in accordance with manufacturer recommended maintenance practices;

7. Failure of Contractor's employees to conduct themselves in a professional and courteous manner and to present a professional appearance;

8. Failure of Contractor to comply with the approved rate regulation, billing or collection provisions of the Agreement;

9. Contractor makes an assignment for the benefit of creditors, files a petition for bankruptcy, is adjudicated insolvent or bankrupt, petitions to apply for any custodian, receiver or trustee for a substantial part of its property, commences any proceeding relating to it under bankruptcy, reorganization, arrangement, readjustment of debt, dissolution or liquidation law or statute of any jurisdiction;

10. Failure of Contractor to cooperate with and assist the County after a Default has been declared as provided for herein, even if it is later determined that such breach never occurred or that the cause of such breach was beyond Contractor's reasonable control;

11. Acceptance or payment by Contractor or any of Contractor's employees of any bribe, kick-back or consideration of any kind in exchange for any consideration whatsoever, when such consideration or action on the part of Contractor or Contractor's employees could reasonably be construed as a violation of federal, state or local law;

12. Failure of Contractor to maintain insurance in accordance with the Agreement;

13. Chronic failure of Contractor to consistently meet Response Time requirements as set forth in the Agreement;

14. Failure to submit an audited financial statements prepared by a certified public accountant or public accounting firm within the specified time frame under the terms and conditions outlined in the Agreement;

15. Failure to maintain a performance letter of credit or cash escrow account upon the terms and in the amount specified in Agreement;

16. Any other failure of performance, clinical or other System Standards of Care as required in the Agreement and which is determined by the County Commission to constitute a Default or endangerment to public health and safety.

H. County's Remedies

If conditions or circumstances, constituting a Default as set forth in Section H exist, County shall have all rights and remedies available at law in equity under the Agreement, specifically including the right to terminate the Agreement, the right to pursue Contractor for damages and the right of Emergency take-over as set forth in Section K. All County's remedies shall be uncumulative and shall be in addition to any other remedy available to the County.

I. Provisions for Curing Default and Emergency Take Over

In the event the County Manager determines that there has been a material breach by the Contractor of the standards and performances as defined in this specification, which breach represents an immediate threat to public health and safety, such Default shall constitute a Default of the Agreement. In the event of a Default, County shall give Contractor written notice, return receipt requested, setting forth with reasonable specificity the nature of the Default. Contractor shall have the right to cure such Default within five (5) calendar days of receipt of such notice and the reason such Default endangers the public's health and safety. Within twenty-four (24) hours of receipt of such notice, Contractor shall deliver to County, in writing, a plan of action to cure such Default. If the Contractor fails to cure such Default within the period allowed for cure (with such failure to be determined in the sole and absolute discretion of County) or Contractor fails to timely deliver the cure plan to the County, County may take-over Contractor's operations. Contractor shall cooperate completely and immediately with County to affect a prompt and orderly transfer of all responsibilities to County.

To accomplish continuous delivery of service County may, in exercising an Emergency take-over, take possession of all of the Contractor’s Ambulances, equipment, facilities and records used in the performance of the Agreement. County may retain possession of said equipment, facilities and records until such items can be acquired by County or another Contractor is engaged to perform the service. Should the County exercise this option, it shall pay the Contractor the reasonable rental value of such equipment and facilities during the time they are used by the County. Liability of the County to the Contractor for this period will be that of a service for hire, with ordinary wear and tear specifically exempt from such liability.

The Contractor shall not be prohibited from disputing any such finding of Default through litigation, provided, however that such litigation shall not have the effect of delaying, in any way, the immediate take over of operations by the County. Nor shall such dispute by Contractor delay the County's access to the funds made available by the performance letter of credit. These provisions shall be specifically stipulated and agreed to by both parties as being reasonable and necessary for the protection of public health and safety, and any legal dispute concerning the finding that a Default has occurred shall be initiated and shall take place only after the Emergency take-over has been completed, and shall not under any circumstances delay the process of an Emergency take-over or the County's access to performance security funds as needed by the County to finance such take-over of operations.

Contractor's cooperation with and full support of such Emergency take-over, as well as the Contractor's immediate release of performance security funds to the County shall not be construed as acceptance by the Contractor of the findings and Default, and shall not in any way jeopardize Contractor's right of recovery should a court later find that the declaration of Default was made in error. However, failure on the part of the Contractor to cooperate fully with the County to affect a smooth and safe take-over of operations, shall itself constitute a breach of the Agreement, even if it was later determined that the original declaration of Default by the County was made in error.

J. "Lame Duck" Provisions

Should Contractor fail to prevail in a future procurement cycle, Contractor shall agree to continue to provide all services required in and under the Agreement until the new Contractor assumes service responsibilities. Under these circumstances Contractor will, for a period of several months, serve as a lame duck Contractor. To ensure continued performance fully consistent with the requirements of the Agreement through any such period, the following provisions shall apply:

1. Contractor shall continue all operations and support services at the same level of effort and performance as were in effect prior to the award of the subsequent Agreement to a competing organization, including but not limited to compliance with provisions hereof related to qualifications of key personnel;

2. Contractor shall make no changes in methods of operation which could reasonably be considered to be aimed at cutting Contractor service and operating cost to maximum profits during the final stages of the Agreement;

3. County recognizes that if a competing organization should prevail in a future procurement cycle, Contractor may reasonably begin to prepare for transition of service to the new Contractor. County shall not unreasonably withhold its approval of Contractor's request to begin an orderly transition process, including reasonable plans to relocate staff, scale down certain inventory items, etc., as long as such transition activity does not impair Contractor's performance during this period.

4. During the process of a subsequent competition conducted by County, Contractor shall permit its Non-management personnel reasonable opportunities to discuss with competing organizations the issues related to employment with such organizations in the event Contractor is not the successful Proposer. Contractor may, however, require that its Non-management personnel shall refrain from providing information to a competing organization regarding Contractor's current operations, and Contractor may also prohibit its management level personnel from communicating with representatives of competing organizations during the competition. However, once County has made its decision regarding award, and in the event Contractor is not the winner, Contractor shall permit free discussion between any County-based Contractor employee and the winning Proposer without restriction, and without adverse consequence to any County-based employee.

K. General Provisions

1. Assignment—
   The Contractor shall not assign any portion of the Agreement for services to be rendered without written consent first obtained from the County and any assignment made contrary to the provisions of this section may be deemed a default of the Agreement and, at the option of the County shall not convey any rights to the assignee.

   Any change in Contractor's ownership shall, for purposes of the Agreement, be considered a form of assignment. The County shall not unreasonably withhold its approval of a requested change in ownership, so long as the transferee is of known financial and business integrity for the undertaking.

2. Permits and licenses—
   The Contractor shall be responsible for and shall hold any and all required federal, state or local permits or licenses required to perform its obligations under the Agreement. In addition, the Contractor shall make all necessary payments for licenses and Permits for the services and for issuances of state Permits for all Ambulance vehicles used. It shall be entirely the responsibility of the Contractor to schedule and coordinate all such applications and application renewals as necessary to ensure that the Contractor is in complete compliance with federal, state and local requirements for Permits and licenses as necessary to provide the services. The Contractor shall be responsible for ensuring that its employee's state and local certifications as necessary to provide the services, if applicable, are valid and current at all times.

3. Compliance with laws and regulations—
   All services furnished by the Contractor under the Agreement shall be rendered in full compliance with all applicable federal, state and local laws, ordinances, rules and regulations. It shall be the Contractor's sole responsibility to determine which, and be fully familiar with all laws, rules, and regulations that apply to the services under the Agreement, and to maintain compliance with those applicable standards at all times. Furthermore, the Contractor agrees to perform in accordance with the provisions of any regulations or written guidelines established by the Medical Director.

4. Product endorsement/advertising—
   Contractor shall not use the name of the County for the endorsement of any commercial products or services without the expressed written permission of the County.

5. Audits and inspections—
   County representatives may, at any time, and without notification, directly observe Contractor's operations to include maintenance facility, vehicles and equipment and any Ambulance post location. A County representative may ride as "third person" on any of the Contractor's Ambulance units at any time, provided, that in exercising this right to inspection and observation, County representatives shall conduct themselves in a professional and courteous manner, shall not interfere with the Contractor employee's duties, and shall at all times be respectful of Contractor's employer/employee relationships.

   At any time during normal business hours and as often as may be reasonably deemed necessary, County representatives may observe Contractor's office operations, and Contractor shall make available to County for its examination any and all business records, including incident reports, patient records, financial records of the Contractor pertaining to the Agreement. County may audit, copy, make transcripts, or otherwise reproduce such records including but not limited to contracts, payroll, inventory, personnel and other records, daily logs, employment agreements, and other documentation for County to fulfill its oversight role.

6. Annual financial audit required—
   Contractor shall provide the County with annual audited financial statements prepared by an independent public accounting firm in accordance with generally accepted accounting procedures consistently applied. Statements shall be available within one hundred fifty (150) days of the close of each fiscal year. If Contractor's financial statements are prepared on a consolidated basis, then separate balance sheets and income statements for service rendered to the County pursuant to the Agreement are required and shall be subject to the independent auditor's opinion.

7. Omnibus provision—
   Contractor understands and agrees that for four years following the conclusion of the Agreement it may be required to make available upon written request to the Secretary of the US Department of Health and Human Services, or any other fully authorized representatives, the specifications and subsequent Agreements, and any such books, documents, and records that are necessary to certify the nature and extent of the reasonable costs of services.

8. Return of equipment—
   Contractor agrees to return any County issued EMS equipment in good working order, normal wear and tear excepted, at the termination of the Agreement. For any County equipment not returned at the conclusion of the term or for any equipment returned damaged or otherwise unusable, County shall repair or replace said equipment at Contractor's expense.

9. Warranty regarding consideration and procurement—
   Proposer warrants that it has not employed or retained any company or person other than a bona fide employee working solely for the Proposer to procure or solicit a Agreement under this procurement, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the Proposer, any fee, commission, percentage, brokerage fee, gifts, or other consideration contingent upon or resulting from this procurement.

   Further, Proposer represents that its pricing has been independently arrived at without collusion. It has not knowingly influenced and promises that it will not knowingly influence a County employee or former County employee to breach any ethical standards. It has not violated, and is not violating, and promises that it will not violate the prohibition against gratuities and kickbacks.

   Violation of this warranty shall constitute Default of the resulting Agreement.

10. Relationship of the parties—
    Nothing in the Agreement resulting from this RFP shall be construed to create a relationship of employer and employee or principal and agent, partnership, joint venture, or any other relationship other than that of independent parties contracting with each other solely for the purpose of carrying out the provisions of the Agreement. Nothing in the Agreement shall create any right or remedies in any third party, it being solely for the benefit of the County and the Contractor.

11. Rights and remedies not waived—
    Contractor will be required to covenant that the provision of services to be performed by the Contractor under the Agreement shall be completed without further compensation than that provided for in the Agreement. The acceptance of work under the Agreement and the payment therefore shall not be held to prevent maintenance of an action for failure to perform work in accordance with the Agreement. In no event shall payment of consideration by County constitute or be construed to be a waiver by County of any default or covenant or any Default by Contractor. County’s payment shall in no way impair or prejudice any right or remedy available to the County with respect to such default.

12. Consent to jurisdiction—
    Contractor shall consent to the exclusive jurisdiction of the courts of the State of Florida or a federal court in Florida in any and all actions and proceedings between the parties hereto arising under or growing out of the Agreement. Venue shall lie in Santa Rosa County, Florida.

13. End-term provisions—
    The Contractor shall have ninety (90) days after termination of the Agreement in which to supply the required audited financial statements and other such documentation necessary to facilitate the close out of the Agreement at the end of the term.

14. Arbitration—
    Pursuant to Section V.C.3 which permits arbitration of fee increases for specific items beyond the Contractor's control, before any such arbitration is requested, the requesting party shall notify the other in writing clearly stating the issue, underlying causes and its proposed solution. The other party shall respond in writing within five (5) working days. If satisfactory resolution cannot be reached at this stage, the parties shall enter into binding arbitration in accordance with American Arbitration Association standards. In any such matter submitted to binding negotiations, each party shall pay their own costs including consultant and attorney fees and shall equally share any arbitrator's fee.

15. Notice of litigation.
    Contractor shall agree to notify County within twenty-four (24) hours of any litigation or significant potential for litigation of which Contractor is aware. Further, Contractor will be required to warrant that it will disclose in writing to the County all litigation involving the Contractor, Contractor's related organizations, owners, and key personnel.

VI.
Minimum Qualifications and Documentation

A. Minimum Qualifications and Documentation of Credentials

This section delineates the information and documentation of the Proposer's credentials that is required from Proposer to ascertain whether Proposer, in the County's judgment, is qualified to provide the services to be awarded through this procurement process.

Proposers' credentials will be evaluated based upon objective criteria designed to document their ability to perform if awarded an Agreement. There are three key areas in which minimum qualifications must be established. These include previous experience in managing Emergency services, financial depth and capability, and regulatory compliance.

B. Standard Requirement for Qualification

Entities qualifying under this section which have multiple operational sites/units may use information from any site to establish qualifications. However, information presented which does not reflect the experience of the operational unit, which is the Proposer, shall be so noted.

Should any group of entities submit a Proposal as a joint venture, or should any Proposer intend to utilize a sub-Contractor to fulfill specified aspects of its obligations, any information presented which does not reflect the experience of the operational unit, which will be the primary proposing organization, shall be so noted.

1. Analogous experience required—

   Proposers shall provide:

   a. Documentary evidence, which clearly demonstrates that the Proposer has experience managing an Emergency ALS Ambulance service, in a community with a population of at least 140,000.

      The format for this information will be in the form of a list of communities, in which the service is operated, Medical Director, Contract officer or designated governmental contact person, the number of responses provided in each of the past two years, and a brief description of the community and service.

      Information regarding medical and governmental contacts should include name, title, address, and telephone and fax numbers.

Or,

   b. Documentation of existing sophisticated internal Emergency services management systems and personnel, which can facilitate its transition to managing such a service.

      This information should include descriptions of operational programs including but not limited to:

- Medical training and quality assurance processes;
- Equipment standardization and replacement policies;
- Fleet size, age, standardization and replacement policies;
- Driver training;
- Risk management procedures; and
- Current deficiencies/planned solutions.

c. Proposer shall provide information and documentation of existing management and supervisory strength (including senior management involvement in operations) in order to demonstrate the organization's ability to manage such a program. This information should be provided in the form of names and resumes of existing management and supervisory personnel.

d. Proposer shall demonstrate ability to comply with Response Times by one of the following methods:

i) Experience in managing and operating a service which is required to comply with specified Emergency Response Times based upon fractile compliance (e.g. 90 percent of all requests must be responded to within 8 minutes and 59 seconds). Documentation shall include a copy of the Contract language, regulation, or ordinance which requires compliance and the service's Response Time performance for the past full year for which information is available.

Format—
For the year beginning _____, 200__
and ending _____, 200__

__ percent life-threatening emergencies responded to within___ minutes.

If item (a) is completed, then omit item (ii) below:

Or, if the Proposer does not have experience managing and operating a service, which is required, to comply with specified Response Times

ii) Proposer shall provide information, which demonstrates a clear and convincing capability to implement and manage such a system. The Proposer should include information about what steps, policies, procedures, training, equipment and management techniques would be utilized on award of the Agreement.

2. Demonstration of Financial Depth and Stability Required

Proposers shall provide documentary evidence, which clearly documents the financial history of the organizations and demonstrates that the Proposer has:

a. The financial capability to handle the expansion (including implementation and start-up costs) necessitated by the award of the Agreement.

Proposers shall include copies of its financial statements for the most recent two-year period. If consolidated financial statements are utilized, the individual program unit's financial statements must be separately shown. Audited financial reports are preferable. If audited financial records are unavailable, Proposer must provide unaudited financial statements supported by tax returns.

b. Has expertise in billing Medicare — Part B and other 3rd party payers of Ambulance services.

For the entity submitting its credentials:

- Describe the average days in receivables.
- Disclose and summarize resolutions of any and all Medicare and/or Medicaid inquiries, audits, sanctions or other notice of violations.
- Provide documentation of key billing and collection policies. Specifically, indicate policy and policy change history during past two years regarding policies related to accepting assignment, and turning accounts to collection.
- Describe relationships with managed care organizations. Specifically indicate experience with capitation for Ambulance/medical transportation services.
- Describe use of collection agency and its experience for internal collections.
- Describe Medicare compliance policies.

Or,

Proposer shall provide information, which demonstrates a clear and convincing capability to implement and manage such a billing and collection system. The Proposer should include information about what steps, policies, procedures, training, equipment and management techniques would be utilized on award of the Agreement.

c. Has the ability to secure insurance coverage's required under this procurement. Any existing self-insurance plan used for the purposes of qualification must substantially meet the requirements set forth in this RFP. Proposer shall detail any and all notifications of pending insurance (separate listings for auto and professional liability) claims, investigations, settlements including both status and resolution.

3. Documentation of Regulatory Compliance and Other Litigation

a. The Proposer shall detail any and all regulatory agency investigations, findings, action complaints and their respective resolutions.

b. The Proposer shall detail any other litigation in which Proposer is involved or which is pending.

VII.
Submission and Review of the RFP

A. General Submission Information

1. Procurement time frames—
   The schedule for the Santa Rosa EMS procurement is outlined in *Attachment 8— Procurement Schedule.* Failure to comply with any time frames outlined in the procurement schedule may result in automatic disqualification of the Proposer.

2. Cost of participation—
   All costs of participation in this procurement process shall be borne by the Proposer. The County reserves the right to reject all proposals.

3. Authority to verify credentials and proposal submissions—
   Proposer shall submit executed notarized "investigative authorization forms" for the company(s) whose credentials are submitted for review and for owners, officers, and key personnel. Provided, however, that if the company is a publicly held corporation, only the company release form and personal release forms of managers and key personnel who would be involved in the fulfillment of the Agreement or in the preparation of the proposal need be submitted. A blank copy of each type required release form, which may be duplicated, is provided herein as *Attachment 9 - Investigative Releases.*

4. Own expertise and judgment required—
   Each Proposer is specifically advised to use its own best expert and professional judgment in deciding upon the methods to be employed to achieve and maintain the performance required under the Agreement. By "methods" the County means, compensation programs, shift schedules, personnel policies, supervisory structures, Ambulance deployment techniques, and other internal matters which taken together, comprise each Proposer's strategies and tactics for accomplishing the task. The County recognizes that different Proposers may employ different production methods, perhaps with equal success. By allowing each Proposer to select, employ, and change its production methods, the County hope to promote innovation, efficiency and superior levels of performance.

5. Estimated business volumes—
   The County specifically make no representations or warranties regarding the number of requests for Ambulance service, Ambulance transports, quantities or length of Long Distance transfer services, or frequency of special events coverage that may be associated with this procurement. Any and all historical data on past volumes of business within the County are provided mainly to illustrate the historical level of performance and not as a guarantee of future business volume.

6. Exceptions—
   Proposers taking material exception to the County's specifications shall be disqualified. The purpose of submittal of written questions is to provide clarification of the RFP and its specifications before submission of proposals. If your organization has questions regarding the RFP and its specifications, submit your request for clarification at or before the question submittal deadline to obtain a ruling on the matter before submitting the proposal.

7. Official contacts only/requirement to disqualify—
   Proposers are advised that all correspondence regarding this procurement should be made in writing to Orrin Smith, 850-983-1870 at 6495 Caroline Street, Milton, FL 32570.

   Answers to substantive questions raised by any Proposer shall be sent in written form to every Proposer. Any information obtained by Proposers from any source other than written communication from the Procurement Coordinator should be considered unofficial and quite possibly in error.

   All Proposers hereby agree that the County shall retain one complete set of all submitted materials for its files and two sets of the winning proposal for its records. If the Proposers desire other copies be returned it shall advise County in writing of such request, and all material, except as defined above, shall be returned.

8. Proposal deposit required—
   No deposit is required.

9. Sealed Submission—
   Each Proposer should submit an original, so marked, and twelve (12) copies of its proposal, signed by the offers contractually binding authority. All proposals must be sealed and labeled on the outside of the sealed container to show the following: Proposal to Santa Rosa County, name of Proposer, address of Proposer and name of primary contact person. Submissions must be received at the County Procurement Department, 6495 Caroline Street, Milton, FL 32570 no later than the time and date specified herein.

B. Mandatory Table of Contents

In order to ensure that the evaluation of proposals is as equitable as possible, all proposals shall be submitted in the following format: Order and numbering conventions should be consistent with the required table of contents. The proposals will be reviewed in comparison with other Proposer's offerings for each section identified in Section VII. D and E., Review of Proposals .

I. Introduction

A. Description of the Proposed Organizational Structure

II. Clinical Performance
- A. Suggested Medical Protocols
- B. Clinical Credentials of Field Personnel
- C. Medical Equipment and Supplies
- D. Financial Reserve for Clinical Upgrades
- E. Quality Improvement Processes
- F. In-service Training
- G. Employee Recruitment, Screening and Orientation

III. Prevention/Access

IV. Human Resources
- A. Employee Work Schedules
- B. Health and Safety Programs

V. Customer Service Monitoring and Development
- A. Program Development
- B. Mechanisms, record keeping and time frames for resolution of customer service inquiries (Non-billing)

VI. Fleet and Equipment Issues
- A. Quality of Vehicles Provided
- B. Ambulance and Equipment Maintenance Practices
- C. Ambulance and Equipment Replacement

VII. Billing and Collection
- A. Billing Processes to Maximize 3rd Party Payments
- B. Mechanisms, Record keeping and Time frames for resolution of customer service inquiries (billing)

VIII. Organizational Experience and Key Personnel
- A. Experience Providing Similar Service
- B. On-Site and Off-Site Personnel

IX. Administrative
- A. Takeover Schedule
- B. Provision of Insurance
- C. Method of Providing Performance Security
- D. Subsidy and User Fee Information

C. Proposal Format and Description of Required Contents

The Proposer shall address each item in this section. Programs and offerings will be compared with other proposals. Minimum requirements are indicated in this section and other sections of this RFP. Any Proposer whose response fails to incorporate or utilize these minimum standards may be ruled Non-Responsive. The Proposer, at its option, may offer higher levels of performance for any component addressed in this RFP.

I. Introduction—

A. Description of Proposed Organizational Structure—
The Proposer shall comprehensively describe the nature of the organizational entity proposed to be directly responsible for the provision of services under the Agreement. This shall include any relationship the proposed organization may have to a "parent" or "sister" company. Financial relationships, ownership, shared directorship, or relationship with other organizations shall be defined. Organizational charts and a complete description of the proposed organization should be included.

II. Clinical Performance—

A. Suggested Medical Protocols
Minimum: Medical protocols, which meet or exceed the clinical protocols provided in the RFP and are currently approved for use in the system.

B. Clinical Credentials of Personnel
Minimum: Personnel, which make up every Ambulance crew, will be appropriately licensed and certified for provision of Advanced Life Support. Each Ambulance shall be staffed with at least one (1) EMT-P.

Position and organizational chart should be included. The proposed job descriptions and the certification/licensure levels of personnel should be provided. The Contractor should demonstrate its commitment to clinical excellence by including programs designed to respond to system clinical needs and to proactively enhance system clinical performance.

C. Medical Equipment and Supplies
Minimum: Description of the types of medical equipment and supplies that will be utilized to meet the licensure requirements.

Proposers shall describe the types and amounts of medical equipment that will be supplied for each Ambulance. The Contractor should demonstrate its commitment to clinical excellence by utilizing medical equipment and supplies that will optimize field medical care.

D. Financial Reserve for Clinical Upgrades
Minimum: List the annual dollar amount to be reserved for Non-mandatory clinical upgrades.

Proposers are eligible for negotiated fee increases for externally imposed changes in the clinical requirements. However, it is also anticipated that other internal clinical enhancements will be desirable during the term.

E. Internal Quality Improvement Processes
Minimum: Internal quality improvement program, which identifies deviations from Medical Protocols, incomplete and inaccurate Patient information, and improvement opportunities.

The Proposer shall describe a comprehensive quality improvement program covering all aspects of the Contractor's operations, which it intends to utilize in the performance of the Agreement. The description of the program should include the type, frequency, and quantity of information, which would be provided to the Medical Director to support clinical oversight responsibilities.

F. In-Service and Clinical Training Programs
Minimum: Necessary programs for employees to retain certification and meet local requirements for respective positions.

Proposers shall describe continuing education and special classes to be offered to personnel, include organizational policies as to what programs are voluntary and which are required, and propose clinical upgrade training to be utilized as well as training and continuing education to address on-going operational and clinical activities.

G. Employee Recruitment, Screening and Orientation
Minimum: Document mechanisms to ensure that well qualified employees are recruited, selected and oriented to the system.

Proposers shall describe the comprehensive program it will utilize to recruit, screen and orient employees. The description should include recruitment methods, screening processes and tools, and orientation processes.

III. Prevention/Access—

Minimum: Development and implementation of community based programs to facilitate and improve injury/illness prevention and system access.

Proposer shall describe the type programs it would offer, proposed training equipment, the job descriptions of the key staff for this component. Proposers should describe innovative approaches to prevention and the dedicated staff commitment and Non-dedicated (in-service hours) commitment to this component.

IV. Employee Resources/Relations—

A. Employee Work Schedules

Minimum: Schedules shall conform to FLSA standards. Claims for exemptions should be accompanied by a legal opinion as to validity. Number and percent of full-time versus part-time employees is to be identified.

Each Proposer shall include hours to be worked by both part-time and full time employees.

B. Internal Safety and Loss Control Programs

Minimum: The Contractor shall propose and demonstrate that it will have multiple programs to enhance the safety and health of the work force and Patients. These shall minimally include service-wide driver training programs, safety and risk management.

The Proposer shall identify its intention to implement a driving program equivalent to the “All-Safe” driving program. The Proposer should also present its policies and intentions regarding safety and health maintenance of its employees.

V. Customer Service Development and Monitoring

A. Program Development

Minimum: Program to enhance customer service perception and reality of the EMS system among key constituency groups.

Proposers shall describe mechanisms to facilitate positive relationships with Patients/families, physicians, employees, hospital and nursing home personnel, law enforcement, public officials, and the media.

B. Monitoring Mechanisms

Minimum: Mechanisms and time frames for resolution of inquiries shall be established.

Proposer shall describe specific mechanisms, record keeping methods and time frames for resolutions of customer service inquiries (Non-billing), and the methods for monitoring employee customer service performance.

VI. Vehicles and Equipment

A. Quality of Ambulances Supplied/Ambulance Replacement

Minimum: Serviceable “Type I, II, or III” vehicles meeting all state requirements required for certification to provide Advanced Life Support.

Proposer shall describe the make, model, manufacturer, quantity, age, mileage replacement policy and other such information as may assist the review committee in assessing the quality of Ambulances to be utilized.

No evaluation shall be made on the type Ambulances (I, II or III) supplied; rather, review shall be based upon the replacement and fleet reserve/peak staffing policies.

B. Ambulance Maintenance Program

Minimum: Ambulance maintenance program which realistically provides that enough Ambulances will be available to meet contractual performance requirements.

Each Proposer shall completely describe the Ambulance maintenance program and qualifications of and training required for personnel involved in Ambulance maintenance.

C. Equipment Maintenance and Replacement

Minimum: Maintenance practices which provide that equipment is kept in such condition as to reasonably expect that it will be functional when needed. Joint Commission on Healthcare Organizations (JCHO) standards for specified sophisticated equipment maintenance shall be utilized.

Each Proposer shall describe the equipment testing and maintenance programs proposed for utilization in the County's system.

VII. Billing and Collection

A. Billing Processes to Maximize 3rd Party Payments

Minimum: Outline billing and collection policies including whether the Contractor does or does not accept assignment.

Each Proposer should outline specific collection policies for use in the EMS system including invoicing, collection time frames, method of internal collection, write-down and write-off policies. Methods for determining medical indigency also shall be described.

B. Mechanisms to Record and Resolve Billing Inquiries

Minimum: Mechanisms and time frames for resolution of billing inquiries shall be established.

Proposer shall describe customer service policies and specific mechanisms, record keeping methods and time frames for resolutions of billing inquiries and the methods for monitoring billing personnel's customer service performance.

VIII. Organization Experience and Key Personnel

A. Experience Providing Similar Services

Minimum: The Proposer shall have experience in providing services in a comparable community.

Each Proposer shall describe the communities, services, and systems. Provide references, which directly indicate satisfactory performance.

B. On-site and Off-Site Personnel

Minimum: Proposer will provide resumes of all key management and middle management personnel who will be working on-site in the County system and those working off-site who will support operations.

IX. Administrative

A. Assumption of Service Responsibilities

Minimum: Describe the date that the organization would be ready to assume service responsibilities.

Each Proposer shall describe any early takeover capabilities. If an early takeover is possible, describe any requirements.

B. Provision of Insurance

Minimum: Provider shall evidence ability to meet all requirements described in the RFP.

C. Method of providing Performance Security

Minimum: Each Proposer shall describe the method by which it will provide the required performance security.

D. Fee Schedule Required

Minimum: Each Proposer shall complete a subsidy user-fee schedule for the first year of the term. The subsidy and user-fees entered on the fee schedule in *Attachment 10 — Official Offer Required for Submission* will be those which the Proposer offers in response to this RFP adhering to all of the minimally required and proposed additional commitments, performance standards and offerings.

X. Alternate submittals for option of deletion of the Midway Fire Protection District from the service area. Santa Rosa County shall entertain but not require alternate submittals that exclude the Midway Fire Protection District from the service area. Such alternate shall not be submitted if deletion of the service area would result in any degradation of service to any other area of Santa Rosa County. If a submittal is made for this alternate, contractor shall affirmatively indicate and demonstrate that no degradation of service will result to any other area of Santa Rosa County. Additionally any alternate submittal shall specify any impact that the Midway Fire Protection District exclusion would have on subsidy/user fee levels.

D. Review of Proposals

During the review phase, proposals are reviewed by selected staff to ascertain which proposals address all requirements of the RFP and to prepare technical and financial analysis to document the adequacy of proposals. Proposals determined to be technically non-responsive shall be eliminated at this point. Once the qualified proposals have been determined, oral presentations will be provided to the ~~staff~~ **county** by the selected Proposers to clarify specific matters presented in the Proposals.

1. Investigations—

Investigations of Proposers submissions and services may be conducted as deemed necessary by the County. This could include a site visit should one be required.

2. Oral presentations—

Oral presentations may be required by staff and/or the County Commission. These presentations will be conducted in the County at a time and place prescribed by the County.

E. Review Criteria

It is the County's specific intent that the clinical and operational quality of service be the primary factor in this procurement. User fees are also an important consideration. Therefore, the County's review includes the opportunity to recognize those Proposers whose service quality is independently judged on an objective basis to be clearly superior. The categories listed below will serve as a guide for the county in its review.

ITEM

I. Introduction
- A. Description of the Proposed Organizational Structure

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- D. Financial Reserve for Clinical Upgrades
- E. Quality Improvement Processes
- F. In-service Training
- G. Employee Recruitment, Screening and Orientation
- H. Preceptor Qualifications/Status

III. Prevention/Access

IV. Human Resources
- A. Employee Work Schedules
- B. Health and Safety Programs

V. Customer Service Monitoring and Development
- A. Program Development
- B. Mechanisms, record keeping and time frames for resolution of customer service inquiries (Non-billing)

VI. Fleet Issues
- A. Quality of Vehicles Provided
- B. Ambulances and Equipment Maintenance Practices
- C. Ambulances and Equipment Replacement

VII. Billing and Collection
- A. Billing Processes to Maximize 3rd Party Payments
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- A. Experience Providing Similar Service
- B. On-Site and Off-Site Personnel

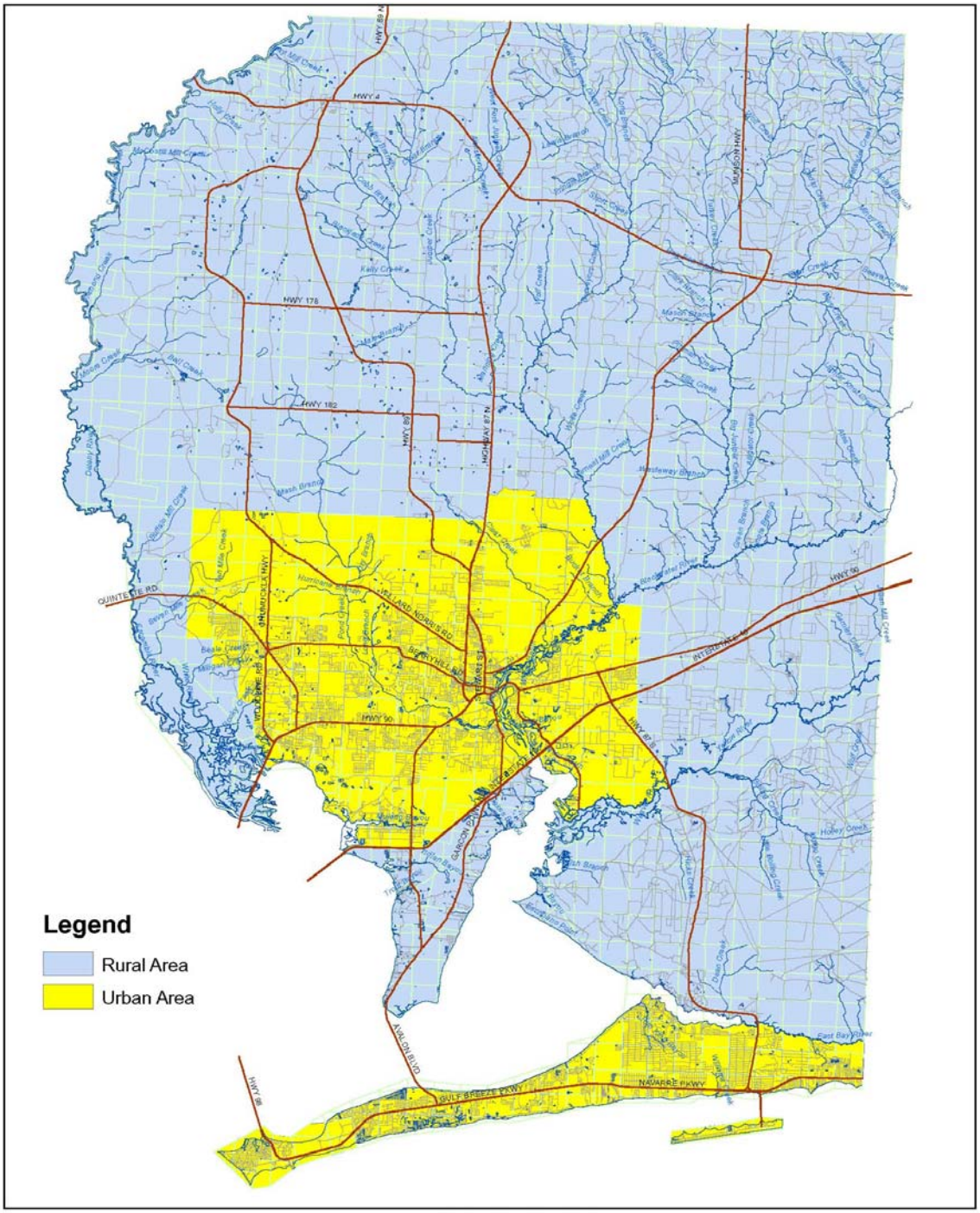
IX. Administrative

A. Early Takeover
B. Provision of Insurance
C. Method of Providing Performance Security

Pricing Information
Subsidy and User Fee Information

ATTACHMENT 1
SERVICE AREAS
AND
RESPONSE TIME
STANDARDS

SERVICE AREA & RESPONSE TIME STANDARDS



ATTACHMENT 2
DEFINITIONS

DEFINITIONS

Advanced Life Support (ALS) means intravenous therapy, endotrachial entubation, defibrillation and other invasive treatment as authorized by State Statutes and Regulations.

Agreement means that legal document to be executed to embody the successful proposer's response to this RFP.

Agreement Administrator means the City Administrator, or his/her designee. The City Administrator shall serve as the liaison between the Contractor in the County.

Ambulance means any vehicle, which is equipped to transport patients, in a reclining position, to or from health care facilities.

Base Station Physician means a physician authorized to practice under Florida Statues and regulations knowledgeable in the medical protocols, radio procedures and general operating policies of the EMS System, and a person from whom emergency medical technicians and paramedics at any training level, may take medical direction by radio or other remote communication device.

County Emergency Management Communications Center means the single facility located in the County's Emergency Operations Center Headquarters that is the 911 Public Safety Answering Point (PSAP), which receives all 911 emergency medical calls, notifies and dispatches first responders, and Contractor ambulances.

Contractor means that organization selected by the County, pursuant to a competitive Request for Proposal process, which is the County's exclusive Emergency Ambulance Contractor within the County and the designated County's service area.

County means Santa Rosa County, Florida.

Default means the Contractor's non-compliance with the standards and performances as defined in this RFP, including but not limited to those identifed at Section V.G.

Emergency means any request for ambulance services received via 911 which may be of a life- or limb- threatening nature and which apparently requires immediate response by an ambulance.

Emergency calls are those received via the 911 Public Safety Answering Point(s) (PSAP).

Emergency Medical Personnel means those persons who are First Responders, Emergency Medical Technicians or Paramedics volunteering or working for the Fire Districts/Departments and the Contractor.

EMS means emergency medical services, including both emergency and non-emergency ambulance services.

DEFINITIONS

EMS system means the comprehensive coordinated arrangement of resources and functions to respond to medical emergencies and provide emergency and non-emergency ambulance service.

First Responder means any person, Fire Department vehicle, police vehicle or non-transporting ambulance capable of providing appropriate basic or advanced first responder service, under the first responder program approved and administered by the Medical Director.

High Performance (ALS) EMS System means those systems, which are clinically effective, provide response time reliability and cost effectiveness simultaneously.

Initial Coverage Plan means that plan to deploy Contractor resources during the first 90 days of operation to specific locations on an hour by hour, day by day basis to achieve the response time requirements.

Long Distance Transport means any transport originating in the County and terminating at a destination other than Santa Rosa County, Okaloosa County, Escambia County, FL and Escambia County, AL and any transport originating from other than Santa Rosa County, Okaloosa County, Escambia County, FL and Escambia County, AL and terminating in the County.

Medical Director means the licensed physician (or his/her designee) selected by the County who serves carries out the duties as described in, but not limited to Section IV.A.

Medical Protocol means any diagnosis-specific or problem oriented written statement of standard procedure, or algorithm, promulgated by the Medical Director as the medically appropriate standard of out-of-hospital care for a given clinical condition.

Medical Priority Dispatch System (MPDS) means that system to prioritize incoming medical calls as outlined by the National Academy of Emergency Dispatch.

Mutual Aid Agreement means a written agreement between one or more providers of emergency medical services whereby the signing parties agree to lend aid to one another under conditions specified in the agreement and as approved by the Medical Director as to quality of care and medical accountability.

Minor Infractions means those individual instances of non-compliance with the Contractor performances (e.g. response time to a single incident) required throughout the RFP.

DEFINITIONS

Non-Emergency means any request for ambulance transport service for a patient, which is not an emergency request.

Off-line Medical Control means the provision of prospective and retrospective medical direction services provided by the Medical Director.

On-line Medical Control means the provision of interactive medical direction during an EMS assignment by the Medical Director or other authorized physician.

Out-of-chute means the elapsed interval between ambulance alert and the time the ambulance is enroute to the scene.

Patient means an individual who is either ill, sick, injured, wounded, helpless or otherwise incapacitated, and who is in need of, or is at risk of needing, medical care or assessment during transportation to or from a health care facility, and who is reclining or should be transported in a reclining position.

Permit means that document required to be obtained by (a) the County Ambulance Service Contractor, (b) each emergency medical personnel, and (c) for each ambulance.

Person means and includes any individual, firm, association, partnership, corporation, or other group or combination acting as a unit.

Preceptor means that person authorized by the Medical Director to serve an instructor within the system.

Priority means the assigned call priority number (i.e., Priority 1, 2, 3 or 4) of all requests for an ambulance, which are received by the County Emergency Management Communications Center at the time of the conclusion of receipt of a request for ambulance service. Such priorities shall be assigned at the time the call is received by the County Emergency Management Communications Center, pursuant to telephone algorithms and priority dispatch protocols approved by the Medical Director.

Proposer means an organization submitting responses to this Request for Proposal.

Response Time (Ambulance) means the actual elapsed time between conclusion of receipt of notification (e.g. address, callback number and presumptive designation) by the Contractor from the County's Emergency Management Communications Center that an ambulance is needed at a location and the actual arrival of an ALS ambulance staffed and equipped to operate as a an ALS ambulance unit under Florida regulations at the designated location within the service area.

DEFINITIONS

Response Time (First Responder Unit) means the actual elapsed time from the receipt of request for first response service from the County's Emergency Management Communications Center until the actual arrival of the first response unit at the designated location.

Response Time Clock means the computer aided dispatch system's internal clock measuring response times and other time intervals.

Response Time Standards mean:

Santa Rosa County	Urban Area Response Time Standard	Rural Area Response Time Standard
Bravo, Charlie, Echo and Delta Calls	Contractor's ambulance to be on scene within 10 minutes, zero seconds from Contractor's receipt of call with 90% reliability *If* Contractor or Fire non-transport ALS unit will arrive within 10 minutes then Contractor's ambulance to be on scene within 14 minutes, zero seconds from Contractor's receipt of call with 90% reliability	Contractor's ambulance to be on scene within 18 minutes, zero seconds from Contractor's receipt of call with 90% reliability *If* Contractor or Fire non-transport ALS unit will arrive within 18 minutes then Contractor's ambulance to be on scene within 22 minutes, zero seconds from Contractor's receipt of call with 90% reliability
Alpha calls (non-life threatening)	Contractor's ambulance to be on scene within 20 minutes, zero seconds from Contractor's receipt of call with 90% reliability	Contractor's ambulance to be on scene within 25 minutes, zero seconds from Contractor's receipt of call with 90% reliability

Non-emergency/inter-facility call responses: Contractor will use best efforts to ensure that all non-emergency calls are answered without undue delay.

DEFINITIONS

Senior Crew Member means that person among the certified personnel assigned to an ambulance, not the driver, who is a certified EMT-paramedic designated as the person in command of the ambulance.

Service Area means that area which is contained within the boundaries of Santa Rosa County, Florida as delineated in *Attachment 1 — Service Area & Response Time Standards.*

Special Event means any public event located within the Primary Service Area for which ambulance service is arranged in advance, and for which an ambulance (or ambulances) is hired directly by the sponsor of the event, and for which a fee for transport may or may not be charged to the patient.

System Standard of Care means the written body of standards and policies governing clinical aspects of the EMS system. As used in this context, System Standard of Care is a comprehensive term including:

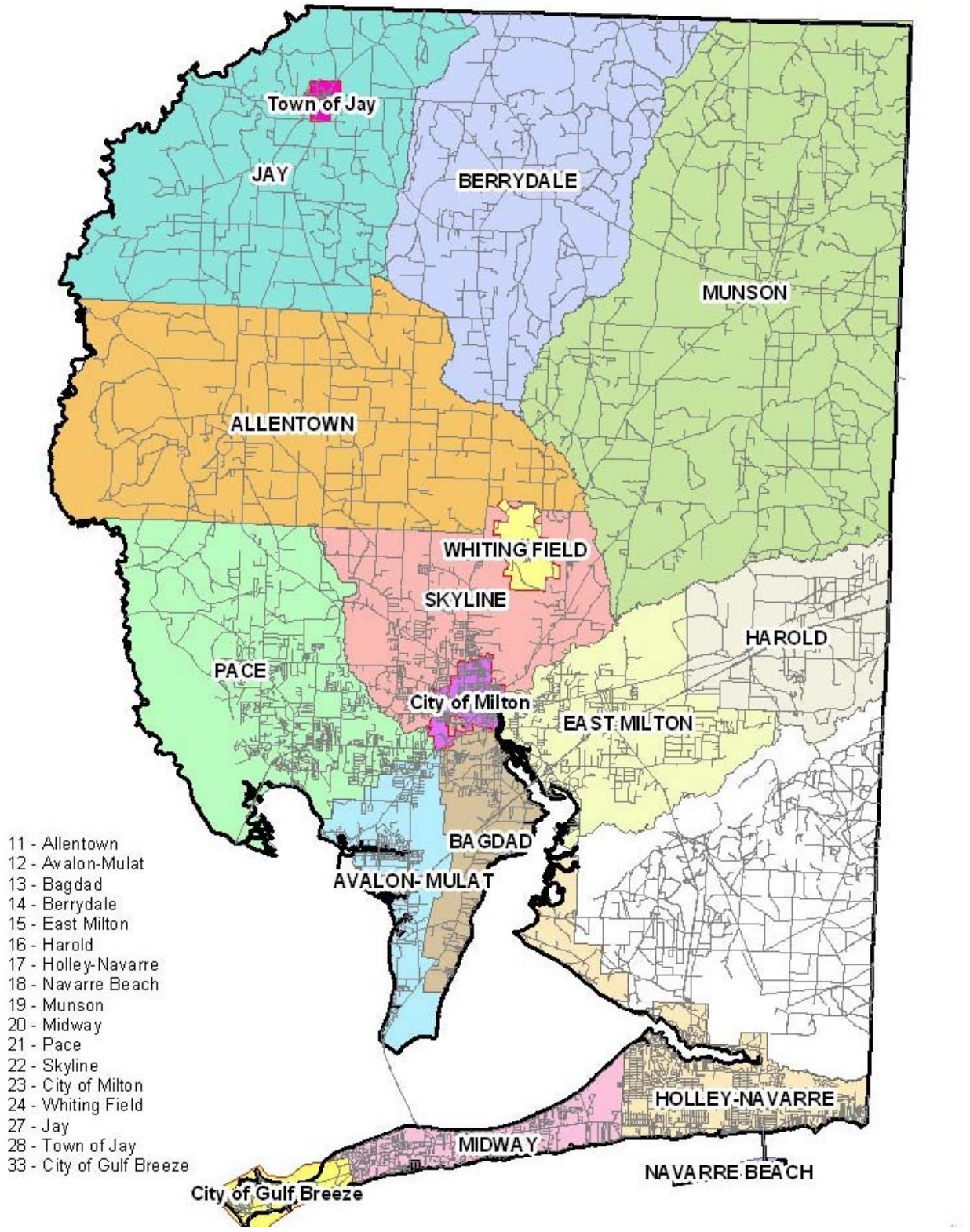
(a) Input standards (e.g., personnel certification requirements, in-service training requirements, equipment specifications, on-board inventory requirements, and other requirements, which the system must fulfill before receipt of a request for service);

(b) Performance standards (e.g., priority dispatching protocols and pre-arrival instructions, medical protocols, standing orders, response time standards, and other performance specifications describing how the system should behave upon receipt of a request for service);

(c) Outcome standards (e.g., target survival rates for certain narrowly defined presenting problems or presumptive diagnoses, such as witnessed cardiac arrests involving patients whose medical histories meet defined criteria). Outcome standards are results the system intends to achieve by meeting its input and performance standards.

ATTACHMENT 3
SANTA ROSA COUNTY
FIRE DISTRICTS

SANTA ROSA COUNTY FIRE DISTRICTS



ATTACHMENT 4
LISTING OF HOSPITAL AND MEDICAL FACILITY DESTINATIONS

LISTING OF HOSPITALS AND MEDICAL FACILITY DESTINATIONS

FACILITY TYPE	NAME	ADDRESS	CITY
Medical	SR Medical Center	6002 Berryhill Rd.	Milton
Medical	Gulf Breeze Hospital	1110 Gulf Breeze Pkwy.	Gulf Breeze
Medical	Jay Hospital	1414 S. Alabama St.	Jay
Medical	Baptist Hospital	1000 W. Moreno St.	Pensacola
Medical	Sacred Heart	5151 N. 9th Avenue	Pensacola
Medical	West Florida Medical Center	8383 N. Davis Hwy.	Pensacola
Medical	Naval Hospital	5600 W. Hwy 98	Pensacola
Medical	FT Walton Beach Medical Center	1000 NW Mar-Walt Dr.	FT Walton Bch
Medical	Eglin AFB ER	307 Boatner Rd.	FT Walton Bch
Nursing	Annette's Rest Home	6913 Olsen Rd.	Bagdad
Nursing	Asbury Place of GB	3428 Gulf Breeze Pkwy.	Gulf Breeze
Nursing	Bay Breeze Nursing & Retirement Center	3375 Gulf Breeze Pkwy.	Gulf Breeze
Nursing	Berryhill Manor	5544 Swanner Rd.	Milton
Nursing	Forsyth House	5887 Berryhill Rd.	Milton
Nursing	Sandy Ridge	101 Glover Lane	Milton
Nursing	SR Health & Rehab	5386 Broad St.	Milton
Nursing	Summer Set Facility	4029 Garcon Point Rd.	Milton
Nursing	The Heritage	5530 Northrop Rd.	Milton
Nursing	The Villas at Gulf Breeze	101 McAbee Court	Gulf Breeze
Mental	West FL Community Care Facility	5500 Stewart St.	Milton
Treatment	The Friary	4400 Hickory Shores Blvd.	Gulf Breeze
Treatment	Twelve Oaks	2068 Health Care Ave.	Navarre

ATTACHMENT 5
FIRE DISTRICT: CURRENT MEDICAL SKILL LEVELS

Profile - Santa Rosa County First Responders			
Name	***Volunteer or Paid Personnel***	***No. Active EMS Volunteers or Employees***	***Medical Care Level***
North End Fire Departments			
Allentown	Volunteer	6 to 8	First Responder
Jay	Volunteer	18	First Responder
Berrydale	Volunteer	6 to 8	First Responder
Munson	Volunteer	16	First Responder
Central County Fire Departments			
Pace	Volunteer	36	First Responder
Skyline	Volunteer	18	First Responder
Milton	Paid	17	Emergency Medical Technician
Avalon-Mulat	Volunteer	13	First Responder
Bagdad	Volunteer	10	First Responder
East Milton	Volunteer	20	First Responder
Harold	Volunteer	5	First Responder
South End Fire Departments			
Gulf Breeze*	Volunteer	1 paid + 20 volunteers	First Responder
Midway	Paid	28 paid	Paramedic
Holly-Navarre	Volunteer and Paid	144 paid + 22 volunteers	First Responder
Navarre Beach	Volunteer and Paid	9 paid + volunteers	Emergency Medical Technician

ATTACHMENT 6
LISTING OF
REQUIRED EQUIPMENT
AND SUPPLIES

LISTING OF REQUIRED EQUIPMENT AND SUPPLIES

Ambulances are to be equipped and stocked with supplies in compliance with Florida Administrative Code, Chapter 401, Part III Medical Transportation Services, other administrative procedures developed by the State of Florida and in compliance with the Santa Rosa County Protocols, Procedures and Equipment listed in Attachment 7 — Medical Protocols of this document.

ATTACHMENT 7
MEDICAL PROTOCOLS

MEDICINES

ALBUTEROL
(PROVENTIL, VENTOLIN)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Sympathomimetic, Beta Agonist

INDICATIONS: Asthma
Reversible bronchospasm associated with COPD

CONTRAINDICATIONS: Known hypersensitivity to the drug
Symptomatic tachycardia

ACTION: Bronchodilation

SIDE EFFECTS: Palpitations
Anxiety
Headache
Dizziness
Sweating

DOSAGE: **Nebulized treatment**

Adult
0.5 ml (2.5 mg) in 2.5 ml Normal Saline over 5 – 15 minutes. **May repeat once, if third treatment is indicated, notify on-line Medical Control.**

Pediatric
0.15 mg (.03 ml)/kg in 2.5 ml normal saline. **May repeat once, if third treatment is indicated, notify on-line medical Control.**

Metered-Dose Inhaler
1 – 2 sprays (90 micrograms per spray)

ASPIRIN
(ASA, SALICYLIC ACID)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Non-steroidal anti-inflammatory

INDICATIONS: New onset of chest pain suggestive of acute MI

CONTRAINDICATIONS: Prior use of aspirin (within 24 hours)
Currently using anticoagulants (i.e. Coumadin, Heparin, Ticlid)
Peptic ulcer disease
Asthma
Allergies to aspirin or other anti-inflammatories
Bleeding disorders (i.e. hemophilia, platelet disorders)

ACTION: Blocks platelet aggregation
Anti-inflammatory

SIDE EFFECTS: Increased bleeding
GI distress
Wheezing

DOSAGE & ADMINISTRATION:
Four 81mg "baby" aspirin, PO. May be given with a small amount of water, if requested.

ATROPINE
(ATROPINE SULFATE)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Anticholinergic, parasympatholytic

INDICATIONS: Symptomatic sinus bradycardia
Partial heart blocks
Bradyarrhythmia resulting in lowered cardiac output, ventricular irritability
Antidote for insecticides and nerve gas
Asystole and idioventricular rhythm

CONTRAINDICATIONS: Glaucoma, allergy, tachycardia

ACTIONS: Blocks vagal stimulation, results in increased SA node discharge
Increased speed of conduction across AV
Increased cardiac output

SIDE EFFECTS: Dilated pupils may be expected, dry mouth, flushed skin, mental confusion, acute onset of glaucoma, ventricular irritability, increased infarct size

DOSAGE: ADULT
0.**5** – 1.0 mg IV slowly (over 1 minute)
May be repeated up to 0.04 mg/kg
Dose less than 0.5 mg may increase bradycardia
Rate should increase 20 beats/minute for every 0.5 mg dose
Dosage via endotracheal tube is 2 – 2.5 mg.

PEADIATRIC
0.02 mg/kg/dose, minimum 0.1 mg total dose
Maximum single dose (child: 0.5 mg, adolescent: 1.0 mg)
Maximum total dose (child: 1.0 mg, adolescent: 2.0 mg)
Dosage via endotracheal tube is 2 – 2.5 times IV dose

BENADRYL
(DIPHENHYDRAMINE)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Antihistamine

INDICATIONS: Anaphylaxis
Allergic reactions
Dystonic reactions due to phenothiazines (i.e. Thorazine)

CONTRAINDICATIONS: Asthma
Nursing mothers

ACTION: Blocks histamine receptors
Has some sedative effects

SIDE EFFECTS: Sedation
Dries bronchial secretion
Blurred vision
Headache
Palpitations

PRECAUTIONS: Hypotension

HOW SUPPLIED: 50 mg pre-filled syringe

DOSAGE: ADULT
15 – 50 mg

PEDIATRIC
1 mg/kg (up to 50 mg in 6 – 12 year old children, up to 25 mg in 2 – 5 year old children)

ROUTE: Deep IM
Slow IV push

DEXTROSE
(D50W, D25W)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Carbohydrate

INDICATIONS: Hypoglycemia

CONTRAINDICATIONS: None if documented hypoglycemia

ACTION: Supplies supplemental glucose in cases of hypoglycemia

SIDE EFFECTS: Local venous irritation

HOW SUPPLIED: 25 gm pre-filled syringe

DOSAGE:

ADULT
25 gm (50 ml of D50W), IV

PEDIATRIC
.5 – 1.0 gm/kg gm/kg of D25W slowly, IV

D50W should be diluted 1:1 with Bacteriostatic saline (or IV fluid) to produce D25W

ROUTE: IV

DOPAMINE
(INTROPIN)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Sympathomimetic

INDICATIONS: Cardiogenic shock

CONTRAINDICATIONS: Uncontrolled arrhythmias

ACTION: Positive inotropic effect (increased cardiac output)
Dilates mesenteric and renal vessels (increases urine output)

SIDE EFFECTS: Ectopy – PVC's (if patient begins having PVC's after dopamine is begun, turn it off)
Nausea, vomiting
Angina
Dyspnea
Headache
Hypotension at low doses

HOW SUPPLIED: 200 mg per glass ampule

DOSAGE: 200 mg in 250 cc
Drip rate depends on effect desired and patient's body weight

2 – 10 mcg/kg/minute = increased cardiac output (average dose – 5 mcg/kg/min)

ROUTE: IV with dial-a-flow

EPINEPHRINE
MEDICAL PROTOCOLS – 2004

CLASSIFICATION:	Sympathomimetic
INDICATIONS:	Asthma (bronchodilator) Anaphylactic shock Cardiac arrest Fine ventricular fibrillation Asystole
CONTRAINDICATIONS:	CHF, shock, glaucoma, tachycardia, hypertension
ACTIONS:	Alpha – vasoconstriction of bronchial muscles Beta – increased heart rate, increased cardiac output, positive inotropic effect Enhances effectiveness of CPR & defibrillation
SIDE EFFECTS:	Anxiety Fear Headache Palpitation PVC's Tachycardia Increased blood pressure Trembling
PRECAUTION:	Inactivated when mixed with or given with Bicarb
HOW SUPPLIED:	1:10,000 – 1 mg pre-filled syringe 1:1,000 – 1 mg ampule
DOSAGE:	**CARDIAC** 5 – 10 cc of 1:10,000 solution (0.5 – 1.0 mg) IV push every 5 minutes (1 cc of 1:1,000 diluted in 9 cc saline or IV fluid makes 1:10,000 solution if pre-loaded not available) When given during a code, continue CPR to circulate the drug **ASTHMATIC** Up to 0.5 cc of 1:1,000 solution SQ Allergic reaction: 0.3 – 0.5 mg of 1:1,000 SQ **PEDS DOSAGE** 0.01 mg/kg SQ Max 0.5 mg
ROUTE:	IV SQ ETT - The dose of epinephrine given down the endotracheal tube is 2.5 times the IV dose (i.e. 2.5 mg of 1:1,000)

GLUCAGON
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Hormone (anti-hypoglycemic agent)

INDICATIONS: Hypoglycemia

CONTRAINDICATIONS: Hypersensitivity to glucagon

ACTION: Causes breakdown of glycogen to glucose
Elevates blood glucose level
Increases cardiac contractility
Increases heart rate
Inhibits glycogen synthesis

SIDE EFFECTS: Few in emergency situations

PRECAUTION: Only effective if sufficient quantities of glycogen are stored within the liver
Use with caution in patients with cardiovascular or renal disease

HOW SUPPLIED: Pre-packaged with 2 bottles. Dilutent is added to drug, mixed and delivered

DOSAGE: ADULT
1.0 mg intramuscularly (IM)

PEDIATRIC
0.03 mg/kg

ROUTE: IM

LASIX
(FUROSEMIDE)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Potent diuretic

INDICATIONS: CHF
PULMONARY EDEMA

CONTRAINDICATIONS: Allergy
Pregnancy
Electrolyte depletion

ACTION: Water diuresis (prevents re-absorption of Na+ in kidney causing the Sodium level in the blood to pull water from body and excrete it).

Venous pooling (reduces venous return)

SIDE EFFECTS: Electrolyte imbalance
Leg cramps (potassium loss)
Allergy
Nausea, vomiting
Deafness

HOW SUPPLIED: 40 mg vials

DOSAGE: Up to 80 mg slowly

ROUTE: IV

LIDOCAINE
(XYLOCAINE)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION:	Antiarrhythmic agent Local anesthetic
INDICATIONS:	Ventricular ectopy Frequent PVC's Closed coupled PVC's Multifocal PVC's Short runs of PVC's (3 or more in a row) Ventricular tachycardia Has been known to help some SVT's
CONTRAINDICATIONS:	Allergy Blocks Bradyarrhytmias
ACTION:	Raises fibrillation threshold Decreases automaticity of Purkinje fibers Has rapid onset with brief duration Effect dissipates in 20 minutes Large doses can decrease cardiac output, heart rate and blood pressure, and increase block (usually not significant)
SIDE EFFECTS:	Bradyarrhythmias Blocks Numbness of tongue and mouth Slurred speech Ringing in ears Deafness (transient) Seizures Mental confusion Low blood pressure and muscle twitching
HOW SUPPLIED:	100 mg pre-filled syringe
DOSAGE:	Bolus – 1- 1.5 mg/kg (usually 75 – 100 mg) IV slowly Repeat dose – 0.5 - .75 mg/kg q 8 – 10 minutes to a total of 3 mg/kg (200 – 300 mg in an hour) IV drip – 1 gm/250cc IV fluid and run at 2 – 4 mg/min (4 mg/cc) Dose should be reduced in presence of decreased cardiac output, CHF, shock, patients older than 70, hepatic disease. (normal bolus with the maintenance drip cut in half) In ventricular fibrillation, 1.5 mg/kg should be given. NOTE: If drip infusing and PVC's increase, bolus must be given before increasing drip rate to be effective.
ROUTE:	IV

MIVACRON
(MIVACURIUM)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Paralytic

INDICATIONS: An aid to intubation in those patients who are still breathing, but need rapid control of the airway.

CONTRAINDICATIONS: Allergy

ACTION: Combines with receptors at the Neuromuscular junction and blocks action of acetyl choline (a competitive blocker).

SIDE EFFECTS: Hyptension due to secondary loss of venous return and relaxation of muscles

PRECAUTIONS: Patients while paralyzed are completely awake
Administer Valium when appropriate (i.e. non-comatose patient)

HOW SUPPLIED: 20 mg in 10 cc vial

DOSAGE: .25 mg/kg, administered as below

ROUTE: IV

ADMINISTRATION:

A. Draw up .25 mg/kg (dosage should be calculated according to table).
B. Administer ½ of dosage, push over 5 – 15 seconds.
C. Wait 30 seconds. Ventilate patient.
D. Administer remaining ½ dosage, push over 5 – 15 seconds.

Weight in Pounds	Weight in Kilograms	Mivacron 20 mg/10 ml
22	10	1.25 mL
44	20	2.5 mL
88	40	5.0 mL
132	60	7.5 mL
176	80	10.0 mL
220	100	12.5 mL
264	120	15.0 mL

MORPHINE
MEDICAL PROTOCOLS – 2004

MUST CONTACT ON-LINE MEDICAL CONTROL FOR ORDERS PRIOR TO ADMINISTRATION

CLASSIFICATION: Opiate pain reliever

INDICATIONS: Treatment of severe pain from myocardial infarction and other medical or traumatic conditions

CONTRAINDICATIONS: Known allergy to Morphine Sulphate
Decreased level of consciousness
Hypotension
Respiratory depression
Undiagnosed acute abdominal conditions
Use with caution in advanced age and COPD patients

ACTION: Narcotic analgesic, elevates pain threshold
Causes peripheral pooling, vasodilation

SIDE EFFECTS: Hypotension
Severe respiratory depression
Bradycardia caused by increased vagal tone
Nausea and vomiting
Decreased level of consciousness

HOW SUPPLIED: 10 mg ampules or 10mg pre-filled syringe.

DOSAGE: ADULT
A. Dilute 10 mg Morphine Sulfate in 9 cc Normal Saline (equals 1 mg/cc)
B. Titrate to control pain, using 2 mg alloquats, slowly IV, every 5 minutes to a total of 10 mg.

PEDIATRIC
0.1 – 0.2 mg/kg

ROUTE: IV

NARCAN
(NALOXONE)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Narcotic Agonist

INDICATIONS: Narcotic overdoses including the following:
Morphine Dilaudid Fentanyl
Demerol Paregoric Methadone
Heroin Percodan Tylox

Synthetic analgesic overdoses such as:
Nubain Stadol Talwin
Darvon

To rule out narcotics in coma of unknown origin.

CONTRAINDICATIONS: Allergy

ACTION: Reverses effects of narcotics

SIDE EFFECTS: Narcotic withdrawal

PRECAUTIONS: Should be administered cautiously to patients dependent on narcotics as it may cause withdrawal effects.

HOW SUPPLIED: 2 mg or 4 mg ampules, vials or pre-filled syringes

DOSAGE: ADULT
Start at .5 mg and titrate slowly to 2 mg IV

PEDIATRIC
Refer to Broselow tape for dose

If given via the ET tube, dose is 2 – 2.5 times IV dose.

ROUTE: IV
ETT
IM
SQ

NITROGLYCERIN
(NITROSTAT, NITROBID)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Cornary vasodilator

INDICATIONS: Angina Pectoris
CHF
AMI
Hypertension

CONTRAINDICATIONS: Acute MI with low blood pressure
Glaucoma
Hypotension
Allergy
Patients (male and female) taking Viagra may cause irreversible profound hypotension

ACTION: Relaxes smooth muscle in coronary vessels by dilation (increases blood flow)
Decreases cardiac workload
Reduces oxygen consumption
May reduce susceptibility to fibrillate
Dilates veins more than arteries
Action rapid, but short duration (onset 1 – 2 minutes, duration of 20 minutes).

SIDE EFFECTS: Headache (varies with indivdual)
Hypotension
Reduced cardiac output
Reflex tachycardia (increases oxygen demand)
Nausea and vomiting, vertigo (cerebral vasodilation)

PRECAUTIONS: Alcohol enhances side effects. Tabs lose potency: a fresh tab should cause tingling sensation under tongue. Deteriorates when exposed to air, light, or heat. MORE EFFECTIVE DURING EARLY ONSET OF CHEST PAIN. Best when refrigerated. Potency lasts around 6 months.

If low blood pressure occurs after taking nitro, raising legs can correct the problem. Usually occurs in a patient that has never taken nitro and not those who are used to it.

Transdermal patches: Don't defibrillate patient with transdermal atches on – they may burn!!!

NITROGLYCERIN
(NITROSTAT, NITROBID)
MEDICAL PROTOCOLS – 2004

HOW SUPPLIED: TABLET
1/150 gr or .4 mg per tablet unless otherwise labeled

SPRAY
Bottle contains 200 metered sprays of 1/150 gr nitroglycerin; provides instant pain relief; bottle has a shelf life of two to three years.

TRANSDERMAL
(Brandnames Nitrodisc, Nitro-Dur) gives a constant release over 24 hours.

DOSAGE: SUBLINGUAL
1 tablet sublingual, every 5 minutes until pain relieved (up to 3 tabs)

SPRAY
Patient must not inhale spray or swallow immediately. Don't give more than three doses in 15 minutes. Bottle has no heat or light problems.

If using for hypertension, **contact on-line Medical Control for dosing and administration.**

ROUTE: SL
Spray
Transdermal

PHENERGAN
(PROMETHAZINE)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION:	Antihistamine
INDICATIONS:	Nausea and vomiting Motion sickness To potentiate the effects of analygesics Allergic reactions
CONTRAINDICATIONS:	Comatose states Patients who have received a large amount of depressants (including alcohol) Use with caution in: Patients with seizure disorders Patients with asthma
ACTIONS:	Antiemetic Sedative Antihistaminic
SIDE EFFECTS:	May impair mental and physical ability Drowsiness Dizziness Blurred vision Dry mouth, nose and bronchi Dystonic reaction or hyperactivity
PRECAUTIONS:	Use with caution in the elderly. May cause confusion/altered mental status. Consider reduced dose, 6.25 mg. Avoid accidental intra-arterial injection.
HOW SUPPLIED:	Ampules and Tubex syringes containing 25 mg.
DOSAGE:	A. Dilute 25 mg of Phenergan in 9 cc of Normal Saline (2.5 mg/cc) B. Give 5 cc over 1 minute (12.5 mg) C. May repeat in 10 minutes if no side effects and stable vital signs
ROUTE:	IV

SODIUM BICARBONATE
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Alkalinizing agent

INDICATIONS: Late in the management of cardiac arrest, if at all.
Tricyclic antidepressant overdose
Severe acidosis

CONTRAINDICATIONS: Alkalotic states

ACTIONS: Combines with excessive acids to form a weak volatile acid.
Increases PH

SIDE EFFECTS: Alkalosis

HOW SUPPLIED: Pre-filled syringes containing 50 milliequivalents of the drug in 50 milliliters of solvent.

DOSAGE:

ADULT
1 mEQ/kg initially followed by .5 mEQ every 10 minutes as indicated by blood gas studies

PEDIATRIC
1 mEQ/kg initially followed by .5 mEQ every 10 minutes as indicated by blood gas studies

ROUTE: IV

VALIUM
(DIAZEPAM)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Benzodiazapine

INDICATIONS: Amnesia for emergency cardioversion
Seizures
Anxiety states

CONTRAINDICATIONS: Allergy
Pregnancy
Shock
Coma
Presence of alcohol

ACTION: Depresses CNS producing drowsiness, sleep and amnesia

SIDE EFFECTS: Respiratory arrest
Confusion
Low blood pressure
Hyper-excited states
Muscle spasticity

PRECAUTIONS: Respiratory depression
Use with caution in the elderly and patients with known respiratory disease

HOW SUPPLIED: 10 mg ampule

DOSAGE: ADULTS
1 – 20 mg IV slowly. Titrate dose to patient and response
PEDIATRIC
Refer to Broselow tape for IV and rectal dosages

DO NOT DILUTE
DO NOT MIX WITH OTHER DRUGS
DO NOT ADD TO IV BAG

ROUTE: IV or rectally

VASOPRESSIN
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Naturally occurring hormone with pressor properties when used in high concentrations

INDICATIONS: Currently indicated for VF or pulseless VT in adults per new ACLS guidelines

CONTRAINDICATIONS: None in the emergency setting

ACTIONS: Vasoconstrictor, which also increases blood flow to the heart and brain and does not cause increased cardiac ischemia or cardiac irritability

SIDE EFFECTS: None in the emergency setting

PRECAUTIONS: Avoid arterial injection

HOW SUPPLIED: Vial containing 20 units per 1 ml

DOSAGE: Single rapid bolus of 40 units

ROUTE: IV

SUCCINYLCHOLINE
(ANECTINE)
MEDICAL PROTOCOLS – 2004

CLASSIFICATION: Neuromuscular blocking agent (depolarizing).

INDICATIONS: To achieve paralysis to facilitate endotracheal intubation.

CONTRAINDICATIONS: None in the emergency setting

ACTIONS: Skeletal muscle relaxant, paralyzes skeletal muscles including respiratory muscles.

SIDE EFFECTS: Prolonged paralysis, hypotension, bradycardia.

PRECAUTIONS: Should not be administered unless persons skilled in endotracheal intubation are present. Endotracheal intubation equipment must be available. Oxygen equipment and emergency resuscitative drugs must be available. Paralysis occurs within 1 minute and lasts for approximately 8 minutes.

HOW SUPPLIED: Vial containing 20 units per 1 ml

DOSAGE ADULT: 1-1.5 mg/kg (40-100 mg in an adult).

DOSAGE PEDIATRIC: 1mg/kg

ROUTE: IV.

PROCEDURES AND EQUIPMENT

CERVICAL COLLAR
AMBU PERFIT ACE

I. INDICATIONS

This device is a one-piece rigid cervical spine immobilization device. It is intended to assist the rescuer with the maintenance of neutral alignment, prevention of lateral movement and flexion/extension of the cervical spine during transport, patient care and movement.

II. ASSEMBLY

The collar is assembled as below:

A. Hold the collar near the tracheal opening with one hand.
B. Place your index finger on the foam side of the chin piece (on the center rivet) and your thumb on the plastic side of the chin piece (on the center rivet).
C. Flip the chin piece from the back of the collar to the front. This automatically forms the chin piece and places it in the position of function.

III. PROCEDURE

A. SITTING/STANDING
   1. One rescuer must manually stabilize the head and neck in a neutral position.
   2. Size the collar:
      a) Measure the distance between an imaginary plane drawn horizontally and immediately below the patient's chin and a second horizontal plane drawn on top of the patient's shoulder. Compare the distance with the distance from the collar "sizing line" to the lowest aspect of the plastic collar body (**not the foam**).
      b) If a large collar is needed, disengage the safety locks by pulling **UP** on the safety buttons (blue knobs on both sides of the chin piece). Pull the collar apart until the distance between the sizing line and the plastic collar body equals your finger measurement. Engage the safety locks by pressing **DOWN** on the safety buttons.
      c) If the collar needs to be resized, pull **UP** on the safety locks and pull **OUT** on the ratchet latches (blue arrows on sizing guide). The collar can now be adjusted back to a smaller size. Reset the ratchet arrows, by pushing them **IN** and engage the safety locks by pressing **DOWN**.
      d) The collar can be rapidly sized to one of the four standard settings (no-neck, short, regular and tall) by pulling **UP** on the safety locks, bringing the blue arrows in line with the middle of the appropriate area and pressing **DOWN** on the safety locks.

CERVICAL COLLAR
AMBU PERFIT ACE

e) The second rescuer should slide the front of the collar along the patient's chest and position the chest piece. The collar should rest on top of the patient's shoulder and against the sternum without gaps. The patient's chin must rest securely in the chin piece with the patient's neck in a neutral position.
f) While firmly holding the front of the collar in place, wrap the back of the collar around the back of the patient's head and neck and secure to the front of the collar with the Velcro tab.
g) The Velcro can be adjusted by firmly holding the front cutout of the collar and tightening the Velcro tab.
h) **AFTER APPLICATION OF THE COLLAR, THE PATIENT'S NECK/HEAD MUST STILL BE MANUALLY MAINTAINED IN A NEUTRAL POSITION UNTIL THE PATIENT IS FULLY IMMOBILIZED ON A BACKBOARD WITH A CID, STRAPS AND PADDING IF NECESSARY.**

B. SUPINE
1. If the patient is supine, follow steps "a" and "b" above.
2. The collar may be applied from either side.
3. Slide the back portion of the collar directly behind the patient's neck.
4. Once the collar is evenly positioned behind the neck, the front portion of the collar can be positioned under the chin.
5. While maintaining proper positioning of the collar with one hand, attach the Velcro with the other hand. Be certain that the loop Velcro is firmly attached and parallel to the fixed hook Velcro tab on the front of the collar.
6. **AFTER APPLICATION OF THE COLLAR, THE PATIENT'S NECK/HEAD MUST STILL BE MANUALLY MAINTAINED IN A NEUTRAL POSITION UNTIL THE PATIENT IS FULLY IMMOBILIZED ON A BACKBOARD WITH A CID, STRAPS, AND PADDING, IF NECESSARY.**

CHEMSTRIP

I. INDICATIONS

These reagent strips provide for a fast, easy and accurate measurement of blood sugar when use of the glucometer is not possible. The pads on the reagent strips react to a wide range of blood sugar levels, from 20 mg/dl to 800 mg/dl.

II. PROCEDURE

A. Assemble equipment and don gloves.
B. Remove reagent strip and compare pads to "unused" section of scale on reagent bottle. They should match.
C. Prep site with alcohol prep and let dry prior to testing.
D. Prick the side of the fingertip and squeeze it until a drop of blood has formed. Venous blood may be used, if done immediately.
E. Touch the blood droplet to the reagent strip, covering both pads entirely. Immediately begin timing for 60 seconds.
F. After exactly 60 seconds, wipe the blood from the test pads with cotton 4 x 4. Wipe gently until all of the blood is removed.
G. After another 60 seconds (2 minutes total), match the colors on the reagent strip to the scale on the bottle.
   If the colors on the pads on the reagent strip match or are darker than those for 240 mg/dl, wait another 60 seconds (3 minutes total).
H. Determine the blood glucose concentration by comparing the color of the pads on the reagent strip to the colors in the chart on the bottle.
I. If you don't have a perfect match:
   1. Find the bottle match, which is closest to the bottom pad.
   2. Find the bottle match, which is closest to the top pad.
   3. Add them together and divide by 2.
J. Blood glucose values measured on the Chemstrip may be significantly lower than true concentrations in patients with hyperglycemic-hyperosmolar states (i.e. those patients with very high glucose level).

CRICOTHYROTOMY
(Melker Set)

I. PURPOSE

The "Melker Emergency Cricothyrotomy Set" is designed to establish emergency airway access when endotracheal intubation cannot be performed and other ventilatory techniques are not effective.

II. INDICATIONS

Inability to adequately ventilate the patient by any other means.

III. SIGNS & SYMPTOMS

A. The need for definitive airway control must be established (to reduce morbidity or mortality).
B. Conventional airway and ventilatory practices, including Endotracheal intubation, have failed to successfully provide an airway or adequate ventilation.

IV. INITIAL ASSESSMENT

Rapid patient assessment with special attention to:
A. Presence of potential spinal injuries
B. Degree of respiratory distress
C. Cyanosis
D. Breath sounds

V. PROCEDURE

A. Identify the cricothyroid membrane between the cricoid and thyroid cartilage. Palpate the trachea anteriorly for the prominent thyroid notch. The next prominence inferiorly is the cricoid cartilage. The small space between the cricoid cartilage and the thyroid cartilage is the cricothyroid membrane.
B. Identify the location of the syringe, catheter, guide wire, scalpel and cloth tie. Advance the handled dilator, tapered end first, into the connector end of the airway catheter until the handle stops against the connector. The use of lubrication on the surface of the dilator (distal, pointed end) may enhance the fit and placement of the emergency airway catheter.
C. Carefully palpate the cricothyroid membrane and thoroughly cleanse the site. While stabilizing the cartilage, make a vertical incision in the midline using scalpel blade (supplied or additional). Incise through skin and subcutaneous tissue only.
NOTE: An adequate incision eases introduction of the dilator and airway.

CRICOTHYROTOMY
(Melker Set)

D. With the supplied 6 cc syringe attached to the 18G, over the needle catheter introducer needle, advance it through the incision into the airway at a 45 degree angle to the frontal plane in the midline in a caudal (toward the feet) direction. **When advancing the needle forward, verification of entrance into the airway can be confirmed by aspiration on the syringe resulting in free air return.**

E. Remove the syringe and needle, leaving the catheter in place. Advance the soft, flexible end of the wire guide through the catheter and into the airway several centimeters.

F. Remove the catheter, leaving the wire guide in place by holding the end of the wire guide until the catheter tip is clear from skin; then grasp the wire guide at entrance to skin.

G. Advance the emergency airway access assembly (pointed end first, 15 mm fitting last) over the wire guide until the proximal stiff end of the wire guide is completely through and visible protruding from the handle end of the dilator.
NOTE: IT IS IMPORTANT TO ALWAYS VISUALIZE THE PROXIMAL END OF THE WIRE GUIDE DURING THE AIRWAY INSERTION PROCEDURE TO PREVENT ITS INADVERTENT LOSS INTO THE TRACHEA.

H. Maintaining the wire guide position, carefully and gently advance the emergency airway access assembly over the wire guide and into the trachea.
NOTE: CARE SHOULD BE TAKEN NOT TO ADVANCE THE TIP OF THE DILATOR BEYOND THE TIP OF THE WIRE GUIDE WITHIN THE TRACHEA.

I. Remove the wire guide and dilator simultaneously, leaving the airway in place.

J. Fix the emergency airway catheter in place with the cloth tracheostomy tie in a standard fashion.

K. Connect the emergency airway catheter, using its standard 15 mm adapter to an appropriate ventilatory device and 100% oxygen.

L. Reassess adequacy of ventilations.

EDD-B

I. INDICATIONS

This device is used to assist in the verification of endotracheal tube placement. By applying a vacuum to the endotracheal tube, this device takes advantage of anatomical differences between the trachea and the esophagus. It relies upon the relative rigidity of the tracheal wall as compared to that of the esophagus. The rigid trachea remains patent, allowing free aspiration of air into the device. The fibro muscular esophagus, however, will collapse around the endotracheal tube and thus prevent aspiration of air. This device does not depend on CO2 detection. It will remain accurate, if properly used, even in patients suffering cardiac arrest in which CO2 production may not be detectable. **This device is to be used as an adjunct. Its purpose is not to eliminate clinical judgment.**

II. CONTRAINDICATIONS

This device is not to be used in children less than 5 years of age or less than 20 kg.

III. PROCEDURE

A. Perform BLS airway management.
B. Open the package and test the device for an air leak by compressing the bulb, applying a gloved thumb over the opening and releasing compression. **If air fills the bulb or an air leak is detected, discard the device and do not use.**
C. Set the bulb in a readily available clean place (in opened package next to patient's head).
D. Properly insert endotracheal tube and secure it with one hand.
E. Compress the device and attach it to the endotracheal tube.
F. Allow the bulb to self inflate.
G. **If ventilation through the endotracheal tube is performed prior to placement of the device, use extreme caution and consider direct laryngoscopy to confirm tube placement because insufflation of the stomach and esophagus may allow the bulb to reinflate.**
    1. **AIR RETURNS AND BULB FILLS RAPIDLY (less than 5 seconds):**
        a. The endotracheal tube is likely **in the trachea**.
        b. Remove the device and attach ventilation device.
        c. Ventilate and clinically assess tube placement:
            i. Observe chest rise
            ii. Auscultate for bilateral breath sounds
            iii. Auscultate over the stomach
            iv. Observe clinical changes in patient

EDD-B

2. **AIR SLOWLY FILLS THE BULB (5- 30 seconds)**
   a. The location of the endotracheal tube **is in doubt**.
   b. Carefully follow the steps in "1" above to confirm endotracheal tube location clinically; using direct laryngoscopy visualization if a question still exists. **If location is still in doubt, remove the tube, hyper-ventilate, re-intubate and verify correct tube position or ventilate by other means.**
3. **AIR DOES NOT FILL THE BULB OR VOMIT RETURNS**
   a. The endotracheal tube is likely **in the esophagus.**
   b. **REMOVE THE ENDOTRACHEAL TUBE.**
   c. Hyperventilate, re-intubate and verify correct endotracheal tube position or ventilate by other means.

IV. WARNING

A. If device results are not conclusive, the ETT should be immediately removed unless definite tracheal intubation is confirmed by other methods.
B. Aspirated food particles or tracheal compression may occlude the endotracheal tube and prevent free bulb filling. Clinical evaluation and direct laryngoscopy are recommended to confirm endotracheal tube location in these situations.
C. A pharyngeal intubation may not be detected because air may freely fill the bulb. Clinical evaluation is necessary.
D. Severe pulmonary edema, ARDS, asthma or morbid obesity may result in delayed bulb filling. Clinical evaluation and direct laryngoscopy may be needed to confirm tube placement.
E. **If ventilation through the endotracheal tube is performed prior to placement of the device, use extreme caution and consider direct laryngoscopy to confirm tube placement because insufflation of the stomach and esophagus may allow the bulb to re-inflate.**
F. Care should be taken if temperature is near freezing. The bulb will not function if it is very cold due to loss of self-inflating capabilities.

ENDOTRACHEAL INTUBATION

I. DEFINITION

The passing of an endotracheal tube through the nose or mouth into the trachea. The tube is open at both ends with a 15 mm adaptor for the attachment of a bag/valve or other device and a cuff at the end, which when inflated, seals the airway.

II. PURPOSE

A. To maintain patient airway and protect from aspiration.
B. To provide a means of mechanical ventilation for patients unable to breathe on their own.
C. To improve oxygenation of patients in respiratory distress.
D. To improve pulmonary function and aid in the removal of secretions.

III. POLICIES

A. Paramedics are allowed to insert endotracheal tubes.
B. Paramedic students, after proper instruction, under the direct supervision of their preceptor may insert endotracheal tubes.
C. All intubated patients should have both arms restrained for safety purposes.
D. Following endotracheal intubation, the ET tube should be secured in an appropriate manner (commercial tube tamer) and continuously reassessed to assure proper placement and immediate detection of an esophageal intubation or tube dislodgement.
E. The pulse oximeter/SaO2 and CO2 detector will be attached to all intubated patients as soon as possible and continuously monitored throughout patient care.
F. Any time the CO2 detector becomes contaminated or appears to not be functioning correctly, it will be replaced immediately.
G. The ventilatory status of all intubated patients will be checked and recorded every five (5) minutes. This will include, at a minimum, the following:
    1. Description of breath sounds
    2. Absence of stomach sounds
    3. Pulse ox reading
    4. End tidal CO2 color changes
H. The ET tube shall be assessed any time that the patient is moved.
I. The position of the tube shall be documented on the patient care form and reported to the emergency department personnel receiving the patient.
J. Upon arrival at the hospital, the tube placement shall be confirmed by the ER staff and documented within the patient care form.

ENDOTRACHEAL
INTUBATION

IV. EQUIPMENT

A. Oxygen setup
B. Suction equipment
C. Bag/valve/mask device
D. Ventilator (where appropriate)
E. Endotracheal tube (sizes appropriate for patient)
F. Laryngoscope handle (with 2 "C" batteries), with straight and curved blades of the appropriate size for patient.
G. Endotracheal stylet
H. McGill forceps
I. 10 cc syringe
J. Lubricant (water soluble)
K. Assorted airways
L. Arm restraints
M. Endotracheal tube restraining device or tape
N. Personal Protective Equipment
O. CO2 detector (Resuscitation ACE)

V. PROCEDURE

A. INSERTION OF ORAL ENDOTRACHEAL TUBE
   1. If possible, explain procedure to patient and family. Tell them patient will not be able to talk while the tube is in place.
   2. **Patient must be well oxygenated prior to insertion of endotracheal tube. Administer 100% oxygen via NRB or ventilate patient with Bag/Valve/Mask device with 100% oxygen.**
   3. Place patient on cardiac monitor.
   4. Don appropriate Personal Protective Equipment (minimum of face shield, mask and gloves)
   5. Inflate cuff of endotracheal tube, remove syringe and check for air leaks. Lubricate end of tube and stylet.
   6. Have suction ready with large bore suction tube (yankauer) connected.
   7. Place patient in proper position (**SEE PRECAUTIONS FOR TRAUMA VICTIMS**). The axis of the mouth, the pharynx and the trachea must be aligned in order to achieve direct visualization of the trachea. The neck must be flexed forward, and the head must be extended backward. The head must not be allowed to hang over the head of the bed.

ENDOTRACHEAL INTUBATION

8. Insert the laryngoscope blade into the mouth to the right of the midline. The blade may be either straight or curved.
   a. STRAIGHT BLADE
      Insert the straight blade below the epiglottis. Apply upward traction (**not prying motion, but a lifting motion**) on the laryngoscope handle, displacing the base of the tongue and the epiglottis anteriorly and exposing the glottis.
   b. CURVED BLADE
      Insert the curved blade into the vallecula. Apply traction in the same fashion as the straight blade, elevate the epiglottis and expose the glottic structures.
9. Insert the endotracheal tube. The cuff of the tube will be passed between the vocal cords under direct visualization. The tube is inserted with the right hand from the right corner of the mouth into the trachea.
   a. Each attempt at insertion of the tube should not be longer than 15 seconds.
   b. Patient must be well oxygenated before and after each attempt.
   c. If endotracheal intubation has failed on 2 attempts, other airway management techniques should be utilized (i.e. bag/valve/mask device with oral airway).
      NOTE: If other qualified personnel are on the scene, they may attempt intubation, after the second failed attempt, with caution not to increase hypoxia.
10. Inflate the cuff.
    a. Cuff should be inflated to where there is minimal air leak.
    b. Document any persistent air leak. If an air leak is persistent and interferes with patient oxygenation, and you suspect the cuff is broken; remove the tube, oxygenate the patient and re-attempt intubation or ventilate patient with bag/valve/mask device.
11. Confirm placement:
    Resuscitation Ace. Resuscitation ACE shall be immediately attached and have rapid color change to purple with each breath/ventilation. (See Procedures, RESUSCITATION ACE, P-0790)
12. Ventilate patient and clinically confirm tube placement. Auscultate breath sounds with stethoscope. Breath sounds should be heard in the chest both anteriorly and laterally post-intubation with no breath sounds over the epigastrium.
    Diminished breath sounds on the left: the tube may be in the right main stem bronchus, deflate cuff, reposition tube, re-assess breath sounds.
13. Secure tube in place.
14. Ventilate and oxygenate the patient.

ENDOTRACHEAL
INTUBATION

B. INSERTION OF NASAL ENDOTRACHEAL TUBE
1. Follow steps 1 – 7 above.
2. Attach BAAM to 15 mm fitting on tube, if available.
3. Inspect patient's nares. Choose nare that appears most patent. Note any septum defect.
4. Position patient's head in neutral position.
5. Insert tube with bevel down and facing septum **gently into patient's nares**. The BAAM will produce a whistling sound as long as the tube is aligned with the trachea. If whistling sound diminishes or stops, the tube may have been inserted into the esophagus. Gently pull back and re-attempt intubation of trachea.
6. Follow steps 9 – 13 above.

C. DOCUMENTATION FOR ORAL AND NASAL INTUBATION:
1. Who performed the intubation?
2. Number of attempts.
3. How patient was oxygenated and/or ventilated prior to, during and post intubation.
4. Size of tube.
5. Centimeter mark at patient's lip.
6. How tube was secured.
7. Time of intubation.
8. Document breath sounds after intubation and after every patient movement.
9. Document who verified breath sounds on arrival at receiving hospital.
10. Problems encountered.
11. Insertion with or without difficulty.
12. Note dentures removed and disposition of dentures.
13. Note changes in patient condition post intubation (i.e. improvement of color, cyanosis, diaphoresis, etc.)
14. Ventilation rate.
15. CO2 detector color changes.
16. Pulse oximeter/SA02 readings.

VII. PRECAUTIONS

INTUBATION OF TRAUMA PATIENTS

A. Oral intubation may be accomplished without hyperextension of the neck by following the procedure below:
1. One crew member manually maintains in-line cervical immobilization while second crew member intubates.
2. Nasal intubation still requires manual in-line cervical immobilization for intubation.

ENDOTRACHEAL INTUBATION

B. USE OF STYLET

The stylet is an aid to intubation. The stylet is used to form the tube by making the tube more rigid to facilitate intubation. Caution should be used when inserting the stylet into the endotracheal tube so the tip of the stylet is not extended beyond the murray eye. If intubation is unsuccessful without stylet, insert stylet prior to second attempt.

VIII. PEDIATRIC CONSIDERATONS

A. May need to restrain child. Enlist help.
B. Restrain gently. Always explain reason for procedure to parents.
C. ANATOMIC AND PHYSIOLOGIC
   1. The larynx is relatively cephalad in position.
   2. The epiglottis is "U" shaped and protrudes into the pharynx.
   3. The vocal cords are short and concave.
   4. In infants and children less than 8 years of age, the narrowest portion of the airway is at the cricoid cartilage below the vocal cords.
D. CONSEQUENCES OF THE ANTOMIC DIFFERENCES OF PEDIATRIC PATIENTS
   1. It is difficult to create a single, clear, visual plane from the mouth through the pharynx to the glottis.
   2. Endotracheal tube size must be selected based on the size of the cricoid ring rather than the glottic opening.
E. Place patient in the "sniffing position" (flexion of the neck on the shoulders and simultaneous extension of the head on the neck). If suspected cervical spine injury, maintain head in neutral position with in-line cervical immobilization.
F. Insertion of the blade is basically the same as an adult.
G. The tube is inserted to a depth where the cords are between the cord markers on the ET tube.

GLUCOMETER (EliteXL)

I. PURPOSE

The Glucometer Elite XL is a blood glucose measuring device used for determining a patient's blood glucose levels.

II. EQUIPMENT

Glucometer with Check Strip, Code Strip or Test Strip (depending on procedure)
Lancet
Alcohol Prep
Gauze pad
Band-Aids

III. PROCEDURES

A. CHECK STRIP TEST

1. This test is performed to ensure that the glucometer is working properly.
2. Remove the Check Strip from the package (save package).
3. Insert Check Strip ("Check" side up) fully into the meter until you hear a beep. A full display (all characters are working) shows, followed by another beep and the Check Strip result.
4. The Check Strip result must be within the range listed on the package insert. **A TEST RESULT WHICH IS NOT IN RANGE MAY INDICATE AN ELECTRONICS FAILURE OR A DIRTY TEST STRIP. DO NOT USE THE GLUCOMETER. CONTACH SHIFT SUPERVISOR.**
5. At the end of the test carefully remove the Test Strip from the glucometer and return to its package.

B. CODE THE GLUCOMETER

1. You must Code the Glucometer whenever a new box of Test Strips is opened. This matches the glucometer to the Test Strip reactivity.
2. Tear open the packet found in the new carton of Test Strips and remove the Code Strip (save the packet).
3. Insert the Code Strip into the test slot ("F" code label is up and the contact end is inserted first). A beep sounds and a full display appears briefly. Another beep will sound and the Code Number ("F") will appear in the display.
4. Remove the code Strip and store in packet.

C. CONTROL TEST

1. Control Test is run to find out if the *whole* system is working correctly (Test Strip and Glucometer) and to practice good technique before blood glucose testing.
2. Carefully check the expiration date, open the Test Strip foil packet and peel the foil back until the Test Strip is completely exposed (save the foil packet).
3. Hold the round end of the Test Strip and insert into the glucometer until it stops.
4. A beep will sound and a full display, followed by the Code number ("F") and previous test result appears. The Code Number and previous test result flash alternately.
5. Squeeze a small drop of Control Solution onto the inside of the foil packet.

GLUCOMETER (EliteXL)

6. Touch and hold the TEST END of the Test Strip to the drop until the meter beeps (Control Solution has now been drawn into the Test Strip). The timer begins to count down from 29 seconds. The test result is displayed. Compare result to the range on the end of the Test Strip carton. If it is out of range, contact Shift Supervisor.
7. Remove the test strip and the glucometer will turn off.

D. **BLOOD GLUCOSE TESTING**

1. Check the expiration date, open a foil packet and remove the Test Strip.
2. With the meter off, hold the round end and insert the Test Strip fully into the glucometer. You will hear a beep. After a full display, the Code Number ("F") and previous test result begin flashing alternately.
3. Prep the site and use a lancet to obtain a small, round drop of blood. Dispose lancet directly into sharps container.
4. Touch and hold the Test End of the Test Strip to the drop of blood until the glucometer beeps. The timer will begin counting down from 29 seconds.
5. Hold direct pressure (with gauze pad) on the puncture site and apply bandaid, if necessary.
6. After 29 seconds, the test result is displayed. Do not remove Test Strip until results are displayed.
7. A reading of "lo" indicates that:
   a. The blood glucose may be below 20 mg/dl, or
   b. The Test Strip did not fill completely, or
   c. The Test Strip is defective, or
   d. The wrong code number ("F") was used
8. A reading of "Hi" indicates that:
   1. The blood glucose may be above 600 mg/dl, or
   2. The other causes in number 7 above.
   3. Remove the Test Strip and properly discard it. The glucometer will turn off.

NOTE: If the Test Strip is left in the glucometer for more than 3 minutes, the glucometer will shut off.

NOTE: The exterior of the glucometer may be cleaned by using a moist (not wet) lint-free tissue with a mild detergent or disinfectant solution. Wipe dry after cleaning.

INTRAOSSEOUS INFUSION

I. INDICATIONS

Peripheral intravenous access is unobtainable in the critically unstable pediatric or adult patient.

II. CONTRAINDICATIONS

A. Fracture of the site or proximal to the site.
B. Cellulitis
C. Burns that may be infected by the technique.
D. Congenital bone disease.

III. COMPLICATIONS

A. Subperiosteal infusion from improper placement.
B. Penetration of posterior wall of medullary cavity, resulting in soft tissue infusion.
C. Slow infusion from clotting or marrow.
D. Osteomyelitis (less than .6%, usually with prolonged infusion).
E. Fat Embolism (not yet reported in children).
F. Slight periostitis at the injection site (usually resolved in 2 – 3 weeks).
G. Infection (acceptably low rate, comparable to other infusion techniques).
H. Fracture

IV. PROCEDURE

A. Put on **STERILE** gloves, if not already done.
B. Prepare bone marrow aspiration needle.
C. Identify landmarks:
    1. Midline or slightly medical aspect of the superior tibia, one or two finger width below the tibial tuberosity, or
    2. Medial aspect of the inferior tibia, just superior to the medial malleolus.
D. Thoroughly cleanse area with betadine and alcohol.
E. Insert needle angled away from the epiphyseal plate.
F. Advance needle until it penetrates the periosteum.
G. Using a boring or screwing motion, advance the needle until it penetrates bone marrow (less resistance and the needle will “stand” in place).
H. Remove the stylet.
I. Aspirate bone marrow into saline filled syringe (bone marrow may not always be able to be aspirated).
J. Infuse saline by syringe to verify placement and clear clots.
K. Secure needle with tape (although needle is generally well stabilized by bone).
L. Attach 3-way stop cock and IV tubing. Infuse by gravity or pressure, as appropriate.

INTRAVENOUS POLICY-EMT
(VENIPUNCTURE)

I. PURPOSE

The purpose of this policy is to allow EMT's, who have successfully completed the IV training program and have the approval of the Medical Director, to provide enhanced patient care and assistance to their Paramedic partner by initiating and monitoring non-medicated IV's.

64E.2.008(4) states:

An EMT employed by a licensed ALS provider is authorized to start a non-medicated IV under the following conditions:

A. A non-medicated IV is initiated only in accordance with department approved protocols of the licensed ALS provider's Medical Director. These protocols must include a requirement that the non-medicated IV be initiated in the presence of a Florida certified paramedic (of the same licensed provider) who instructs the EMT to initiate the IV.
B. If the licensed ALS provider elects to utilize EMT's in this capacity, the licensed EMS provider shall ensure that the Medical Director provides training at least equivalent to that required by the 1986 U.S. D.O.T. EMT-Intermediate National Standard Curriculum relating to IV therapy which is incorporated by reference and available from the Superintendent of Documents, Post Office Box 371954, Pittsburgh, P.A. 15250-7954.

II. POLICY

The attending paramedic is responsible for the delivery of patient care. An EMT who has successfully completed the department approved training and has the approval of the Medical Director may initiate a non-medicated IV under the direction and supervision of a Public Safety paramedic. The EMT may decline the request to initiate a non-medicated IV. Any IV initiated by an EMT will be assessed by the paramedic to ensure that it is patent. All documentation will be consistent with accepted policy and clearly state that the EMT established the IV.

III. INDICATIONS

An approved EMT may be requested to initiate an IV at the discretion of the attending paramedic.

IV. PROCEDURE

The procedure for initiating an IV is contained within the IV PROCEDURE (P-0300) with the only exception being that approved EMT's may not initiate a medicated IV nor administer any medication.

INTRAVENOUS POLICY
(VENIPUNCTURE)

I. PURPOSE

A. To restore or maintain fluid and electrolyte balance.
B. To administer medications and blood components.
C. To perform the treatment with skill in order to minimize apprehension and discomfort to the patient and/or trauma to the site of the infusion.

II. DEFINITION

A. The introduction of a solution directly into a vein.

III. POLICY

A. A paramedic who has received prior instruction may initiate intravenous therapy in accordance with the Medical Director's approval.
B. A paramedic student, after proper instruction, under the direct supervision of their preceptor may initiate intravenous therapy
C. An EMT who has successfully completed the department IV therapy course and has the approval of the Medical Director may initiate a non-medicated IV when requested by a Paramedic.

IV. INDICATIONS

A. IV fluid infusion is indicated in all patients that need or may need drug therapy or fluid infusion.
B. PRN Adaptor may be used when IV access is indicated, but volume infusion is not (when IV rate is KVO).

V. EQUIPMENT

A. IV solution with IV administration set and extension set or PRN
B. Tourniquet
C. Alcohol swabs
D. IV catheter, size appropriate for patient condition
E. Pediatrics: use IV catheter when possible, use butterfly needle when patient's vein will not accommodate IV catheter
F. Tape
G. Arm board (if needed)

VI. PROCEDURE

A. <u>ASSEMBLE AND PREPARE EQUIPMENT</u>
   1. Verify Protocol requires venous access.
   2. Assemble equipment.
   3. Note any patient allergy or limb restriction.

INTRAVENOUS POLICY
(VENIPUNCTURE)

4. Check fluid container for crack, leakage and expiration date.
5. Check fluid for clarity and particulate matter. **Do not use solution if cloudy or contains particulate matter.**
6. Close the flow clamp on administration set. Spike IV bag.
7. Hang bag on IV pole, if available.
8. Squeeze drip chamber and open flow regulator, allowing solution to clear tubing of air. Drip chamber should be half filled. Tapping tubing aids in the removal of bubbles.
9. Add extension tubing and flush air out of tubing.
10. Close flow clamp.
11. Reapply the protective cap to the tubing needle adaptor to maintain its sterility.

B. PREPARING THE PATIENT

1. Explain the procedure to the patient. Explaining can gain the patient's cooperation and allay apprehension.
2. Prepare the site.
   a. Don gloves
   b. If available, place protective towel beneath area to keep work area clean.
   c. Have equipment within reach, cut tape for securing IV.
   d. Apply tourniquet and select vein.
   e. Tourniquet should be loose enough to allow arterial blood flow, yet tight enough to prevent venous flow. Avoid antecubital area and other flexion joints if possible except when a large bore IV is needed or the patient is hypotensive.
   f. Palpate vein. If vein is not readily palpable do not thump vein; it may cause spasms. The following may be helpful:
   g. Have patient hang arm over the side of the stretcher.
   h. Rub toward the trunk with alcohol swab.
   i. Remove tourniquet.
   j. Cleanse the skin with alcohol swab using circular motion moving outward. Allow skin to dry.
3. Insert needle or catheter.
   a. Grasp area below the proposed site, using the thumb to keep the skin taut and anchor the vein.
   b. Hold the needle at a 45 degree angle.
   c. Pierce the skin and tissue about ½ inches below the proposed site of entry with the bevel of the needle upward. (Needle will enter skin more easily and cause less trauma with bevel upward)
   d. Lower shaft of needle until it is almost flush with the skin surface and enter the vein. (Usually there is a back-flow of blood. A sensation of resistance is followed by ease of penetration as the vein is entered)

INTRAVENOUS POLICY
(VENIPUNCTURE)

e. Advance needle approximately 1/8 inch and thread catheter into vein. Once needle is withdrawn, do not reinsert into catheter.
f. Dispose of needle directly into dirty needle box.
g. Release tourniquet and apply pressure above end of catheter. (This prevents blood spills)

C. CONNECTING THE SOLUTION
1. Connect tubing to needle hub.
2. Open flow clamp and flush needle briefly, then slow rate. Flush must be brief to prevent "blowing" vein. Adjust to appropriate rate.
3. Watch for infiltration of IV:
   a. Swelling developing just distal to tip of the catheter.
   b. Infiltrated IV's will be removed immediately.

D. SECURING THE NEEDLE, CATHETER AND TUBING
1. Tape securely to prevent any motion. Any motion could contribute to phlebitis. Movement may dislodge the catheter.
2. Loop the tubing and secure it independently of the needle.
3. Immobilize extremity with arm board, if needed.
4. Instruct patient to avoid unnecessary motion of the arm. Restraints may be required in patients with altered LOC. Restraints should be applied distal to the IV site.
5. Frequent checks of the IV site for infiltration, flow rate or kinks in tubing.

E. DOCUMENT
1. IV catheter type and size.
2. Number of attempts.
3. IV solution type and size.
4. IV flow rate and amount infused in patient.
5. Medications added to the solution.
6. Condition of IV site.
7. Who performed the venipuncture.
8. Example: "18g jelco started in left forearm x 1 attempt with 1000 cc RL at keep open rate by R. Smith, CP, IV patent without edema or erythema".

INTRAVENOUS POLICY
(VENIPUNCTURE)

VII. SPECIAL NOTES

A. Never push the needle back through the catheter while the catheter is in the vein. The sharp double edge may cut the catheter and become an embolus. If at any time, the venipuncture is unsuccessful, remove the needle and catheter.
B. If an extremity is involved with trauma (i.e. fracture, sprain, dislocation, or burn) or is an area of infection, the other extremity should be used. If both arms are involved, external jugular cannulation should be considered; if unable to start external jugular and both extremities are involved and the patient's condition will deteriorate without IV replacement, attempt IV in arms. If necessary, IV cannulation can be attempted at a burn site although some burns make IV cannulation difficult.
C. Use the appropriate size catheter for the patient's diagnosis and treatment. Large bore IV cannulas should be attempted in patients who need or may need fluid replacement.
D. Communicate with the patient prior to the procedure to alleviate any fears.
E. When possible, take patient's blood pressure in unaffected extremity to prevent problems with IV flow rate.
F. **Wear gloves. Use aseptic technique.**
G. Document all IVs (and attempts) appropriately.
H. Central lines and dialysis shunts may be used for IV infusions and medications if the patient is in full cardiac arrest, **with on-line Medical Control approval**.
I. PIC lines should not be used for fluids, but may be used for administering medications, **with on-line Medical Control approval**.

VIII. PEDIATRIC CONSIDERATIONS

A. Procedure the same as adult.
B. May need to restrain child. Enlist help.
C. Restrain gently. Always explain reason for restraints to parents. Check circulation and document circulation checks.

IX. RESEAL DEVICE (PRN ADAPTOR)

A. Fill syringe with 5 cc saline, flush PRN adaptor with saline, if indicated.
B. After venipuncture, attach PRN adaptor securely to hub of IV catheter.
C. Using saline filled syringe with one (1) inch needle, thoroughly cleanse injection port and inject 3 cc saline flush. Remove syringe.
D. Secure adaptor in place with tape.
E. In addition to the documentation above, chart the saline flush of the PRN adaptor after IV started.

USING PRN ADAPTOR FOR MEDICATIONS

1. Thoroughly cleanse injection port with alcohol swab.
2. Always flush PRN adaptor before and after medications.

I. LIFEPAK 12 MONITOR/DEFIBRILLATOR

The LifePak 12 defibrillator/monitor is a complete acute cardiac care response system with the following functions:

A. Noninvasive pacemaker
B. Interpretive 12-Lead ECG
C. AED functions
D. 100 mm printer
E. Records interventions
F. One set of pads to monitor, defibrillate and pace a patient
G. Uses 4 Lead ECG monitoring
H. Can monitor up to three Leads at one time on the screen
I. Automatically records all times and ECG rhythm
J. Downloadable data to fax or modem for QA

Special Note: On Pediatric patients weighing below 33 lbs. use the set of pads in the A/P (anterior/posterior) placement.

II. INDICATIONS

Any patient that requires cardiac monitoring due to medical illness or trauma.

III. PROCEDURE FOR BASIC MONITORING

A. Explain the procedure to the patient
B. Using four electrodes connect the patient to the monitor. Placement of the limb leads are RA, LA, RL, LL. Remember to place the RA and LA on the deltoids (slightly posterior) and place the RL and LL on the iliac crest. **Connect electrodes to lead cable prior to placing on the patient. Skin prep is very important prior to applying electrodes. Alcohol preps and razors can be utilized.**
C. Turn the monitor on. The monitor will come up with three channels (lead II, lead III, and AVF). The monitor will print out your strip.
D. Set alarms by pushing “ALARMS” button and then selecting “Quick Set”. This sets the parameters for the current patient.

Note: Use the Quick-Combo pads when you have determined that the patient will need pacing or defibrillation. You do not need to constantly print strips. The monitor will record any changes in the patient’s ECG rhythm automatically. You can print originals for yourself and the hospital.

LIFEPAK 12

IV. PROCEDURE FOR DEFIBRILLATION: AED MODE

Special Note: The AED Mode can *NOT* be used on patients under 16 years of age. The EMT can operate the LP12 in the AED (Advisory) Mode.

A. Attach the Quick-Combo pads to the monitor cable.
B. Properly prep and apply the Quick-Combo pads on the patient (both pads can be placed anteriorly).
C. Turn the monitor on.
D. Push the "ANALYZE" button and stand clear, voice prompt will advice, "Analyzing now, stand clear".
E. If shockable rhythm, voice prompt will announce, "shock advised" and charge to 200 joules then advise to "stand clear" and "push to shock".
F. Clear the area by verbalizing and looking.
G. Once the machine is charged, then push the "SHOCK" button.

Note: If patient remains in a shockable rhythm, the voice prompt will continue to announce step E increasing joules to 300 then 360 joules. If rhythm changes to a non-shockable rhythm, the voice prompt will advise, "No shock advised. Check for pulse. If no pulse, start CPR". The 60 second internal clock will begin. After 60 seconds, the voice prompt will announce, "Check for pulse. If no pulse, push Analyze".

V. PROCEDURE FOR DEFIBRILLATION: MANUAL MODE

A. Attach the Quick-Combo pads to the monitor cable.
B. Properly prep and apply the Quick-Combo pads on the patient insuring good contact with out air pockets (both pads can be placed anteriorly).
C. Turn on the monitor.
D. Minimize patient movement.
E. Push the "ADVISORY" button to place LP12 in the paddle mode.
F. Push the "CHARGE" button (it will automatically begin at 200J).
G. Clear by looking and verbalizing for everyone to clear.
H. Push the shock button.
I. Repeat steps F – H (increase joules, 300 to 360, by pushing the "ENERGY SELECT" button).
J. After 3 stacked shocks, check for pulse.

Note: AED mode can be initially utilized by the EMT. Push the "CHARGE" button at any time to override the AED mode, placing the LP12 into the manual mode.

LIFEPAK 12

VI. PROCEDURE FOR CARDIOVERSION

A. Explain the procedure to the patient (if the patient is alert, consider sedation).
B. Properly prep and apply the four electrodes on the patient. Place the RA and LA leads on the deltoids (slightly posterior) and the RL and LL leads on the iliac crest.
C. Turn the monitor on and interpret the rhythm.
D. If rhythm requires synchronized cardioversion, properly prep patient, attach the Quick-Combo pads to the monitor and apply the pads to the patient (anteriorly if desired) insuring good contact with no air pockets. **The 4 limb leads must remain attached for synchronized cardioversion.**
E. Select the energy setting by pushing the "ENERGY SELECT" button.
F. Push the "SYNC" button and confirm the complexes are flagged.
G. Push the "CHARGE" button.
H. Clear the area by looking and verbalizing.
I. Push the "SHOCK" button.
J. Repeat steps F through J as needed.

VII. PROCEDURE FOR 12-LEAD ECG

Note: This should be performed on all cardiac, chest pain patients. However, do not delay transport time to obtain 12-Lead.

A. Explain the procedure to the patient.
B. Attach the 12-Lead cable to the monitoring cable.
C. Attach electrodes to the 12-Lead cable.
D. Properly prep and apply the chest electrodes to the patient.
E. Instruct the patient to remain still for approximately 10 seconds.
F. Push the "12-LEAD" button on the monitor and enter patient's age.
G. The monitor will automatically interpret and print out your 12-Lead ECG.
H. The incident number must be entered in the patient information area (OPTIONS).

VIII. PROCEDURE FOR RECORDING INTERVENTIONS

A. The LP12 can automatically record the vital signs.
B. You may record your interventions on the monitor by pushing the "EVENT" button, then turn the selector knob to the desired item and push the selector knob.
C. The monitor will automatically record the time this is done.
D. The interventions are listed in order by time.
E. The incident number must be entered in the patient information area (OPTIONS).

LIFEPAK 12

IX. PROCEDURE FOR PRINTING

A. Push the "PRINT" button once to begin printing and a second time to end printing of the present screen.
B. Push the "EVENT" button.
C. Turn the selector knob to "PRINT".
D. Turn the selector knob to the desired report to print and push the selector knob.
E. The LP12 will print the report.

Special Notes:

Once the advisory mode is on, the LP12 will monitor the patient and verbally advise you to check the patient when it monitors a change in the rhythm. Alarms should be set for rate changes as a safeguard by selecting "Quick Set". The VF/VT alarm is already set and will alarm if the patient's rhythm changes. This is indicated by a voice prompt, "Check Patient". When battery one is depleted, an alarm tone will sound. You should rotate battery two forward to replace battery one and replace battery two with a fully charged battery. If both batteries become depleted, a voice prompt announcing "Replace Battery" will occur.

NEBULIZED TREATMENT

I. INDICATIONS

For patients in moderate to severe respiratory distress due to bronchospasm. These patients may/may not have a history of asthma, emphysema or anaphylaxis.

II. GOALS

To improve airway control rapidly by reversing any existing bronchospasm and/or hypoxia.

III. EQUIPMENT

A. Albuterol 2.5 mg premix (2.5 mg/3 cc NS).
B. Acorn nebulizer
C. Oxygen

IV. PROCEDURE

A. Administer supplemental oxygen as patient condition warrants.
B. Apply Cardiac Monitor
C. Establish IV at KVO
D. Semi-Fowler position
E. Administer Albuterol Acorn Nebulizer treatment:
    1. Assemble acorn nebulizer and connect to oxygen source.
    2. Add Albuterol 2.5 mg pre-mix to nebulizer reservoir.
    3. Set oxygen flow meter at 6 – 8 L/min or regulate for a fine mist.
    4. Instruct patient to breath through mouthpiece.
    5. Albuterol should be administered over 5 to 5 minutes.
    6. See drug summary for Albuterol. (Drug Summary, Albuterol, D-050)
    7. May administer second treatment as patient condition warrants.
    8. **Must contact on-line Medical Control prior to administering third treatment.**

V. POTENTIAL COMPLICATIONS

A. Carbon Dioxide Retention – some patients given oxygen will lose their hypoxic ventilatory drive. Be prepared to intubate.
B. Cardiac Dysrhythmias – Albuterol may predispose patients to tachydysrhythmias most predominantly ventricular tachycardia, PVCs and Ventricular Fibrillation. Treat per protocol.

NEEDLE CRICOTHYROTOMY

I. INDICATIONS

Patient in respiratory distress and/or severe respiratory distress that is unable to be intubated due to massive facial injuries or anterior neck injury causing obstruction in which normal intubation is not possible. Other unforeseen life threatening situations where the procedure may decrease the chance of morbidity of the patient.

II. PROCEDURE

A. Identify landmarks: Palpate the trachea for the prominent thyroid notch anterior (see attached diagram).
B. Beneath this find the cricoid cartilage. The cricoid cartilage is immediately beneath the large thyroid cartilage.
C. The space between the cricoid cartilage is the cricothyroid space where there is a very thin membrane with good external support.
D. Cleanse this area with betadine maintaining sterile technique.
E. Stabilize the trachea by holding the thyroid cartilage between the thumb and fingers.
F. Using a 14, 16, or 18 gauge angiocath placed on a 10cc syringe, gently perforate through the cricothyroid membrane.
G. Once within the tracheal lumen, aspirate air through the syringe.
H. Remove needle and slowly advance the cannula interiorly.
I. Care must be taken to prevent passage of the needle through the posterior wall of the trachea.
J. Secure the catheter to the skin with tape.
K. Administer oxygen using high flow oxygen: 15 liter per minute through the cannula.
L. See procedure for “Transtracheal Jet Insufflation” for oxygen administration.
M. Observe for chest rise, Auscultate for breath sounds, re-evaluate patient’s respiratory status.

III. POST PROCEDURE

A. Observe for subcutaneous emphysema in the area of the neck and upper chest, which may be caused by improper placement.
B. Control bleeding using direct pressure.

NEEDLE
CRICOTHYROTOMY

IV. COMPLICATIONS

Asphyxia Aspiration of blood
Laceration of trachea Laceration of esophagus
Hemorrhage or hematoma formation Mediastinal emphysema

A. Bleeding is uncommon if you stay in the right area. Therefore, if you have excessive bleeding, re-identify your landmarks.
B. There are many surrounding structures that may be damaged with improper technique or unusual individual anatomy:
    1. Superior – vocal cords and larynx lateral
    2. Inferior – thyroid and its vessels (if you nick the thyroid you may elicit a thyroid storm).
C. Thyroid storm – life threatening emergency consisting of sudden onset of tachycardia, hypertension, pulmonary edema, CHF, nervousness.

V. PEDIATRICS

Foreign body obstruction, severe orofacial injuries, or laryngeal fracture.
Other airway opening techniques have failed.

NOTE: Cricothyrotomy may be ineffective in children less than eight (8) years of age. The subglottic cricoid ring, inferior to the cricothyroid membrane, forms the narrowest segment of the airway; and cricothyrotomy may therefore not be effective. Since the exact site of obstruction cannot be predicted, cricothyrotomy should not be withheld when other methods have failed.

NEEDLE DECOMPRESSION

I. INDICATIONS

A needle decompression is used as an emergency measure to treat a tension pneumothorax in the pre-hospital setting. The patient presents with acute respiratory distress and the absence of breath sounds unilaterally (occasionally bilaterally).

Other signs include:

A. Cyanosis
B. Tracheal deviation
C. Hypotension
D. Shock
E. Hemi thoracic distention
F. Distended neck veins

II. EQUIPMENT

14 g, 2 ¼ inch over the needle IV catheter

III. PROCEDURE

A. Administer 100% oxygen by non-rebreathing face mask or assist ventilations, with BVM and 100% oxygen, if necessary.
B. Apply cardiac monitor
C. Confirm tension pneumothorax:
    1. Is there poor ventilation despite an open airway?
    2. Auscultate breath sounds, are they equal?
    3. Assess neck:
        a. Is there neck vein distention?
        b. Is there tracheal deviation?
    4. Assess chest for:
        a. Hyperresonnance?
        b. Subcutaneous emphysema?
        c. Fractured ribs/flail segment?
D. Place on protective personal equipment (gloves, gown, face shield and mask), if not already done.
E. Thoroughly cleanse the overlying skin, on the affected side with alcohol prep.
F. Insert 14 gauge over-the-needle catheter into the second intercostal space in the midclavicular line by:
    1. Palpate third rib.
    2. Stab third rib with over-the-needle catheter.
    3. Walk the needle up and over rib, keeping the needle on the superior edge of the rib.
    4. Advance the needle and the catheter into the interspace.
    5. Advance the needle and catheter through the parietal pleura until air escapes. Reassess respiratory status.
    6. Remove needle from catheter.
    7. Apply one way valve, if available.

NEEDLE
DECOMPRESSION

8. Reassess patient.
9. Secure catheter.

G. The catheter commonly kinks. If patient becomes symptomatic again, remove catheter and re-needle as above.

IV. COMPLICATIONS

A. Laceration of intercostal vessels and nerves.
B. Creation of pneumothorax.
C. Laceration of the lung.
D. Infection.

RESUSCITATION ACE
Airway Circulation Evaluation

I. INDICATIONS

The RESUSCITATION ACE serves as an adjunct to other clinical guides of adequate resuscitation (auscultation of the chest, observation of chest and abdomen as an assessment of ventilation). In addition, palpation of the femoral pulse is a guide to the adequacy of massage. **THIS DEVICE IS NOT A SUBSTITUTE FOR THE OBSERVATION OF THE PATIENT.** The device must not be relied upon as the sole indicator of resuscitation performance. The device must be attached to all Endotracheal tubes following intubation. The indicator dye must be frequently checked for appropriate color change. This is particularly true anytime that an intubated patient is moved.

II. EQUIPMENT

Resuscitation Ace
Airway Equipment (BVM, ET Tube, laryngoscope, etc.)
Oxygen

III. PROCEDURE

A. Provide BLS airway management.
B. Intubate the patient according to the Endotracheal Intubation Procedure.
C. Check the device for expiration date.
D. Connect the device between resuscitation bag and the ET tube so that the side arm is horizontal.
E. Remove the protector paper tube from the side arm, exposing the clear tube and the indicator ampoule.
F. Crush the ampoule in the side arm by pinching or bending the side arm. This exposes the ampoule cartridge to expired air.
G. Carefully watch for the indicator cartridge to change from white to purple with each breath or ventilation. Subsequent color changes from white to purple may indicate normal exchange of gases by breathing resuscitation.
H. Clinically assess for correct tube placement.
    1. Auscultate for breath sounds.
    2. Auscultate for absence of epigastric sounds.
    3. Observe chest rise.
    4. Observe for patient color improvement.
    5. Observe rising SA02, if available.
I. During resuscitation, the indicator cartridge will change from white to purple with each breath if both cardiac massage and ventilation is being performed correctly.

RESUSCITATION ACE
Airway Circulation Evaluation

J. The shade of purple can be compared to the label to give an approximation of end-tidal CO2.
K. A new device may be used at any time during resuscitation by following the steps above.

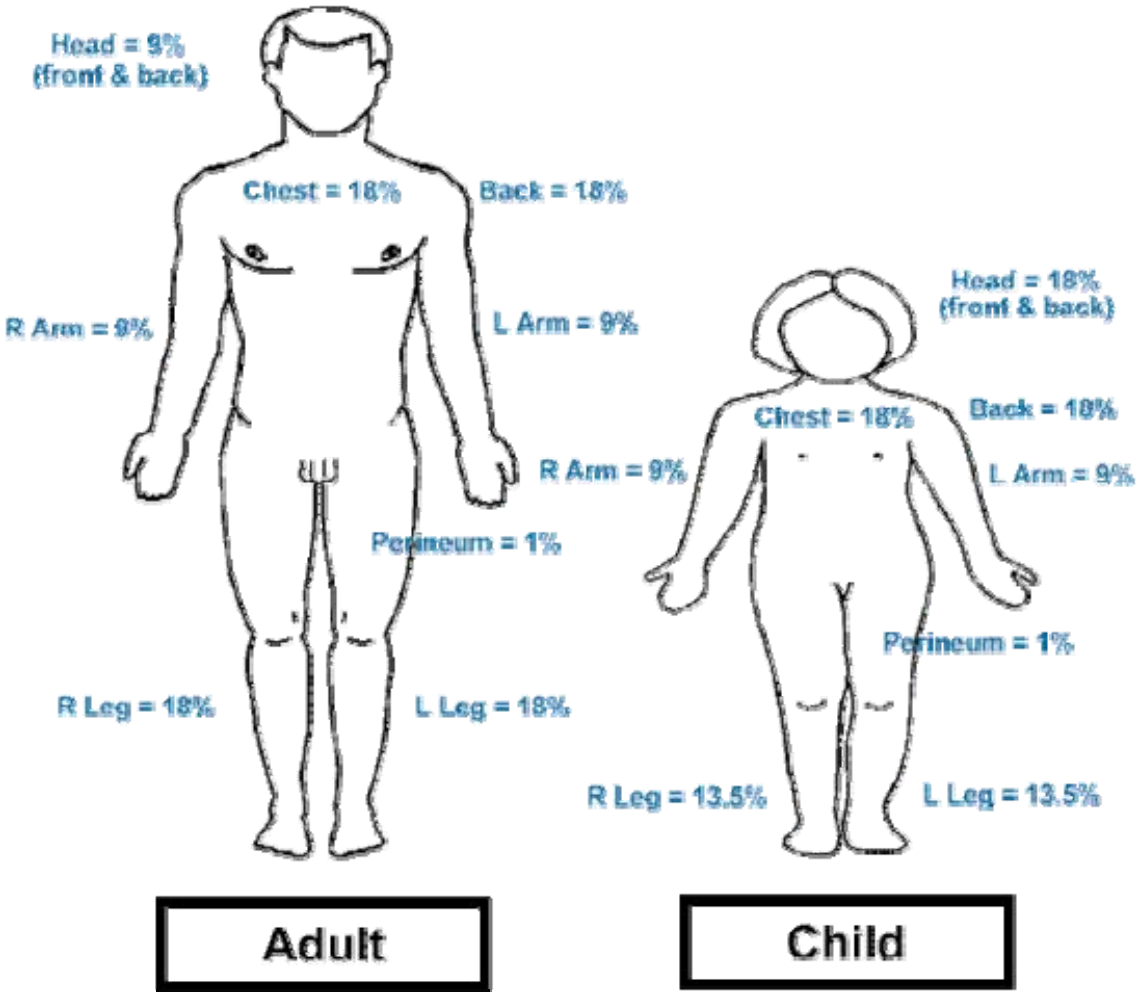
IV. PRECAUTIONS

A. If the expiration date has passed or if the cartridge has turned yellow, the device should not be used.
B. The device should be used in the temperature range of 32 – 120 F.
C. The device is intended for single use only.
D. Gastric distension, vomit and/or other fluids and gas that enter the side arm may cause color change independent of the concentration of CO2.
E. The device is not intended for use on patients weighing less than 30 KG.

RULE OF NINES

INDICATION

The "Rule of Nines" allows for a quick approximation of the percentage of total body surface area affected by a burn.



SAGER TRACTION

I. PURPOSE

To provide a means to splint fractures that will provide anatomical alignment, fracture stability and pain relief in long bone fractures.

II. EQUIPMENT

Sager Traction Splint

III. APPLICATION

A. Assemble two person team.
B. Check distal pulses and sensation (be certain to document the presence/absence of pulses and sensation).
C. One team member may maintain slight manual traction on the fractured leg. Check distal pulses and sensation (document again).
D. Assemble the splint and adjust to the proper length. Adjust the ankle strap to the approximate size of the patient's ankle.
E. Place the padded brace between patient's legs, resting the ischial perineal cushion against the ischial tuberosity. Avoid undue pressure on external genitalia. Apply the abductor bridle (thigh strap) around the upper thigh of the fractured leg and tighten firmly. The perineal area and the area under the abductor strap may be padded with a towel for comfort and to minimize pressure over the femoral vessels. Extend the inner shaft of the Sager until the crossbar rests adjacent to the patient's heels.
F. Position the malleolar (ankle) harness beneath the heel(s) and around the ankle(s). Secure these snugly.
G. Shorten the loop straps on the harness to ensure that the cable ring is secure up against the foot.
H. Grasp the shaft with one hand and the traction bar with the other hand; gently extend the inner shaft until the desired amount of traction is obtained on the calibrated scale located on the wheel. The correct amount of traction would be approximately 10% of body weight to a maximum of 15 pounds. If more traction is indicated, **contact on-line Medial Control**.
I. Posterior to the knees, gently slide the largest elastic cravat through and upwards to the thigh, repeating with the smaller elastic cravats to minimize lower and mid-limb movement.
J. Re-tighten the adductor bridle (thigh strap) at the upper thigh and firmly secure the three elastic cravats.
K. Apply pedal binding (figure eight strap) to feet.
L. Check and document pedal pulses and sensation.
M. Consider elevating the extremity. Stabilize extremity to backboard or stretcher (**be certain that splint does not extend past backboard or stretcher to avoid contact with door**).

VENTILATOR (Uni-Vent)

I. INDICATIONS

To assist in providing adequate ventilatory support to intubated and non-intubated patients. The Uni-Vent Automatic Resuscitator/Minute Volume Ventilator (700 series) is a battery powered device intended to ventilate a patient during resuscitation in emergency and field use applications.

II. EQUIPMENT

Uni-Vent Ventilator
Oxygen source

III. PROCEDURE

A. Provide effective basic life support and effectively ventilate the patient by other means (bag valve mask or demand valve).
B. Connect the Uni-Vent to either the quick connect on the portable O2 regulator or to the wall oxygen outlet in the vehicle.
C. Turn the Flow Control knob fully clockwise (to the OFF position).
D. Turn the Mode Selector Switch to the desired setting.
    1. OFF/CHARGE: Disconnects operating power from the circuitry and permits recharging of the battery from an external source.
    2. ADULT CPR & VENT: Provides automatic ventilations at a rate of **12 BREATHS PER MINUTE** for adult CRP and ventilation use.
    3. ADULT HYPERVENT: Provides automatic ventilations at a rate of **18 BEATHS PER MINUTE**. (The expiration cycle is sped up)
    4. CHILD/INFANT CPR: Provides automatic ventilations at a rate of **14 BREATHS PER MINUTE** for infants and children in the CPR mode.
    5. CHILD/INFANT VENT: Provides automatic ventilations at a rate of **20 BREATHS PER MINUTE**. (Inspiration and expiration are sped up)
    6. CHILD/INFANT HYPERVENT: Provides automatic ventilation at a rate of **30 BREATHS PER MINUTE**. (The Inspiratory and expiratory rates are sped up again)
    7. The Manual Trigger, when depressed, allows oxygen to flow and the patient to be ventilated.
E. Verify that the inhalation and/or exhalation LED indicators flash in the CPR/Vent modes.
F. The rotary pressure valve on the patient valve should be set at the 60 cm. of water setting. Some instances of poor lung compliance or high resistance may require the patient valve to be set at the 80 cm. of water setting. **Do not use the 80 cm. of water setting on children.**

VENTILATOR (Uni-Vent)

G. For non-intubated patients, place the adult/child or infant mask on the patient valve. An oral airway and cricoid pressure should be utilized. Place the mask snugly over the patient's face and turn the flow control knob counterclockwise until the patient's chest rises. **Do not use high flows unnecessarily!** Excessive flow wastes oxygen and may result in gastric distention and subsequent regurgitation.

H. For intubated patients, attach the patient valve to the endotracheal tube and turn the flow control knob counterclockwise until the patient's chest rises. It is not necessary to adjust the flow control knob beyond chest rise. Excessive flows can cause a rise in intrathorcic pressure which will trigger an audible relief valve (in the patient valve). This will vent the excess oxygen to the air.

I. The low battery LED indicator will turn on when approximately five hours of battery life remains. When not in use, the Uni-Vent should be attached to the charger.

J. **USAGE TIPS**

1. Before turning the power on, be certain that the Flow Control Knob is fully turned clockwise to the "OFF" position. Select the proper operating mode. Always adjust tidal volumes from minimum to "Chest Rise". Excessive flow (above "Chest Rise") can cause gastric distention and regurgitation, can cause the relief valve to open and wastes oxygen.
2. In the non-intubated patient, save oxygen by ensuring an effective mask seal.
3. Excessive flow, an obstructed airway or poor lung compliance can cause gastric distention.
4. Intubated patients generally require a lower flow setting than non-intubated patients since some oxygen is lost through mask seal leakage and increased "dead space".

K. The external surfaces of the Uni-Vent (the hoses, control box and patient valve) may be cleaned with soap and water.

The unit should be externally cleaned, returned to the office, and given to a Shift Supervisor. The internal components will then be cleaned.

FINAL PROTOCOLS

AIRWAY OBSTRUCTION
(MECHANICAL)

I. POSSIBLE CAUSES

Aspiration
Mucous Plug
Food Impaction (café coronary).
Regurgitation of stomach contents into pharynx.
Blood clots from facial trauma or recent surgery.
Tongue – in unconscious patient.
Trauma to head or neck.

II. SIGNS & SYMPTOMS

A. Partial Airway Obstruction With Good Air Exchange:
   1. Victim can still cough forcefully and may be able to speak.
   2. Stridor (high pitched noise while inhaling with increased respiratory effort) is a relatively specific sign of airway obstruction (wheezing may be present but is non-specific).
   3. Patient may be clutching their neck. (The Universal sign for choking.)
   4. Rapidly try to obtain any pertinent history of aspiration or trauma.

B. Complete Airway Obstruction:
   1. Inability to speak, breathe or cough.
   2. Frequently preceded by any of the above symptoms.
   3. Unconsciousness.
   4. Cyanosis follows soon after complete airway obstruction.

III. INITIAL ASSESSMENT

A. **Defer vital signs until after airway has been secured.**
B. If patient is conscious ask, “Are you choking”? The patient’s ability to answer will depend on the degree of airway obstruction present.
C. Determine whether patient has partial or complete airway obstruction based upon the criteria above and proceed as below.

PARTIAL AIRWAY OBSTRUCTION WITH POOR AIR EXCHANGE SHOULD BE MANAGED AS COMPLETE AIRWAY OBSTRUCTION.
CAUTION: Partial airway obstruction with good air exchange may progress to complete airway obstruction.

AIRWAY OBSTRUCTION
(MECHANICAL)

IV. TREATMENT

PARTIAL AIRWAY OBSTRUCTION

A. **Do not attempt to clear a partial obstruction unless you are positive you can remove the obstruction.** Transport immediately and avoid moving patient around as much as possible. Patient should be allowed to assume their position of least respiratory distress (commonly they will want to sit up or assume a high Fowler position.)
B. As long as good air exchange continues, encourage patient to persist with spontaneous coughing and breathing efforts.
C. Do not interfere with patient's attempts to expel foreign body at this time.
D. Provide supplemental oxygen in the highest concentration practical under the circumstances, provided that it does not interfere with the patient's attempts to breathe or expel a foreign body.
E. Monitor pulse oximetry and vital signs.

COMPLETE AIRWAY OBSTRUCTION - ADULT

A. Conscious patient: Apply Heimlich maneuver until foreign body is expelled or patient becomes unconscious.
B. Unconscious patient: Inspect for and remove obvious obstruction:
   1. Perform finger sweep
   2. Attempt to ventilate
   3. Perform 5 Abdominal Thrusts
   4. Finger sweep and ventilate
   5. Repeat above sequence until foreign body removed, or patient improves
C. If above efforts unsuccessful, attempt to clear airway by manual inspection with laryngoscope and forceps or suction.
D. Use cricothyrotomy as last resort. MUST CONTACT ON-LINE MEDICAL CONTROL FOR AUTHORIZATION PRIOR TO PERFORMING PROCEDURE.

NOTE: Heimlich maneuver is performed on a conscious patient while sitting or standing. The unconscious patient, while lying supine, should receive abdominal thrusts as above. Chest thrusts are used for advanced stages of pregnancy or in the markedly obese.

AIRWAY OBSTRUCTION
(MECHANICAL)

COMPLETE AIRWAY OBSTRUCTION - CHILD (1 to 8 years)
Same as adult using Heimlich maneuver for conscious and unconscious, attempt to ventilate and remove the object, if seen. Provide supplemental oxygen.

COMPLETE AIRWAY OBSTRUCTION – INFANT (up to 1 year)
Series of five back blows and five chest thrusts, attempt to ventilate and remove the object, if seen. Provide supplemental oxygen.

ALLERGIC REACTION

I. POSSIBLE CAUSES

Reaction to drugs
Envenomation with allergic reaction (insect stings and bites, jellyfish, etc.)
Ingested shellfish
Contact allergens (plants, animals, chemicals, etc.)
Inhalational allergens
Unknown allergens

II. SIGNS & SYMPTOMS

A. Local Reaction: Most frequently a mild localized response, which is characterized by pain, skin rash, pruritus, erythema, and edema at a sting site. May be associated with nausea, malaise and fever. If a prior history of true systemic allergic reaction from same cause, watch for rapid onset of systemic response.
B. Systemic allergic Reaction (Anaphylactic Reaction): hypotension, fainting, flushing, urticaria, angioedema (swelling to face and throat), chest tightness, wheezing, pruritus, dysphagia, abdominal cramps, vomiting and diarrhea. Occurs within 30 minutes after contact.
C. Common cause of death: Airway obstruction and circulatory collapse.

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Special attention to:
   1. Airway
   2. History – type of reaction
   3. Soft tissue swelling
   4. Blood Pressure

IV. TREATMENT

A. Local Reaction: Remove "stinger" and remove or wash off any residual allergen. Jellyfish: Wash off with salt water and apply meat tenderizer, if available on scene (do not use ice or fresh water to wash off).
B. Catfish and stingray injuries can result in severe pain without an allergic reaction. The pain responds well to heat.
C. Anaphylactic Reaction:

Emphasis: Administer Epinephrine SQ (subcutaneous) ASAP. **Do not wait for IV access.** Epinephrine :
Adults: 1:1000, 0.3 mg-0.5 mg SQ.
Pediatrics: 1:1000, 0.01 mg/kg SQ (max 0.3 mg).

ALLERGIC REACTION

D. Establish airway, administer 100% oxygen via NRB mask, intubation may be necessary (See Procedures, Endotracheal intubation, P-0250). If soft tissue swelling prevents intubation, may need to prepare for cricothyrotomy
E. IV at KVO , If hypotensive, give 250cc fluid bolus.
F. After IV established, Epinephrine may be administered IV. Lower the dosage for patients with moderate symptoms, a history of cardiac disease or hypertension and for the elderly. Use caution in patients over 50 years of age. Epinephrine may be administered via ETT if necessary.

Adults 1:10,000 – up to 0.5 mg slowly over 3-5 minutes.
Pediatrics 1:10,000, 0.1 mg/kg slowly over 3-5 minutes.

G. After Epinephrine, continue IV at rate to maintain BP >90 systolic.
H. If necessary for severe respiratory distress, Albuterol via acorn nebulizer
I. Benadryl, IM or IV, 50 mg for adults, pediatric 1 mg/kg up to 50 mg.
J. Repeat Epinephrine in 15 minutes, if necessary.
K. Pulse oximeter
L. Monitor blood pressure.
M. If hypotension persists, start Dopamine drip, titrate for BP of 90 systolic

V. SPECIAL PRECAUTIONS

Epinephrine induces vomiting in children; it increases cardiac work and may precipitate angina or MI in susceptible individuals.

A. Anxiety, tremor, palpitations, tachycardia and generalized feeling of nervousness are common following administration of Epinephrine. Patient should be reassured that these reactions are to be expected.
B. Epinephrine should not be given without signs and symptoms of anaphylaxis with systemic toxicity. Do not rely on history alone. Hyperventilators will occasionally think they are having an allergic reaction. Epinephrine just aggravates their anxiety.
C. Lethal edema may be localized to the tongue, uvula or other parts of the upper airway. Examine closely, and be prepared for Cricothyrotomy, if necessary. **Contact On-line Medical Control.**

AMPUTATION

I. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Assess for additional injury
C. Assess blood loss and determine time of amputation
D. Obtain significant medical history (to determine if reimplantation is possible)

II. TREATMENT

A. Apply pressure dressing to control bleeding.
B. Severed extremities may be micro-surgically replanted successfully. Quick thinking and completion of the following steps can make a difference.
   1. Place amputated part(s) in saline soaked gauze (do not immerse directly in fluid) and place in clean plastic bag or plastic wrap, etc.
   2. Surround plastic bag with ice in container. The amputated part should not be in direct contact with the ice.
   3. Container must accompany patient.
C. Splint limb appropriately if partially amputated.
D. Initiate IV for hypotension, tachycardia, signs of hypovolemia, or for pain management, 18 gauge or larger and O2 therapy.
E. For pain management, Morphine Sulfate (dilute 10 mg Morphine in 9 cc of fluid. Administer IV by giving 2 mg (over 1-2 minutes), titrate to relieve pain. **Must contact on-line medical control prior to administration of Morphine.**

ASTHMA

I. POSSIBLE CAUSES

Intrinsic
Allergic
Infection (bronchitis)
Inhalation of irritant (i.e., smoke)
Medication (aspirin, beta blockers, including eye drops)

II. SIGNS & SYMPTOMS

Shortness of breath and/or tightness in chest
Wheezing
Coughing
Use of accessory chest muscles to breathe
Decreased LOC
Confusion

III. INITIAL ASSESSMENT

A. Rapid patient assessment with primary emphasis on respiratory system.
B. Special attention to:
   1. History of asthma? Medical Alert bracelet.
   2. On asthma medications?
   3. Degree of distress (mild, moderate, severe?)
   4. Level of consciousness
   5. Cyanosis
   6. Diaphoresis
   7. Breath sounds (expiratory wheezing is diagnostic; “silent chest” is an ominous sign).
C. Apply cardiac monitor.

IV. TREATMENT

A. Airway maintenance, (consider intubation, as needed)
B. Oxygen by nasal cannula or non-rebreather, as appropriate, to maintain oxygen saturation of 90% or above.
C. Pulse oximetry.
D. Albuterol, 2.5mg in 3ml normal saline, via updraft nebulizer May repeat Albuterol treatment, “back to back”, when clinically necessary (no significant improvement after first treatment.) **Contact on-line Medical Control if third dose necessary.**
E. If in severe respiratory distress, or any history or suspicion of cardiac disease, start PRN adaptor. (See Procedures, IV Procedure, P-0300.)

ASTHMA

F. Consider SQ epinephrine, if no response to albuterol treatment or if condition warrants. (See Drug Summary, Epinephrine D-250):
   1. **Adult – Epinephrine 1:1000, 0.3 ml-0.5 ml SQ**
   2. **Pediatric – 1:1000 0.01 ml/kg up to 0.3 ml (0.3 mg) SQ.**

RELATIVE CONTRAINDICATIONS TO EPINEPHRINE

Age >50
History of cardiac disease
Hypertension: Systolic BP >160 or Diastolic >95
Tachydysrhythmia (ST >120) or Ectopy

BURNS

I. POSSIBLE CAUSES

Heat
Chemical
Electrical
Radiation
NOTE: Safety of crew must be a priority

II. SIGNS & SYMPTOMS

Pain
Redness
Blisters
Respiratory Distress

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Assess for Trauma – trauma is quite common with burns
C. Estimate size of burn: consider only 2nd and 3rd degree
D. Use rule of nine and/or palm of patient's hand rule

SPECIAL ATTENTION TO

1. **Call Trauma Alert if 2nd or 3rd degree burns greater than or equal to 15% of Body Surface area. Peds burn Trauma Alert Criteria greater than or equal to 10% BSA.**
2. Time of burn
3. Was patient in closed space with steam or smoke? For how long?
4. Assess for evidence of respiratory burns: soot or erythema of mouth; singed nasal hairs, hoarseness, respiratory distress.
5. Loss of Consciousness?
6. Electrical burns: note entrance and exit sites.
7. Heat loss: keep patient warm.

IV. TREATMENT

A. **Stop the burning process. Burning clothing should be extinguished or removed.**
B. Establish airway, 100% oxygen via NRB mask, consider early intubation for patients with signs and symptoms of respiratory burns. (See Procedures, Endotracheal Intubation P-0250)
C. Chemical burns to skin: irrigate at scene with copious amounts of water for 5 minutes.
D. Chemical burns to eyes: copious lavage is started and continued throughout transport.

BURNS

E. Remove rings, bracelets and other objects which may remain hot or constrict circulation. (Be aware that circumferential burns may constrict circulation, check pulses distal to these burns).
F. Establish IV – Large bore, if possible.
G. Monitor cardiac rhythm and vital signs
H. Apply dry sterile dressing or sheet
I. For pain management, Morphine Sulfate (dilute 10 mg Morphine in 9 cc of fluid). Administer IV by giving 2 mg (over 1-2 minutes), titrate to relieve pain. Must contact on-line medical control prior to administration of Morphine

V. INTERFACILITY TRANSPORTS

A. Ensure that patient has a secure airway prior to transport.
B. Morphine Sulfate IV route only, administer after hypoxia and hypovolemia have been corrected.

REMEMBER: Document time of burn, type of burn, if patient was in an enclosed environment, type of chemical, what was burning? Document accurate intake of IV fluids and any output of urine on patient care form.

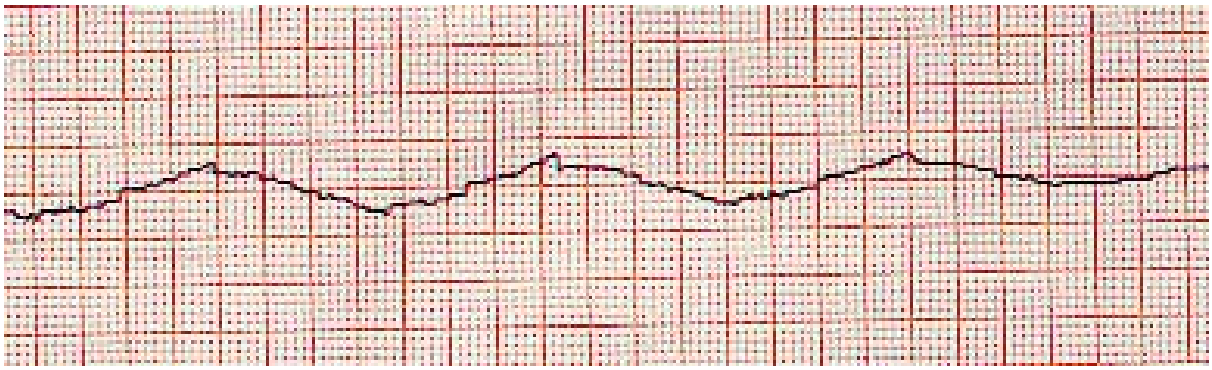
REMEMBER: Replacement of IV fluids is based on time burn **occurred**. Administer what has been lost from time of burn.

USE FORMULA BELOW FOR FLUID REPLACEMENT DURING INTERFACILITY TRANSFERS:

% of burn x 4cc x Pt. Wt (kg) = 24 hour total. Give ½ in first 8 hours.
i.e.; 40% x 4cc x 60kg = 9600cc. ½ of 9600cc = 4800cc ÷8 = 600cc/hr

CARDIAC DYSRHYTHMIA
ASYSTOLE/AGONAL

Asystole



Heart Rate	Rhythm	P Wave	PR Interval (in seconds)	QRS (in seconds)
0	Absent	None	None	None

I. POSSIBLE CAUSES

Acute Myocardial Infarction
Exsanguination
Prolonged Hypoxia
Hypothermia
Hypoxia
Hyper/hypokalemia
Drug overdose
Pre-existing acidosis

II. SIGNS & SYMPTOMS

Cardiac arrest with isoelectric ECG tracing
Verify asystole in 2 leads to rule out Ventricular Fibrillation
Be certain monitor gain is turned up.

III. TREATMENT

A. Rapid patient assessment. EKG monitor. If patient is unconscious, use "Quick look" or pads method for initial cardiac rhythm identification.
B. Start CPR. Establish and maintain airway. O2 therapy, administer O2 as patient condition warrants.
C. Epinephrine 1:10,000, 1 mg IVP or Epinephrine 1:1,000, 2.0 to2.5 mg ETT (See Drug Summary, Epinephrine D-250).
D. Repeat Epinephrine every 3 – 5 minutes.
E. Atropine, 1 mg IVP or 2-2.5 mg. ETT, repeat every 3 – 5 minutes, up to 0.04 mg/kg (3-4 mg for an average adult)

CARDIAC DYSRHYTHMIA
ASYSTOLE/AGONAL

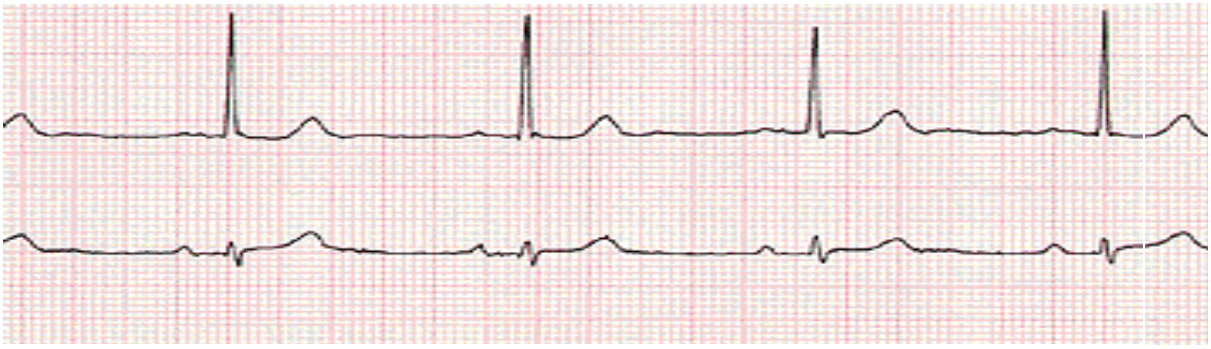
F. Start IV
G. If a witnessed change to asystole, a trial of immediate transcutaneous pacing may be tried. Do not delay drug therapy

Special Note: Orders to cease resuscitation efforts may be requested from **on-line Medical Control** after persistent asystole has been confirmed and has not responded to successful intubation, IV access, suitable CPR, and all rhythm-appropriate medications.

NOTE: When pacemaker is applied: Document: Rate, Milliamps, if pacemaker captures and if patient has pulses with pacemaker.

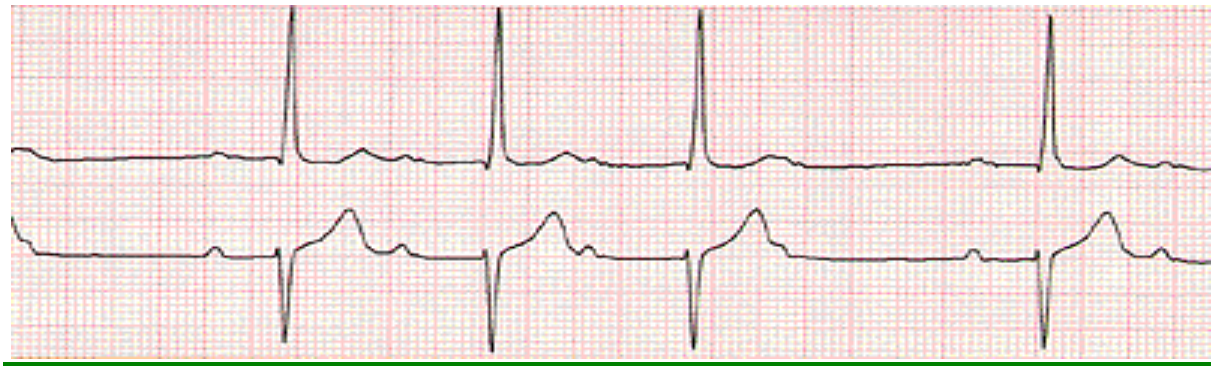
CARDIAC DYSRHYTHMIA
BRADYCARDIA

Sinus Bradycardia



Heart Rate	Rhythm	P Wave	PR Interval (in seconds)	QRS (in seconds)
< 60 bpm	Regular	Before each QRS, identical	.12 to .20	< .12

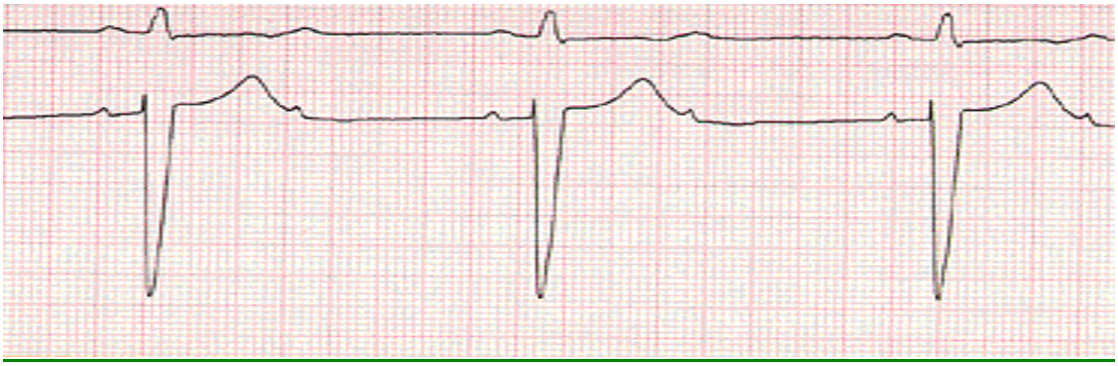
Second Degree AV Block / Mobitz I (Wenckebach)



P Wave	PR Interval (in seconds)	QRS (in seconds)	Characteristics
Conduction Intermittent	Increasingly prolonged	< .12	QRS dropped in a repeating pattern

CARDIAC DYSRHYTHMIA
BRADYCARDIA

Second Degree AV Block / Mobitz II



P Wave	PR Interval (in seconds)	QRS (in seconds)	Characteristics
Conduction Intermittent	Interval is constant	Normal or wide	Fixed ratio of conduction (P:QRS)

Third Degree (Complete) AV Block

P Wave	PR Interval (in seconds)	QRS (in seconds)	Characteristics
Normal but not related to QRS	None	N/A	No relationship between P&QRS

CARDIAC DYSRHYTHMIA
BRADYCARDIA

I. POSSIBLE CAUSES

Acute Myocardial Infarction or ischemia
Chemical and drugs (Digoxin, beta blockers, organophosphates)
Vasovagal reflex

II. SIGNS & SYMPTOMS

Chest pain
Hypotension
Dyspnea
Altered Mental State

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Place patient on cardiac monitor
C. Place patient on Pulse Oximeter

IV. TREATMENT

A. Establish airway. Administer supplemental oxygen as patient condition warrants. Start CPR if indicated.
B. Atropine .5 mg to 1 mg IV or 1 mg to 2.5 mg ETT (if no IV), up to a total of 0.04 mg/kg. If new onset 2 degree or wide complex 3 degree hold atropine and proceed to "D".
C. IV Fluid challenge, if hypovolemia is suspected
D. Do not delay Transcutaneous Pacemaker waiting for IV access to administer atropine in symptomatic patient. Begin rate at 70 BPM and MA at 40. Increase MA in increments of 5 until there is capture with pulses. (Use the lowest MA to produce pulses with pacemaker)

<u>NOTE:</u> Document pacemaker: rate and milliamps, if pacemaker captures and if pulses present with pacemaker.

CARDIAC
DYSRHYTHMIAS

I. POSSIBLE CAUSES

Myocardial Ischemia and/or Infarction
CHF
Blunt chest trauma
Drug toxicity (cocaine, tricyclics)
Toxins
Electrolyte imbalance
Hypoxia

II. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Special attention to:
   1. Blood pressure
   2. Pulse
   3. Evidence of poor perfusion
   4. Pulmonary Edema
   5. Cardiac monitor – document dysrhythmias

III. TREATMENT

A. If patient is unconscious – use quick-look method for initial cardiac rhythm identification and treat accordingly. **Identify and treat dysrhythmias per specific Dysrhythmia Protocols.**
   1. Ventricular Fibrillation
   2. Ventricular Ectopy
   3. Symptomatic Bradycardia
   4. Paroxysmal Superventricular Tachycardia
   5. Sustained Ventricular Tachycardia
   6. Pulseless Electrical Activity
   7. Agonal Rhythm (treat as Asystole)
   8. Asystole
B. If patient in cardiac arrest - start CPR
C. Establish adequate airway. Administer supplemental oxygen as patient condition warrants. Intubate as needed
D. Place patient on pulse oximeter
E. Start IV at KVO
F. If hypotensive consider Trendelenburg
G. If hypovolemia is suspected, infuse 250 cc IV fluid and **contact on line Medical Control**.

CARDIAC DYSRHYTHMIA
PEA

I. POSSIBLE CAUSES

Hypovolemia	Cardiac tamponade
Hypoxemia	Tension pneumothorax
Acidosis	Pulmonary embolism
Hyperkalemia	Massive acute myocardial infarction
Hypothermia	Drug Overdose

II. SIGNS & SYMPTOMS

Cardiac monitor displays normal rhythm. Patient is pulseless.

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Cause is often determined by the history
C. Attach patient to cardiac monitor using “patch look” or “pads” method.

IV. TREATMENT

A. CPR
B. Establish Airway; administer 100% oxygen via BVM. Prepare to intubate
C. Epinephrine 1 mg. 1:10,000 IVP or 2-2.5 mg 1:1000 ETT repeat every 3-5 minutes
D. Atropine 1.0 mg IVP or 2-2.5 mg ETT, repeat every 3-5 minutes (total 0.04 mg/kg) for absolute or relative bradycardia
E. Fluid Challenge, 250 cc bolus, if hypovolemia suspected
F. Chest needle decompression if tension pneumothorax suspected. **Contacting on-line Medical Control prior to performing this procedure is strongly advised <u>if time and situation permit</u>.** Identify and attempt to correct underlying causes.

CARDIAC DYSRHYTHMIA
SINUS TACHYCARDIA

Sinus Tachycardia

Heart Rate	Rhythm	P Wave	PR Interval (in seconds)	QRS (in seconds)
> 100 bpm	Regular	Before each QRS, identical	.12 to .20	< .12

I. POSSIBLE CAUSES

Hypovolemia
Fever
Exercise
Anxiety
Drugs

II. SIGNS & SYMPTOMS

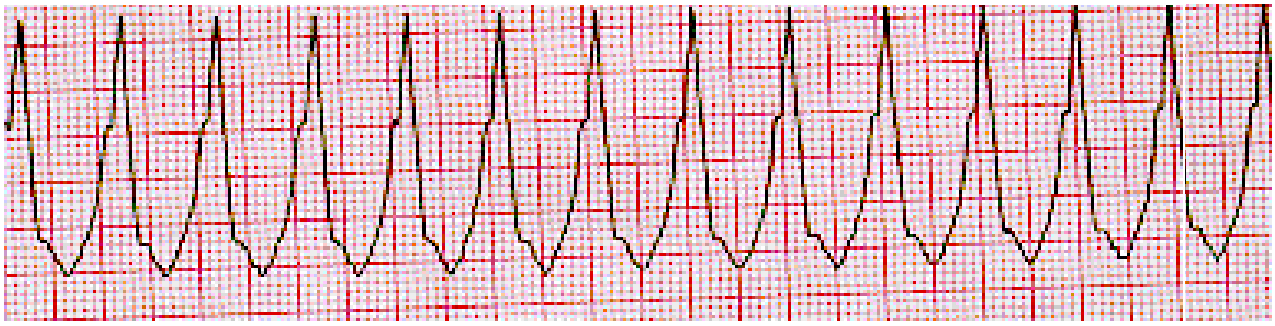
Increased heart rate greater than 100 BPM.

III. TREATMENT

A. Rhythm itself requires no treatment, although underlying cause may need treatment.
B. Explore underlying cause; refer to appropriate protocol.

CARDIAC DYSRHYTHMIA
SUSTAINED VENTRICULAR TACHYCARDIA

Sustained Ventricular Tachycardia



HeartRate	Rhythm	P Wave	PR Interval (in seconds)	QRS (in seconds)
Greater than 100, usually less than 220	Usually regular, may be irregular	Usually not recognizable	None	Broader than .12, bizarre, notched

I. POSSIBLE CAUSES

Acute myocardial infarction or ischemia

II. SIGNS & SYMPTOMS

Stable	Unstable
1. Has pulse	1. Hypotensive (Syst. BP <90)
2. Asymptomatic	2. Hypoxia
3. Stable blood pressure	3. Altered LOC
	4. Chest pain
	5. Diaphoresis

III. INITIAL ASSESSMENT

A. Rapid patient assessment, EKG monitor. If patient is unconscious, use "Quick look" method for initial cardiac rhythm identification.

B. Special attention to differentiate between stable and unstable ventricular tachycardia. NO PULSE, REFER TO VENTRICULAR FIBRILLATION PROTOCOL (See CARDIAC DYS., V.FIB, 0180)

IV. TREATMENT

A. **STABLE PATIENT:** Administer supplemental oxygen as patient condition warrants.

1. Attempt non-invasive maneuvers, (i.e. have patient cough)
2. Initiate IV. (See Procedures, IV Procedure, P-0300)

CARDIAC DYSRHYTHMIA
SUSTAINED VENTRICULAR TACHYCARDIA

3. Place patient on Pulse Oximeter. (See Procedures, Pulse Oximeter, P-0600)
4. Place patient on pulse oximeter. (See procedures, Pulse Oximeter, P-0600)
5. Lidocaine bolus 1-1.5 mg/kg IV, repeat dose 0.5-.75 mg/kg, may use initial dose in refractory VF. Drip at 1-4 mg/min. (See Drug Summary, Lidocaine, D-520)

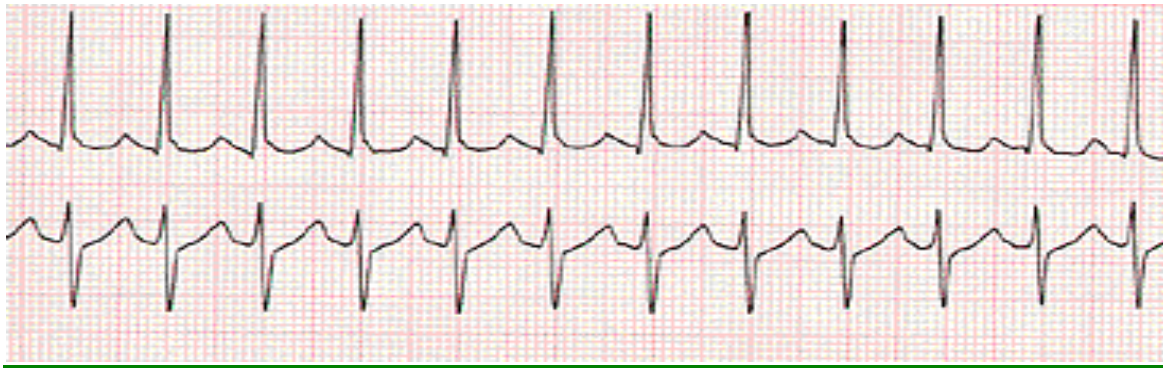
B. **<u>UNSTABLE PATIENT:</u> No pulse, refer to Ventricular Fibrillation Protocol (See CARDIAC DYS., V. Fib, 0180). 100% oxygen via NRB face mask. Intubate PRN. (See Procedures, Endotracheal Intubation, P-0250)**

1. 100% oxygen by NRB face mask. Intubate PRN. (See Procedures, Endotracheal Intubation, P-0250)
2. Consider sedation with Valium, may titrate up to 5 mg IVP. (See Drug Summary, Valium, D-900).
3. Deliver synchronous cardioversion at 100 joules, if no response.
4. Synchronous cardioversion at 200 joules, if no response.
5. Synchronous cardioversion at 300 joules, if no response.
6. Synchronous cardioversion at 360 joules.
7. Administer Lidocaine 1-1.5 mg/kg IVP, may be repeated at 0.5 to .75 mg/kg up to a total of 3 mg/kg. For refractory VT repeat initial dose. (See Drug Summary, Lidocaine, D-520)
8. Begin a Lidocaine drip at 1-4 mg/min. (See Drug Summary, Lidocaine, D-520)

<u>NOTE:</u> If patient's rhythm converts to Ventricular Fibrillation, turn off synchronization, defibrillate and follow Ventricular Fibrillation protocol (See Cardiac Dysrhythmia, Venticular Fibrillation, 0180).

CARDIAC DYSRHYTHEMIA
SUPRAVENTRICULAR
TACHYCARDIA

Supraventricular Tachycardia



Heart Rate	Rhythm	P Wave	PR Interval (in seconds)	QRS (in seconds)
150 - 250 bpm	Regular	Abnormal/ absent P before each QRS (difficult to see)	<.20	< .12

I. POSSIBLE CAUSES

Chemicals and drugs (decongestants, stimulants, alcohol, Digoxin, caffeine).
COPD
Acute Myocardial Infarction
Wolff-Parkinson-White Syndrome
Mitral Valve prolapse

II. SIGNS & SYMPTOMS

Rapid regular heart rate with narrow QRS (usually 150-250 BPM)

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor

IV. TREATMENT

A. **STABLE PATIENT** (conscious patient without symptoms)
   1. Establish IV with at least an 18g catheter, either antecubital or external jugular when Adenosine is to be administered.
   2. Administer supplemental oxygen as patient condition warrants. Intubate PRN.

CARDIAC DYSRHYTHEMIA
SUPRAVENTRICULAR
TACHYCARDIA

3. Vagal Maneuvers
4. Have patient cough
5. Valsalva maneuver
6. Place patient on pulse oximeter
7. Adenosine 6 mg **RAPID IVP** (1 to 2 seconds). If no response within 2 minutes, rebolus with 12 mg. If no response within 2 minutes, rebolus with second 12 mg. Follow each bolus with 20 cc flush. Monitor blood pressure before and after each bolus.

B. **UNSTABLE PATIENT** (Hypotension, Systolic BP <90, Hypoxia, decreased level of consciousness)
    1. Synchronized Cardioversion
        a. Synchronous cardioversion at 50 joules, if no response
        b. Synchronous cardioversion at 100 joules, if no response
        c. Synchronous cardioversion at 200 joules, if no response
        d. Synchronous cardioversion at 360 joules, if no response
    2. **Do not delay cardioversion for IV access**
    3. Sedation should be used as time permits (Valium 5 mg IVP).
    4. 100% oxygen via NRB face mask. Intubate PRN.
    5. Identify and attempt to correct underlying abnormalities.
    6. If PSVT recurs after cardioversion, repeated electrical cardioversion is not indicated. **Contact on-line Medical Control for additional orders.**

CARDIAC DYSRHYTHMIA
VENTRICULAR FIBRILLATION

Ventricular Fibrillation				
				
Heart Rate	**Rhythm**	**P Wave**	**PR Interval** (in seconds)	**QRS** (in seconds)
None	Irregular	Absent	None	None

I. POSSIBLE CAUSES
Acute Myocardial Infarction
Electrocution
Hypoxemia

II. SIGNS & SYMPTOMS
Cardiac arrest, Apneic, Pulseless

III. INITIAL ASSESSMENT
A. Rapid patient assessment
B. Attach cardiac monitor using “quick look” or “pads” method.

IV. TREATMENT
A. If witnessed: precordial thump.
B. CPR until defibrillator available.
C. Defibrillate at 200 joules, if no response, then immediately
D. Defibrillate at 300 joules, if no response, then immediately
E. Defibrillate at 360 joules
F. Reassess patient
G. Intubate with ETT – ventilate with 100% oxygen via ambu bag
H. Obtain vascular access (as soon as possible).
I. Administer Epinephrine 1 mg, 1:10,000 IVP, or 2 to 2.5 mg, 1:1,000 ETT every 3 minutes OR Administer Vasopressin, 40 units intravenously After 10 minutes, administer Epinephrine as above.

CARDIAC DYSRHYTHMIA
VENTRICULAR FIBRILLATION

J. Defibrillate at 360 joules
K. Lidocaine 1-1.5 mg/kg IVP/ETT may be repeated every 3 to 5 minutes to a total of 3 mg/kg.
L. Continue to defibrillate at 360 joules between drug administrations. Continue CPR as indicated.

NOTE:

1. After initial three stacked shocks, check pulse and rhythm frequently after subsequent shock. If V-Fib recurs, use previous energy level. Check rhythm after each shock. Check for pulse if rhythm changes.
2. **After conversion, rebolus and then begin a drip of last anti-arrhythmic drug that terminated fibrillation.**
3. Consider sodium bicarbonate after prolonged resuscitation attempt. **Must contact on-line Medical Control prior to administration.**

CHEST PAIN

I. POSSIBLE CAUSES

Cardiac Ischemia	Pericarditis
Pulmonary Edema	Trauma
Pulmonary Emboli	Hysteria
Chest Wall Pain	Pneumothorax
Aortic Aneurysm	Gastritis

II. SIGNS & SYMPTOMS

Multiple, depending on pathologic cause
Cardiac related symptoms
Pain may be crushing, substernal, neck or arm pain
Nausea and/or vomiting
Diaphoresis
Shortness of Breath
Rales

III. INITIAL ASSESSMENT

A. Rapid patient assessment
   1. Special Attention to:
   2. History of cardiac problems
   3. Time from onset of chest pain
   4. Level of pain/discomfort (1-10)
   5. **Recent use of Viagra within the last 72 hr.**
B. Cardiac monitor

IV. TREATMENT

A. Establish airway: administer 100% oxygen via NRB mask.
B. Place patient on pulse oximeter
C. Cardiac monitor, note dysrhythmias, document with 10 second strip, treat per protocol
D. Place patient in position of comfort or supine position if hypotensive.
E. Obtain vascular access, PRN adaptor or IV at KVO
F. Aspirin, four “baby” Aspirin (total of 324 mg), PO, if no contraindications, (**i.e., currently using anticoagulants such as Coumadin; bleeding disorders; peptic ulcer disease; asthma; or history of allergy to aspirin or anti-inflammatory**). May be given with a small amount of water, if requested
G. Nitroglycerin 0.4 mg sublingual for chest pain, if not hypotensive or taking Viagra. May repeat dosage twice at 5 minute intervals, (monitoring blood pressure).

CHEST PAIN

H. For chest pain not relieved by Nitroglycerin: Morphine Sulfate (dilute 10 mg Morphine in 9 cc NS, Administer IV by giving 2 mg over 1-2 minutes), titrate to relieve pain. **Must contact on-line Medical Control for orders prior to administration of Morphine.**
I. For relief of nausea, Phenergan 25 mg in 9 cc bacteriostatic saline. Give 5 cc IV over 1 minute. May repeat in 10 minutes if no side effects and stable vital signs. Consider ½ initial dose in the elderly.
J. Obtain 12 lead EKG, if time allows.
K. Complete r-TPA inclusion/exclusion criteria form, if time and clinical condition allows

CHF
PULMONARY EDEMA

I. POSSIBLE CAUSES

Myocardial Infarction	Increased circulating volume
Left Ventricular Failure	Cardiac Tamponade
Prolonged Ischemia	Aortic Stenosis
Pulmonary Emboli	Mitral Insufficiency
Inhalation Injuries	Drug Overdose

II. SIGNS & SYMPTOMS

Shortness of Breath	Orthopnea
Tachycardia	Altered LOC
Restlessness, anxiety	Cyanosis or pallor
Hypoxia > respiratory acidosis	Pink Frothy Sputum
Increased systolic blood pressure	Basilar Rales
Chest Pain	Nocturnal Dyspnea

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Cardiac monitor

IV. TREATMENT

A. Administer oxygen at 100% via NRB mask.
B. Obtain vascular access, PRN adaptor or IV at KVO, limit fluids infused.
C. **If patient has severe distress with stable vital signs, afebrile, and audible wet rales, consider administering:**
    1. Nitroglycerin 0.4 mg sublingual, if not hypotensive.
    2. Lasix 80 mg IV push.
    3. Albuterol treatment.
    4. Morphine, 2-4 mg IVP titrated to symptoms and vital signs. **Must contact on-line Medical Control prior to administration.**
D. If patient is unstable or fails to respond to treatment, consider intubation.

COPD

I. POSSIBLE CAUSES OF EXACERBATION

Infection
Failure to take meds
Pneumothorax
Weather changes

II. SIGNS & SYMPTOMS

Labored respirations
Use of accessory muscles
Rales, wheezing
Diminished breath sounds
Respiratory arrest
Dysrhythmias
Lethargy/confusion
Cyanosis

III. INITIAL ASSESSMENT

Rapid patient assessment

Special Attention to:

Level of consciousness
Breath sounds
Oxygen saturation
Cardiac monitor

IV. TREATMENT

A. Oxygen at 2 liters per nasal cannula. Administer supplemental oxygen as patient condition warrants, increase as needed.
B. Establish IV at KVO
C. Consider intubation, if increased respiratory distress or decreasing mental status suggests that respiratory failure is imminent.
D. Place patient on pulse oximeter and document oxygen saturation.
E. Albuterol, 2.5 mg, via acorn nebulizer. May repeat once, call for the third treatment.
F. If CHF obvious factor.

DEATH

I. PURPOSE

To outline procedures when a patient has suffered a mortal injury or irreversible cardiac arrest.

II. POLICY

When obvious signs of death are present upon arrival of Paramedics, Do Not Resuscitate orders can apply.

III. SIGNS & SYMPTOMS

Absence of vital signs with any of the following and no signs of hypothermia.

1. Rigor Mortis with Asystole
2. Dependent lividity with Asystole
3. Decapitation
4. Massive incineration
5. Massive Blunt Trauma with Asystole
6. Decomposition
7. Documented "Down time" > fifteen (15) minutes prior to basic life support with Asystole.
8. Asphyxia > thirty (30) minutes; due to drowning, cave in, no airway in a patient that cannot be accessed in cases with lengthy extrication or any other similar situations with Asystole.
9. An original, fully executed, state approved DNRO is presented.

IV. INITIAL ASSESSMENT

A. Rapid patient assessment.
B. Vital Signs must be documented.
C. Cardiac monitor, must document with cardiac strip as defined above.
D. Resuscitation shall be initiated unless patient has signs and symptoms of death as listed above.

V. TREATMENT

A. If a resuscitation attempt is in progress and the above assessment is present (III above), **continue resuscitation attempt and contact on-line Medical Control for orders to terminate resuscitation effort.**

B. **IF ANY DOUBT EXISTS, BEGIN RESUSCITATION AND CONTACT ON-LINE MEDICAL CONTROL**

NOTE: **Must document Asystole with 6 second cardiac strip.**
Must document time of cessation of CPR.
Must document absence of vital signs.

DECOMPRESSION SICKNESS

I. POSSIBLE CAUSES

Scuba diving or other activity involving the breathing of compressed gases at greater than atmospheric pressure.

Also known to occur in deep tunnel workers and aviators subjected to rapid depressurization.

II. SIGNS & SYMPTOMS

Symptoms are essentially broken down into those that pertain to direct results of the pressurized gas or decompression, and those that pertain to the formation of bubbles within the venous system or arterial system or within the tissues.

Signs and symptoms of decompression sickness usually appear within fifteen (15) minutes to twelve (12) hours after surfacing, but in severe cases, symptoms may appear sooner. Delayed occurrence is rare, but does occur especially if there is air travel following diving.

Decompression Sickness – formation of nitrogen bubbles

A. unusual fatigue
B. skin itch
C. pain in legs, arm, torso
D. dizziness
E. numbness
F. shortness of breath
G. respiratory distress
H. paralysis, paresthesia
I. skin may show a blotchy rash
J. staggering
K. coughing spasm
L. collapse or unconsciousness
M. altered mental status
N. difficulty in urination

Symptoms pertaining to probable vascular emboli usually occur within ten minutes after ascent. Their symptoms may be present at the time of your arrival or may have resolved. This does not eliminate the diagnosis of vascular embolic phenomena.

Arterial Gas Embolism

A. loss of consciousness
B. paralysis, either unilateral or bilateral
C. altered mental status
D. altered vision
E. altered balance
F. seizure
G. respiratory distress with equal or unequal breath sounds

DECOMPRESSION SICKNESS

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Special attention to: (and document the following)
   1. Complete history of diving during previous 24 to 72 hours
   2. Has the victim experienced this before?
   3. Has there been more than one dive?
   4. Time on the bottom
   5. Surfacing intervals
   6. Time to onset of symptoms
   7. Has been diving, and then flew?

IV. TREATMENT

A. Establish airway, CPR if necessary
B. Administer 100% oxygen by most effective means (via NRB mask or BVM). Place pulse oximeter, document oxygen saturation. Position victim on left side, head down 10 – 15 minutes (to allow fat or air embolization to dissolve), then the patient may be placed flat.
C. Large bore IV at 100-200 cc/hr or depending on state of hydration. Remember: diving causes mild dehydration due to increased insensible water loss (diaphoresis, hyperventilation). Cardiac monitor.
D. Advise on-line Medical Control, as soon as possible, of possible need to transport to re-compression chamber.
E. Transport to closest appropriate emergency department. Crew should attempt to stand-by in the emergency department for possible immediate transport to a re-compression chamber.
F. If patient is conscious, give two aspirin p.o.

<u>NOTE:</u> All patients with absent pulse and/or breathing are managed according to the appropriate protocol. Remember, these patients have a higher incidence of Pneumothorax and tension Pneumothorax.

DIABETIC HYPOGLYCEMIA

I. POSSIBLE CAUSES

Not eating after taking medication
Vomiting
Medication change
Increased activity

II. SIGNS & SYMPTOMS

Pale, moist skin
Full, rapid pulse (Bradycardia may be present)
Fainting, seizures, or unconsciousness
Nausea and vomiting
Dizziness, headache, weakness

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Cardiac monitor

IV. TREATMENT

A. Establish airway, administer supplemental oxygen as patient condition warrants. Intubate as needed
B. If patient conscious, cooperative, and not a risk for aspiration, try oral glucose (i.e., orange juice, coke, instant glucose, etc
C. Start IV
D. Check blood glucose level.
E. **Adult** – Glucose <60 – Administer D50W 25 gm IV, over 3-5 minutes.
F. **Pediatric** – Glucose <60 – Administer D25W .5-1 gm/kg IV, slowly. D50W diluted 1:1 with bacteriostatic saline results in D25W.
G. If blood glucose <60 and, if IV access is clearly going to be difficult (or if IV access cannot be obtained within two attempts) administer Glucagon 1 mg SQ or IM.
H. Recheck blood glucose level after treatment.

NOTE: D50W should be administered as soon as possible. If the patient refuses transport, and the patient is competent to refuse transport, contact on-line Medical Control. Document that patient is competent to refuse in PCR and complete AMA form. Advise patient and family to feed patient immediately and follow up with family physician as soon as possible.

If the patient is incompetent and there is no competent adult to stay with the patient, contact Shift Supervisor and on-line Medical Control.

DROWNING

Near Drowning – when recovery occurs following asphyxia due to submersion injury.

Drowning – death within 24 hours of asphyxia due to submersion injury.

I. POSSIBLE CAUSES

Asphyxia due to submersion in water or other fluid media.

II. SIGNS & SYMPTOMS

Normal to unresponsive
Normal to absent vital signs

III. INITIAL ASSESSMENT

A. Rapid patient assessment.
B. Apply cardiac monitor.

IV. TREATMENT

A. Establish airway, use chin lift/jaw thrust for possible cervical injury. Protect cervical spine if there is suspicion that the victim suffered a neck injury (usually associated with diving injury or fall).
B. Intubate as needed and ventilate with 100% oxygen or 100% via NRB mask.
C. Remove foreign matter if obstructing airway.
D. IV at KVO (increase if obvious evidence of hypovolemia).
E. Provide blankets if cold water submersion and treat for Hypothermia as needed

NOTE: All victims of near drowning should be evaluated by a physician. Patients may develop signs of respiratory distress within the first four hours (Secondary drowning).

NOTE: Safety – Remove patient from water and dry chest before defibrillating. Document if patient was in contaminated water.

EKG TRACINGS

I. INDICATIONS

All patients presenting in any distress secondary to respiratory or cardiac difficulties shall be placed on a cardiac monitor. The presenting rhythm and any rhythm changes shall be documented by affixing a representative EKG tracing as defined below.

II. PROCEDURE

A. A printed EKG tracing shall be requested from any first response agency that attaches their cardiac monitor to the patient. This is particularly important in those situations where the patient is no longer exhibiting Ectopy and during cardiac arrest situations to identify the presenting rhythm.

B. All patients shall be monitored in either the "quick look" mode using the paddles/pads or through the use of lead II.

C. All presenting rhythms and rhythm changes shall be documented by collecting and maintaining a representative sample of the tracing. **For the LP-12, the incident number must be entered in the patient information section using the "OPTIONS" key.**

D. The presenting rhythm and subsequent rhythm changes shall be documented within the intervention section (Cardiac Monitor) of the Uniform Run Report.

EPIGLOTTITIS

I. POSSIBLE CAUSES

Acute bacterial infection (usually caused by Hemophilus influenza bacteria affecting upper airway).

II. SIGNS & SYMPTOMS

A. Rapid onset
B. High fever
C. No cough
D. Cyanosis
E. Drooling
F. Child is ill, anxious
G. Doesn't attempt to speak
H. Refuses to swallow
I. Retractions present
J. Epiglottis is "Cherry Red", inflamed, swollen
K. Muffled voice
L. Prefers sitting position (can't lie down)
M. Inspiratory stridor (noisy upper airway respirations)
N. Sore throat, refusal to eat and drink
O. Pain
P. Shallow breathing, Dyspnea

NOTE: THIS IS A TRUE MEDICAL EMERGENCY
Most commonly affects ages 3-6 years (rarely infants, occasionally adults).
Occurs year round.
Duration of illness prior to call is 2-48 hours.

III. INITIAL ASSESSMENT

A. Rapid patient assessment, **do not attempt to look in mouth or throat. Do not agitate patient during assessment.**
B. Cardiac monitor.

IV. TREATMENT

A. Administer supplemental oxygen as patient condition warrants.
B. Position patient for comfort, security, and to help handle oral secretions. Avoid unnecessary oral suctioning.
C. Have airway equipment ready for possible respiratory arrest. Be aware you will need to use one size smaller ETT than usual, due to swelling.
D. Do Not start IV, or any other action which may upset patient **unless absolutely necessary.**

EYE INJURY
HEAT AND LIGHT

I. POSSIBLE CAUSES

Flash Burns (Welder's Torch), this is a UV burn and becomes symptomatic 6 – 12 hours after exposure because of corneal injury.
Chemicals and irritants cause direct injury to the cornea
Heat Burns rarely cause direct injury but when they do result in a a hazy opacity of the cornea.

II. SIGNS & SYMPTOMS

Hemorrhage
Spots
Photophobia
Pain
Decreased vision

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Eye & adjacent structures
C. Visual acuity (count fingers)
D. History of eye problems, glasses, etc.
   Ask specifically about contact lenses, and if worn at time of injury

IV. TREATMENT

A. Chemical Exposure: irrigate eye with large quantities of normal saline or H2O until arrival at ED. (Remove contact lenses, if able , then irrigate) Document amount of fluids used.
B. Cover both eyes with loose dressings (dry or moist) for heat burns, avoid pressure on eyes.
C. Cover eyes for light burns, avoid pressure on eyes.
D. Obtain type of chemical or description of chemical.

GENERAL INFORMATION

If acid or alkali burns are not treated immediately, irreparable damage may occur. Transport with head elevated if not contraindicated.

GUNSHOT WOUND

I. POSSIBLE CAUSES

Penetration of missile into body

II. SIGNS & SYMPTOMS

Entrance wound with or without exit
Bleeding with or without hypotension
Respiratory distress

III. INITIAL ASSESSMENT

A. Scene must be secured by Law Enforcement personnel prior to arrival of Department of Public Safety personnel.
B. ABC's, rapid patient assessment
C. **LOAD AND GO SITUATION!!!**

NOTE: Attempt to obtain a history of the incident, including type gun caliber, angle of entry, and distance of weapon. Observe whether there are powder burns at entrance wounds. Look for exit wound. Remove as much clothing as necessary to check for additional bullet holes. Do not cut clothing through a GSW hole, cut around it. Observe your surroundings – GSWs often require legal testimony later. CHART CAREFULLY

SPECIAL NOTE: Penetrating injury to the head, neck, chest, abdomen or groin is a **TRAUMA ALERT** (See Trauma Alert, 2020) per HRS protocols and should be transported to the closest trauma center or as per Trauma Transport Protocols.

IV. TREATMENT

A. Administer supplemental oxygen as patient condition warrants. Intubate patient if unconscious or respiratory deterioration.
B. IV access should be attempted while enroute to the hospital; Start IV access with large bore needle. IV rate according to patient's clinical condition.
C. Apply dressing – monitor blood loss.
D. Cardiac monitor
E. Provide spinal immobilization if spinal cord injury is suspected or GSW to the head, neck, chest or back.
F. Consider Trendelenburg if not contraindicated.

HEAD INJURY

I. POSSIBLE CAUSES

Blunt Trauma
Penetrating Trauma

II. SIGNS & SYMPTOMS

Diminished level of consciousness
Combativeness
Amnesia of event
Focal neurological deficits
Seizures
Headache
Nausea/vomiting

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Neuro assessment

IV. TREATMENT

A. **If unconscious, assume spinal cord injury.**
B. Secure and maintain airway, intubate PRN (preferably oral with in-line c-spine immobilization)
C. Administer 100% oxygen via bag-valve-mask device.
D. Immobilize spine with long backboard, cervical immobilization device and extrication collar. **Assume that all head trauma patients have spinal cord injury.**
E. Control bleeding with gentle direct pressure and sterile dressings.
F. Start IV at KVO, unless hypotensive (BP <90), then wide open infusion.
G. Cardiac monitor.

SPECIAL NOTE: Paralysis, loss of sensation, BMR of 4 or less or Glasgow Coma Scale of 12 or less is a Trauma Alert per HRS protocols. Patient should be transported to the closest Trauma Center or as defined by Trauma Transport Protocols. (See Protocols, Trauma Transport Protocol, 2030)

HEAT EXPOSURE

I. POSSIBLE CAUSES

Exposure to extreme temperature conditions

Exacerbated by age or alcohol intake or drugs, i.e.; phenothiazines, anti-histamines, and anti-cholinergics

II. SIGNS & SYMPTOMS

Varies according to type:

A. HEAT CRAMPS:
   1. Muscle cramps (common to abdomen and legs)
   2. General malaise

B. HEAT EXHAUSTION:
   1. Moist, clammy skin
   2. Weakness, dizziness, headache
   3. Nausea, vomiting
   4. Fainting
   5. Normal or subnormal temperature

C. HEAT STROKE:
   1. Very high temperature
   2. Unconsciousness, or altered mental state
   3. Hot dry skin
   4. Hot humid environment

III. INITIAL ASSESSMENT

A. Rapid patient assessment

B. Apply cardiac monitor

IV. TREATMENT

Move patient to cool environment and out of sun.

A. HEAT CRAMPS:
   Give oral fluids, preferably water, unless patient is nauseated.

B. HEAT EXHAUSTION:
   1. Administer supplemental oxygen as patient condition warrants.
   2. Start IV at 200 cc/hr.

C. HEAT STROKE:
   1. First imperative is to cool the patient in any way possible
   2. Loosen clothing
   3. Start IV at 200 cc/hr.

NOTE: You may use cold tap water ,ice packs to axillae, groin, neck and fans if available.

HYPERTENSIVE EMERGENCIES

I. POSSIBLE CAUSES

Failure to take blood pressure medication
Drugs
Stimulants (decongestants)
Cocaine
MAO Inhibitors

II. SIGNS & SYMPTOMS

Systolic blood pressure >200 mm hg and/or a diastolic blood pressure >120 mm hg.

NOTE: In the presence of focal neurological findings, pre-hospital treatment of hypertension may be contraindicated because a rapid precipitous drop in blood pressure may compromise cerebral blood flow and create further CNS injury.

NOTE: DO NOT TREAT ASYMPTOMATIC HYPERTENSION

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor
C. Recent use of Viagra-within 72 hours

IV. TREATMENT

A. Establish and maintain airway. Administer supplemental oxygen as patient condition warrants.
B. Start IV at KVO.
C. Nitroglycerin 0.4 mg sublingual. **Must contact on-line Medical Control prior to administration.**

HYPERVENTILATION SYNDROME

I. POSSIBLE CAUSES

Fear
Anxiety
Hypoxia

II. SIGNS & SYMPTOMS

A. Dizziness
B. Numbness and/or tingling (especially face and hands)
C. Carpopedal spasm
D. Flushed skin
E. Shortness of breath

III. INITIAL ASSESSMENT

A. Rapid patient assessment.
B. Pulse oximeter.
C. Apply cardiac monitor.

IV. TREATMENT

A. Place patient in supine position or position of comfort.
B. Reassurance
C. Oxygen via nasal cannula @ 4LPM
D. Have patient breathe in re-breathing bag (paper bag)
E. Always remember that the patient may be hypoxic rather than hyperventilating and even if hyperventilating from anxiety reassurance is paramount.

HYPOTHERMIA

I. POSSIBLE CAUSES

Exposure to extreme temperature conditions
Exacerbated by age, alcohol intake, or drugs

II. SIGNS & SYMPTOMS

A. Shivering
B. Apathy
C. Unconsciousness
D. Low blood pressure
E. Slow pulse and respirations
F. Frozen extremities (Frostbite)
G. Minimal pain response
H. Patient may initially appear to have no vital signs

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor

IV. TREATMENT

A. Gently move patient to warm environment, excess activity may induce V-Fib.
B. Remove wet clothing
C. Wrap patient in warm, dry linens
D. Start IV at KVO (preferably warmed).
E. Administer supplemental oxygen as patient condition warrants. Intubate if necessary to oxygenate.

NOTE: Hypothermia may hinder drugs effectiveness. Patient must be warmed first. Do not administer ALS drugs prior to contacting on-line Medical Control.

NOTE: Hypothermia patients in full arrest should have BLS to the hospital and not be "pronounced dead" in the field.

OBSTETRICAL
ABNORMAL DELIVERY

I. POSSIBLE CAUSES

Breech presentation
Prolapsed umbilical cord
Limb presentation

II. SIGNS & SYMPTOMS

A. Breech presentation – buttocks present first
B. Prolapsed umbilical cord – cord comes out of the vagina before the baby
C. Limb presentation – presentation of an arm or leg through the vagina first

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor
C. How many weeks pregnant?
D. Gravida and Para history
E. Presenting part
F. Contractions – quality, duration, interval
G. Multiple fetuses
H. Medication/drug use

IV. TREATMENT

A. LOAD AND GO SITUATION!!! Delivery is imminent: Contact on-line Medical Control.
B. Administer 100% oxygen via NRB face mask.
C. Start large bore IV. (See Procedures, IV Procedure, P-0300)

BREECH PRESENTATION

1. Position mother for delivery
2. Open sterile OB kit, sterile gloves
3. Buttock and trunk should be allowed to deliver spontaneously.
4. Support baby's body on anterior part of your arm and allow head to deliver
5. If head does not deliver: prevent suffocation.
6. Place gloved hand in the vagina, positioning palm toward baby's face.
7. Form a "V" with fingers on either side of baby's nose.
8. Push vaginal wall away from baby's face.
9. If possible, administer oxygen via blow by.
10. If cord is compressed by baby's body: use same technique as IV.C.1.e to relieve pressure.

OBSTETRICAL
ABNORMAL DELIVERY

PROLAPSED CORD

1. Place mother on left side in Trendelenburg position
2. Hips elevated on pillow
3. With gloved hand, gently push baby back off cord
4. **Never attempt to push baby or cord back into vagina**
5. If cord is protruding, cover with moist sterile dressing

LIMB PRESENTATION

1. Place mother on left side in Trendelenburg position
2. Hips elevated on pillow
3. **Never attempt to push baby or cord back into vagina**

MECONIUM STAINED

1. If child is delivered breathing, use bulb syringe for nasal/oral suctioning only
2. If child is delivered not breathing, intubate and perform ET suctioning (with meconium aspirator, rapidly) once before re-intubation with clean ET tube.

OBSTETRIC
ANTE PARTUM HEMORHAGE

I. POSSIBLE CAUSES

Abortion
Ectopic pregnancy
Abruptio placenta
Placenta previa
Uterine rupture

II. SIGNS & SYMPTOMS

A. ABORTION – Loss of pregnancy before 20 weeks of gestation
   1. Vaginal bleeding
   2. Uterine contractions
   3. May have signs of shock

B. ECTOPIC PREGNANCY – Rupture
   1. Severe localized pain in lower quadrant
   2. May have vaginal bleeding
   3. Signs of hypovolemic shock: rapid pulse, pale, cool, moist skin, decreased BP.

C. ABRUPTIO PLACENTAE
   1. Severe lower abdominal pain
   2. Rigid uterus
   3. Hemorrhage – signs of hypovolemic shock.
   4. Usually in third trimester

D. PLACENTA PREVIA
   1. Usually in third trimester
   2. Hemorrhage – signs of hypovolemic shock. Pain is frequently absent

E. UTERINE RUPTURE
   1. Sudden, severe abdominal pain
   2. Bleeding may not be apparent externally
   3. Profound shock from internal hemorrhage.

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Vital signs, with special attention to blood pressure and pulse.
C. Vaginal bleeding (pads used per hour)
D. How many weeks pregnant?
E. Contractions? Quality, duration, intervals?

OBSTETRIC
ANTE PARTUM HEMORHAGE

IV. TREATMENT

A. Maintain airway, Administer 100% oxygen via NRB face mask
B. Intubate (See Procedures, Endotracheal Intubation, P-0250) PRN
C. Start two large bore IV lines. (See Procedures, IV Policy, P-0300) Infuse IV fluid at wide open rate if patient in hypovolemic shock. (See Shock, Hypovolemic, 1000)
D. Place patient on left side
E. Keep patient warm
F. Transport products of conception with patient to hospital

OBSTETRICS
COMPLICATION OF DELIVERY

I. POSSIBLE CAUSES

Post partum hemorrhage
Uterine inversion
Pulmonary embolism

II. SIGNS & SYMPTOMS

A. Post partum hemorrhage – characterized by internal or external bleeding
B. Uterine inversion – turning inside out of the uterus can occur as a result of excessive pressure or from pulling on the umbilical cord. Shock usually occurs.
C. Pulmonary Embolism – sudden Dyspnea, tachycardia, and/or hypotension. Caused by blood clot or from amniotic fluid.

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor
C. Evaluate for presenting parts and vaginal bleeding

IV. TREATMENT

A. Administer 100% oxygen via NRB face mask.
B. Start two IV lines at wide open rate
   1. <u>POST PARTUM HEMORRHAGE</u>
      Continue uterine massage, baby should be allowed to nurse
   2. <u>UTERINE INVERSION</u>
      Cover protruding tissue with moist, sterile dressings
   3. <u>INTERFACILITY TRANSPORTS</u>
      If established, maintain Pitocin drip as ordered by transferring physician.

OBSTETRICS
NORMAL DELIVERY

I. SIGNS & SYMPTOMS IMMINENT DELIVERY

A. Abdominal distention
B. Abdominal pain
C. Uterine contractions
D. Vaginal discharge of fluid or blood

II. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Maternal history:
    1. How many times she has been pregnant
    2. Due date
    3. When contractions began, how often, regular
    4. Does she feel like she has to have a bowel movement
    5. Has she ever had problems with deliveries in the past
    6. Pre-natal care
    7. Any abnormal problems with this pregnancy
    8. Signs of drug or alcohol abuse with this pregnancy
C. Visual inspection of vagina for "Crowning" or abnormal presentation of presenting parts
D. When did membranes rupture? Note abnormal color, odor, etc.

III. TREATMENT

A. <u>NORMAL DELIVERY</u>
    1. If delivery is imminent, prepare patient for delivery prior to transport
    2. Transport ASAP
    3. Administer supplemental oxygen as patient condition warrants
    4. Start IV at KVO.
    5. Delivery procedure
        a. Open sterile OB kit
        b. Drape patient, protect patient's privacy
        c. Put on sterile gloves and PPE
        d. As head emerges, gently support the baby's head to prevent explosive delivery
        e. Never attempt to pull baby's head from vagina
        f. If membranes cover the head after the head is delivered, the sac should be opened (using scissors) and removed from the baby's face
        g. Check for umbilical cord around baby's neck. It should be slipped gently over the head
        h. If unable to remove cord from around neck, clamp and cut cord
        i. After head is delivered, suction airway with bulb syringe.

OBSTETRICS
NORMAL DELIVERY

IF ANY SIGN OF MECONIUM ASPIRATION, IMMEDIATELY CONTINUE SUCTIONING. IF BABY HAS TAKEN FIRST BREATH AND IS VIGOROUS, DO NOT ATTEMPT INTUBATION.

j. Deliver shoulders and body
k. Clamp cord approximately 6 inches from infant and second clamp 3 inches from first clamp, cut between clamps. Examine cord ends for bleeding.
l. Care of the baby after delivery
   i. Hold head downward to aid drainage, suction
   ii. If delivery is normal, baby should spontaneously start breathing
   iii. Dry baby, cover body and top of head – keep warm, place in mothers arms as soon as possible
   iv. If baby does not breathe spontaneously
   v. Tactile stimulation of the infants back (rub with towel) and tapping soles of feet
   vi. No response: ventilate baby with infant bag-valve-mask device and 100% oxygen
   vii. Be prepared to intubate. **Note: If ventilations are ineffective, may need to deactivate pop-off valve.**
   viii. Assess for pulses. If none present or heart rate less than 60 BPM begin cardiac compressions.

   Remember: Always support respiratory status and administer oxygen. Cardiac status usually will improve with adequate ventilations.
   ix. Delivery of the placenta
      1. Will spontaneously deliver within 15-20 minutes after birth
      2. Bleeding can be expected as placenta separates from uterine wall
      3. Gently massage uterus through abdominal wall
      4. If mother plans to nurse infant, allow her to nurse to help stimulate uterine contractions
      5. Never pull umbilical cord to deliver placenta
      6. Transport placenta with mother
      7. Examine mother's perineum for lacerations and tears. Use direct pressure to control bleeding.
      8. Place sanitary napkin

NOTE: IF PLACENTA HAS NOT DELIVERED AND PATIENT IS READY FOR TRANSPORT – PROCEED TO THE HOSPITAL

DOCUMENT: Apgar score one and five minutes after delivery, if placenta has delivered, time of birth, estimated blood loss.

OBSTETRICS
ECLAMPSIA

I. POSSIBLE CAUSES

Vasospasm – circulatory impairment. As plasma volume decreases and edema increases, catecholamine release occurs in response to hypovolemia.

II. SIGNS & SYMPTOMS

A. Generally occurs during 1st pregnancy after the 20th week
B. Elevated blood pressure
C. Edema
D. Nausea/Vomiting
E. Mental confusion
F. Increased reflexes
G. Pulmonary Edema
H. Seizures present with Eclampsia

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor

I. TREATMENT

A. Definitive treatment is delivery of baby
B. Maintain airway. Oxygen 100% via NRB mask
C. Decrease stimuli and position on left side.
D. Seizure precautions
E. Start IV at KVO

OVERDOSE

I. POSSIBLE CAUSES

Intentional
Accidental

II. SIGNS & SYMPTOMS

A. Vary with ingestion
B. Altered level of consciousness
C. Respiratory depression
D. Dysrhythmias
E. Nausea/vomiting
F. Hyper/hypotension

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor
C. History:
   1. Substance ingested?
   2. How much?
   3. When?
   4. Any alcohol ingested?
   5. Needle marks?
   6. Suicidal intent?
D. Obtain and transport vials, bottles, containers, etc.

IV. TREATMENT

A. UNCONSCIOUS PATIENT

1. Refer to Unconscious Patient Protocol.

B. CONSCIOUS PATIENT

1. Maintain airway
2. Administer supplemental oxygen as patient condition warrants
3. Place pulse oximeter, document oxygen saturation.
4. Start IV.
5. If altered mental status, check blood sugar.

C. SUSPECTED COCAINE TOXICITY

1. Patients who present in a hyper dynamic state with pulse rate >100 with odd Superventricular or ventricular dysrhythmias do not respond to conventional therapy.
2. **Contact on-line Medical Control.**
3. Consider Valium; titrate up to 10 mg IV.
4. Consider Lidocaine if ventricular Ectopy does not respond to therapy.

OVERDOSE

D. SUSPECTED TRICYCLIC OVERDOSE

Cardiac dysrhythmias are treated differently and do not respond to conventional therapy.

1. Patient presents with history of Tricyclics O.D. with frequent PVC's or runs of SVT with widening QRS complex
2. **Contact on-line Medical Control.**
3. Consider Sodium Bicarbonate 1 amp IVP.
4. Consider Lidocaine, if ventricular Ectopy does not respond to Sodium Bicarbonate.

SPECIAL NOTE:

Do not pass NG tube if corrosive substance or hydrocarbon ingested.

Warning: Withdrawal symptoms may be induced with Narcan. **Narcan should not be used unless it is necessary to maintain respirations**. Initial dose of 0.2 mg should be considered in all patients who are receiving chronic narcotics. Titrate drug to point that ventilations are adequate. Restraints should be used on all patients receiving Narcan. Air transport will not be utilized if patient cannot be adequately restrained.

PEDIATRIC
CROUP

I. POSSIBLE CAUSES

Majority is caused by viruses
Rarely seen: bacterial, foreign body, allergies
Most commonly affects 6 months – 3 years
Males > Females (2:1)
Occurs fall and winter, worse at night and early morning
Duration of illness prior to call 12 – 78 hours

II. SIGNS & SYMPTOMS

A. Gradual insidious onset
B. Variable fever
C. Hoarse voice
D. Preferred position variable (sitting or lying)
E. "Barking Seal" cough
F. Inspiratory/Expiratory Stridor usually when upset (noisy upper and lower airway respirations).
G. Epiglottis normal in appearance
H. No drooling
I. Reports of child being "well" during the daytime

III. INITIAL ASSESSMENT

A. Rapid patient assessment

IV. TREATMENT

B. Administer supplemental oxygen as patient condition warrants.
C. Decrease stimuli and keep patient calm.
D. Position patient for comfort.

POISONING

I. POSSIBLE CAUSES

Intentional
Accidental

II. SIGNS & SYMPTOMS

A. Vary according to substance involved

III. INITIAL ASSESSMENT

A. **Ensure scene is safe, avoid self contamination**.
B. Rapid patient assessment.
C. Apply cardiac monitor.

IV. TREATMENT

A. Administer supplemental oxygen as patient condition warrants
B. Place pulse oximeter, document oxygen saturation.
C. Start IV at KVO.
D. Decontaminate skin (absorbed poison) by copious water flushing. Be careful not to contaminate yourself.
E. Contact Emergency Department by radio for management of specific poison.
F. Consider Atropine 1 to 3 mg IV slow push, if symptomatic of Organophosphate poisoning.

RESPIRATORY DISTRESS

I. POSSIBLE CAUSES

Bronchospasm
Asthma
Emphysema
Anaphylaxis
Traumatic injury to neck or chest
Pneumonia
CHF

II. SIGNS & SYMPTOMS

A. Increasing shortness of breath
B. Labored respirations with use of accessory muscles
C. Altered level of consciousness
D. Respiratory Arrest
E. Dysrhythmias
F. Hypoxia

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor

IV. TREATMENT

A. Establish airway, intubate as needed.
B. Administer supplemental oxygen as patient condition warrants.
C. Start IV at KVO.
D. Place on pulse oximeter.
E. When possible, place patient in position of comfort.
F. Refer to appropriate protocol to treat underlying cause.
G. If bronchospasm or asthma suspected, Albuterol 2.5 mg (3 cc) via acorn nebulizer.
H. If allergic reaction, follow allergic reaction protocol.
I. If CHF, follow CHF protocol.
J. Treat hypotension with fluid challenge: 250 cc bolus.
K. If hypotension persists: Start Dopamine drip: 400 mg in 250 cc IV fluid with minidrip, piggybacked into primary IV line. Titrate dopamine for BP of 90 – 100 systolic.

RESTRAINT

I. INDICATION

Restraints may be used for the following reasons:
To protect a patient from causing harm to himself and/or others.
To prevent a patient from removing life-saving equipment.
To prevent a patient from falling.
To remind a patient that activity of a limb is restricted.

II. EQUIPMENT

A. Soft limb restraints
B. Leather restraints
C. Towels
D. Sheets

III. POLICY

A. Patients requiring restraints shall be assessed every 5 minutes and PRN for:
B. Proper restriction of movement
C. Any impairment of circulation
D. Discoloration
E. Irritation of skin
F. Results of these assessments shall be documented in the patient care form and corrective action, if necessary, shall be taken.

IV. PROCEDURE

A. Explain to patient, regardless of condition, why restraints are being applied.
B. Explain purpose of restraining device to patient's family.
C. Select appropriate type of restraining device, giving consideration to patient's psychological and physical status, as well as to environmental and safety factors.
   1. TO APPLY SOFT RESTRAINTSFasten restraint snugly around extremity and attach securely to frame of stretcher.
      a. For wrist restraints, secure to frame below waist level of patient.
      b. For leg restraints, secure to frame below knee level of patient.
   2. TO APPLY TOWEL RESTRAINTS
      a. Open towel and fold side edges to center, fold again. Seams should not come in contact with skin as they will cause irritation.
      b. Place one end of towel snugly around extremity.
      c. To maintain proper placement of towel on extremity, wrap 2" adhesive tape around end of towel at least 5 times.
      d. Attach opposite end of towel to stretcher frame.

RESTRAINT

3. TO APPLY SHEET RESTRAINTS
   a. Fold sheet length-wise approximately 6" wide.
   b. Place across chest, under arms and attach securely to head of stretcher.
   c. **Avoid compromising chest expansion.** Patient respiratory status must be continuously monitored. Consider pulse oximetry, using finger or ear probe.

V. PRECAUTIONS

A. Observe for proper restriction of movement.
B. Observe for any impairment of circulation, discoloration or skin irritation.
C. If discoloration or impairment of circulation is noted, loosen or release restraint.
D. Observe for Dyspnea
E. Provide good body alignment and proper positioning of patient.
F. Request assistance in application of restraints, if necessary.

VI. DOCUMENTATION

A. The following shall be documented on the patient care form:
B. Time, type and size of restraint applied
C. Reason for applying restraint
D. Circulation checks distal to the restraint initially and every 15 minutes to include:
   1. Distal pulses
   2. Skin color, temperature

NOTE: If unable to adequately restrain patient to avoid harm to him/her or others, the patient may be transported by Law Enforcement and the ambulance will follow Law Enforcement to the hospital. Metal hand cuffs must be applied by Law Enforcement and a key must accompany patient.

SEIZURES

I. POSSIBLE CAUSES

CVA	Hypoglycemia
Cerebral hypoxia	Meningitis
Head trauma	Idiopathic (epilepsy)
Fever (children)	Drug overdose/withdrawal

II. SIGNS & SYMPTOMS

A. Normal to altered level of conscious
B. Generalized or focal involuntary motor activity
C. Incontinent

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor

IV. TREATMENT

A. GRAND MAL SEIZURE (SUBSIDED)

1. Maintain airway, administer supplemental oxygen as patient condition warrants.
2. Never put anything in the mouth of a seizing patient
3. Prevent patient from harming himself:
a. If possible, keep patient on left side
b. Keep patient area free of furniture, etc.
c. Do not forcibly restrain patient during seizure
4. Once seizure subsided, keep patient in quiet environment
5. Start IV at KVO
6. Febrile Seizures: Cool patient. Document temperature.
7. Check blood sugar

NOTE: A fibrillating patient may present with seizure!
NOTE: A confused patient recovering from seizure may view you as threatening.

Be careful not to get too close to patient's face at first. Quiet please!

B. STATUS EPILEPTICUS

NOTE: In consideration of response time, most patients still seizing when rescue arrives should be considered as STATUS EPILEPTICUS (usually due to failure to take medications but may be the presenting symptom in new epileptics). This refers to repetitive seizures.

SEIZURES

1. Maintain airway – use nasopharyngeal airway
2. Do not attempt to intubate during seizure!
3. Administer 100% oxygen.
4. Assist ventilations with BVM device if there are periods of hypoventilations or apnea. Deaths from seizures are hypoxic deaths!
5. Protect patient from injury.
6. Check blood sugar
7. Start IV at KVO
8. Valium 5 to 10 mg IVP, or rectal, monitor respiratory status. See Broselow tape for pediatric dosage. Consider Ativan as well.

SHOCK
CARDIOGENIC

I. POSSIBLE CAUSES

Acute Myocardial Infarction
Valvular disease
Pulmonary embolus
Cardiac tamponade

II. SIGNS & SYMPTOMS

A. Signs of CHF
B. Cyanosis
C. Chest pain with myocardial infarction
D. Low blood pressure
E. Dysrhythmias with hypoxia
F. Decreased LOC

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor

IV. TREATMENT

A. Establish airway
B. Administer 100% oxygen
C. Start IV at KVO
D. Keep patient supine, consider Trendelenburg
E. Give fluid challenge: 250 cc IV bolus
F. Start Dopamine drip: 400 mg in 250 cc IV fluid with minidrip, piggybacked into primary IV line. Titrate dopamine for BP of 90 – 100 systolic.

SHOCK
HYPOVOLEMIC

I. POSSIBLE CAUSES

Rupture hollow viscous (ulcer, aneurysm)
Trauma
Ruptured Ectopic pregnancy
Gastrointestinal bleeding
Severe dehydration

II. SIGNS & SYMPTOMS

A. Restlessness
B. Decreased LOC
C. Tachypnea, Tachycardia
D. Pale, cool, clammy skin
E. Hypotension (may be initially hypertensive with narrow pulse pressure or may be normal for patient)

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor
C. **The patient in hypovolemic shock due to trauma or other acute blood loss requires transportation to the hospital ASAP! Every attempt should be made to minimize on-scene time. You cannot "stabilize" this patient in the field.**
D. If trauma is the cause of the hypovolemic shock, follow Trauma Transport Protocols and HRS criteria for trauma victims.

IV. TREATMENT

A. Establish airway, intubate as needed.
B. 100% oxygen via NRB face mask.
C. Apply direct pressure to sites of bleeding.
D. Start two large bore IVs at open rate for BP <90 systolic. Fluids may be pressure infused if hypotension persists.
E. Trendelenburg position
F. Conserve body heat.
G. If chest wound, consider potential tension Pneumothorax. If sucking chest wound, apply occlusive dressing secured on three sides of a square to prevent formation of tension Pneumothorax. If patient is intubated, no occlusive dressing is required.

SHOCK
EUROGENIC

I. POSSIBLE CAUSES

Sepsis	Drug reaction
CVA	Vasovagal fainting
Head injury	Spinal cord injury
Anaphylactic	

II. SIGNS & SYMPTOMS

A. Hypotension
B. Normal to decreased LOC
C. Tachycardia
D. Tachypnea and Bradycardia may be seen in spinal cord injuries

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor
C. **Spinal Shock – Clinical presentation differs from hemorrhagic shock in that there is no catecholamine release, thus:**
   1. **No pallor**
   2. **<u>No tachycardia or diaphoresis.</u>**
   3. **Decreased blood pressure with normal or slow heart rate.**
   4. **Skin warm, dry and pink.**
   5. **Patient may be more alert than expected for his blood pressure.**

IV. TREATMENT

A. Ensure spinal immobilization for possible spinal injuries.
B. Establish airway, intubate as needed.
C. Administer supplemental oxygen as patient condition warrants
D. Start IV, titrate infusion rate for blood pressure of 90 systolic.
E. Place in Trendelenburg
F. Administer 250 cc IV fluid challenge.
G. Consider Dopamine drip: 400 mg in 250 cc IV fluid, 2 to 10 ug/kg/min, titrate for BP of 90 mm hg systolic.

SNAKEBITE

I. POSSIBLE CAUSES

Snake bite

II. SIGNS & SYMPTOMS

A. Fang mark (burning and pain at site)
B. Edema
C. Bleeding (from puncture site)
D. Hypotension
E. Tachycardia
F. Possible weakness, tingling or “bad taste” in mouth, tingling and numbness of the extremities, cold perspiration.
G. Nausea/vomiting

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor
C. Document time of bite, if possible

IV. TREATMENT

A. Maintain airway.
B. Administer supplemental oxygen as patient condition warrants.
C. Keep patient calm.

SPINAL CORD INJURY (TRAUMA)

I. POSSIBLE CAUSES

Falls Motor vehicle accident
Diving injuries Deceleration trauma
Unconscious patient with a head injury
GSW to head, neck, back or trunk

II. SIGNS & SYMPTOMS

A. Motor – weakness, paralysis of extremities.
B. Sensory – absence or alteration of sensation in trunk and/or extremities.
C. Incontinence and/or Priapism – Loss of control of bladder and/or bowels, and/or persistent erection of the penis. (This may be regarded as a reliable sign of spinal cord injury)
D. Superficial signs – abrasions, lacerations, deformities of spine, neck, back.
E. Pain – tenderness to palpation or pain in a specific area of spine.
F. Diaphragmatic breathing.
G. Hypotension

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor
   1. MOTOR EXAM
      a. Check for upper and lower extremity movement. If patient can move to a limited degree with pain, spinal cord injury may be present.
   2. SENSORY EXAM
      a. Establish the gross sensory level on both sides of the trunk and extremities.
      b. Sensory ability should be ascertained in all four extremities and trunk.

IV. TREATMENT

A. Establish and maintain airway. Intubate PRN . Oral intubation may be accomplished without hyperextension of the neck when one crew member manually
   Maintains in-line cervical immobilization while second crew member orally intubates.
B. Administer supplemental oxygen as patient condition warrants.
C. Start large bore IV at KVO or titrate for blood pressure of 90 mm hg systolic.
D. Transport in Trendelenburg position, if in severe hypotension. Treat per Shock Protocol.

SPINAL CORD
INJURY (TRAUMA)

E. Reassess and document Neuro checks every five minutes and after every movement.
F. Conserve body heat
G. Mark level of sensation on extremities and trunk with ink pen.

EXTRICATION AND SPLINTING

Cervical spine immobilization

1. Use short spine board or KED, when indicated
2. Use long backboard with CID or other available cervical immobilization device. No sandbags.
3. Use minimal movement, best to logroll or straddle slide. Do not lift, pull or twist patient.
4. Always maintain head/neck in a neutral position and the body in proper body alignment.
5. Secure patient to long backboard with straps. This will allow rotation of patient as a unit in case vomiting occurs.

NOTE: Patients with paralysis after injury are considered Trauma Alerts. Transport per Trauma Transport Protocols.

STROKE
(ACUTE ISCHEMIC)

I. POSSIBLE CAUSES

Cerebral Embolus
Intracerebral Hemorrhage
Cerebral Thrombosis
Cerebrovascular Insufficiency

II. SIGNS & SYMPTOMS

A. Sudden numbness, weakness or paralysis of face, arm or leg, especially on one side of the body.
B. Sudden blurred or decreased vision or loss of total vision in one or both eyes, loss of vision in one half of visual field or double vision.
C. Sudden difficulty speaking or understanding simple statements.
D. Sudden decline in consciousness or mental confusion.
E. Sudden severe headache, neck stiffness.
F. Sudden loss of control in extremity or side.
G. Sudden loss of sensation in one half of the body.
H. Sudden acute vertigo and vomiting with headache.
I. Sudden loss of balance or coordination when combined with another sign.
J. Sudden temporary loss of consciousness or other sign (TIAs)
K. Convulsions
L. Coma

III. INITIAL ASSESSMENT

A. Rapid Patient assessment
B. Rapid neurological evaluation
C. Establish onset of symptoms. Stroke alert, if onset of symptoms less than 3 hours.
D. Start review of inclusion and exclusion criteria. Do not delay transport**.**

IV. TREATMENT

A. Immediately transport to emergency stroke care facility.
B. Immediately radio “Stroke Alert” and time of stroke onset.
    1. Note Presence of:
        a. Seizures, head trauma
        b. If patient taking anticoagulants (Heparin, Warfarin, etc.)
C. Administer supplemental oxygen as patient condition warrants.
D. Intubate and hyperventilate, with 100% oxygen, the unconscious patient, patient with respiratory deterioration, or loss of gag reflex.
E. While en route, establish IV.
F. While en route, check blood sugar.
G. Complete TPA inclusion/exclusion criteria form.
H. 12 Lead EKG, if time allows.
I. Do not give Aspirin or other antiplatelets.

TPA INCLUSION/EXCLUSION CRITERIA

I. INDICATION

To survey the patient for eligibility for receiving r-TPA to restore circulation in acute ischemic brain attacks and acute myocardial infarction. The appropriate protocol for managing the patient should be followed prior to surveying the patient for eligibility. **Asking the questions should not, in any way, delay implementation of definitive interventions.** The inclusion/exclusion criteria are to be completed any time, when time allows, a patient is encountered who may need the administration of a thrombolytic.

II. EQUIPMENT

A. Inclusion/Exclusion form

III. INCLUSION CRITERIA

A. **Chest Pain**: Clinical presentation of ischemic heart disease and ECG evidence of ST elevation of greater than 2 mm in two or more contiguous leads.
B. **Ischemic Brain Attack**: Clinical presentation of ischemic stroke and measurable neurological deficit to justify the risk.
C. **Time from onset of symptoms**:
D. Chest pain: >20 minutes, but <12 hours to initiation of r-tPA.
E. Ischemic Brain Attack: <3 hours.

IV. EXCLUSION CRITERIA

A. **CPR**: Recent history, past 6 months.
B. **Major Trauma**: Recent history, past 6 months.
C. **Head Injury, CA, TIA, Intracranial Hemorrhage**: Recent history, past 6 months.
D. **Major Surgery**: Recent history, past 6 months.
E. **GI/GU Bleeding**: Recent history, past 6 months.
F. **Inflammatory Bowel Disease**: Recent history, past 6 months.
G. **Anticoagulation Therapy**: Recent history, past 6 months.
H. **Bleeding Disorder**: Recent history, past 6 months.
I. **Esophageal Varices**: Recent history, past 6 months.
J. **Prosthetic Valve, Cardiomyopathy, or Ventricular Aneurysm**
K. **Uncontrolled Hypertension (SBP>180, DBP>110)**: Requiring aggressive treatment to lower it.
L. **Previous Thrombolytic Therapy**
M. **Pregnancy or Lactating Females**
N. **Seizure at Stroke Onset**
O. **Glucose**: <50 mg/dl or >400 mg/dl

TRAUMA ALERT

I. POSSIBLE CAUSES

Penetrating injury such as stab wound or gunshot wounds
Blunt trauma, such as that caused by a motor vehicle accident or fall
Burns
Amputations
Other potentially life-threatening injuries requiring immediate surgical intervention.

II. SIGNS & SYMPTOMS

TRAUMA ALERT CRITERIA ARE THE ESTABLISHED, STATE MANDATED CRITERIA WHICH ARE LISTED BELOW

PEDIATRIC TRAUMA ALERT CRITERIA

(Physical and anatomical characteristics of a person under 16 years of age)

Any 1 of the following:	**Minimum of 2 of the following:**	**In the event that none of the prior conditions are identified, an EMT or Paramedic can call a Trauma Alert, if in his or her judgment, the patient's condition warrants such action.**
1. Airway: **a.** Intubated **b.** Airway Maneuvers **c.** Mult. Suctioning **d.** Other Ventilatory means. **2. Consciousness:** **e.** Drowsiness **f.** Lethargy **g.** Inability to follow commands **h.** Unresponsiveness **i.** Coma **j.** Paralysis **k.** Suspicion of SCI **l.** Loss of sensation **3. Circulation:** **a.** Faint or non-palpable carotid or femoral pulse **b.** SBP < 50 mm **4. Fracture:** a. Open longbone FX b. Multiple FX c. Multiple Dislocations **5. Cutaneous:** a. $2^{nd}/3^{rd}$ burns, $\geq$ 10% b. Amputation above the wrist or ankle c. Penetrating injury to head, neck, torso d. Major degloving e. Major flap avulsion	**1. Consciousness:** a. Signs of amnesia b. Loss of consciousness **2. Circulation:** Carotid or Femoral pulse is palpable, but radial and pedal are not and BP is $\leq$ 90 mm. **3. Longbone Fracture** Signs or symptoms of a single longbone fracture. **4. Size:** 11 kg or less or body length equivalent to this weight on a Broselow tape.	

TRAUMA ALERT

ADULT TRAUMA ALERT CRITERIA
(Physical and anatomical characteristics of a person 16 years of age or older)

Any 1 of the following:	**Minimum of 2 of the following:**	**After evaluation in the first two (2) columns, the patient shall be assessed using all elements of the Glasgow Coma Scale. A score f 12 or less shall be a Trauma Alert.** (Excluding those persons with a GCS which is normally 12 or below due to a preexisting condition) In the event that none of the prior conditions are identified: **An EMT or Paramedic can call a Trauma Alert, if in his or her judgment, the patient's condition warrants such action.**
1. Airway: Needs assistance beyond oxygen **2. Circulation:** **a.** Lacks radial pulse with HR > 120/min **b.** BP < 90 mm Hg **3. Best Motor Response (BMR):** a. 4 or < on BMR of GCS b. Paralysis c. Loss of Sensation d. Suspected SCI **4. Cutaneous:** a. 2nd or 3rd burns ≥ 15% b. Amputation proximal to ankle or wrist c. Penetrating injury to head, neck, torso **5. Longbone Fracture:** The patient reveals signs or symptoms of 2 or more longbone fx* (humerus, radius and ulna, femur, tibia and fibula) *Tib/fib and rad/ulna count as one fx *Isolated distal wrist fx is not a Trauma Alert *Isolated hip fx is not a Trauma Alert	**1. Airway:** RR ≥ 30 **2. Circulation:** HR ≥ 120 **3. Best Motor Response (BMR):** BMR = 5 **4. Cutaneous:** a. Major degloving b. Flap avulsion > 5 inches c. GSW to extremity **5. Longbone Fx:** Single fracture resulting from a MVA or fall of ≥ 10 feet **6. Age:** ≥ 55 years of age **7. Mechanism:** a. Ejection from a motor vehicle b. Drive has impacted the steering wheel and has caused deformity of it	

I. INITIAL ASSESSMENT

Rapid scene survey for crew safety
Rapid patient assessment
Apply cardiac monitor

II. TREATMENT

A. Maintain airway and immobilize spine; remember to maintain spinal immobilization during intubations and other airway maneuvers. (See Procedures, Endotracheal Intubation, P-0250)
B. Place on 100% oxygen via non-rebreather mask.
C. Control bleeding by direct pressure; IV's are not to be established on scene unless some other cause for the delay is present. For example, if extrication is in progress.
D. IV's may be initiated en-route if time permits. If there is not enough time in transport, IV's may be omitted without significant change in patient outcome.

TRAUMA ALERT

E. Dispatch notification of trauma alert should be made within first 5 minutes on scene, or documentation should be made on patient care form as to cause of delay. The following information is to be given when a trauma alert is called:
   1. ETA: how many minutes will elapse from NOW until arrival at the trauma center? An educated guess will suffice, consider packaging and loading time;
   2. Age and sex of the patient; again, estimate age if necessary; (if best guess is less than 16, child should go to Sacred Heart unless they are on bypass or child is considered by the Paramedic to be too unstable to pass another trauma center en-route to Sacred Heart.
   3. Injuries: a quick survey will provide such information; for example, gunshot wound to the head or possible chest injury from a MVA, so the trauma center will know what to prepare for.

F. Transport of patient to the appropriate trauma center should be under way within 10 minutes of arrival on scene, unless:
   1. Extrication is still in progress
   2. Multiple patients must be triaged
   3. Other delays occur.

UNCONSCIOUS PATIENT

I. POSSIBLE CAUSES

Trauma	Meningitis
Diabetes	Seizures (post-ictal)
Drug overdose	Alcoholic intoxication
CVA	Respiratory failure
Shock	Dysrhythmias

II. SIGNS & SYMPTOMS

A. Decreased mental status
B. Unresponsive to command or physical stimulus

III. INITIAL ASSESSMENT

A. Rapid patient assessment
B. Apply cardiac monitor
C. Assume possible cervical spine injury

IV. TREATMENT

A. Airway maintenance with cervical spine precautions. Intubate as needed.
B. Administer supplemental oxygen as patient condition warrants
C. Place pulse oximeter, document oxygen saturation.
D. Check blood sugar, treat if indicated.
E. Start IV at KVO, increase rate for shock/trauma or hypotensive.
F. Restrain patient with soft restraints, as necessary.
G. Consider Narcan up to 2 mg IV slowly, if respirations depressed. Do not use it as a diagnostic tool. **Narcan may induce drug withdrawal in patients who are chronic users of narcotics. Use with caution, begin initial dose of 0.2 mg.**
H. If no response obtained, refer to overdose protocol.

VIOLENT PATIENT

I. POSSIBLE CAUSES

Alcohol or other drug intoxication
Head injury
Hypoglycemia
Hypotension
Hypoxia
Psychosis

II. SIGNS & SYMPTOMS

A. Agitation
B. Restlessness
C. Altered mental status
D. Violence

III. INITIAL ASSESSMENT

A. Ensure scene safety
B. Rapid patient assessment
C. Signs of trauma
D. Attempt to obtain history from available family or bystanders of patient's prior mental status, psychiatric illness, substance abuse, recent trauma, or medical history.

IV. TREATMENT

A. Maintain patient airway with cervical spine precautions
B. Administer supplemental oxygen as patient condition warrants
C. Utilize verbal reassurance
D. Physical restraint may be used if above actions do not produce a manageable patient.
E. Check blood sugar
F. Request additional assistance as needed.

NOTE: Dystonic reaction caused by many phenothiazine drugs. These reactions are defined as sudden onset of involuntary turning or twisting movements produced by massive, sustained muscle contractions. These may include extension of the back (opisthotonos), head arching backwards (retrocollis) or sideways (torticollis), or eyes pulled painfully upward (oculogyric crisis) or laryngospasm. All respond dramatically to Benadryl IV.

VIOLENT PATIENT

G. Elevate head of stretcher unless patient is hypotensive.
H. Start IV **in unaffected extremity.**
I. Apply loose dressing over wound.
J. Immobilize affected extremity.
K. Do not apply ice pack.

NOTE: If snake is dead, request that it be transported to the receiving hospital for identification. If receiving physician requests the snake, the **DEAD** snake may be put in a secure container with a lid. If snake can be positively identified at the scene, notify receiving hospital with information.

LMA PROTOCOLS

Laryngeal Mask Airway (LMA)

I. Clinical Indication:

A. Inability to secure an endotracheal tube in a patient that does not have a gag reflex where at least one failed intubation attempt has occurred.
B. Appropriate intubation is impossible due to patient access or difficult airway anatomy
C. This airway does not prevent aspiration of stomach contents

II. Clinical Contraindications:

A. Patients who are grossly or morbidly obese, more than 14 weeks pregnant or those with multiple or massive injury, acute abdominal or thoracic injury.
B. Pulmonary Fibrosis
C. Patients where peak airway inspiratory pressures are anticipated to exceed 20 cm H20

III. Procedure:

A. Check the tube for proper inflation and deflation.
B. Lubricate with water-soluble jelly.
C. Pre-Oxygenate the patient with 100% Oxygen.
D. Insert the LMA into the hypopharynx until resistance is met.
E. Inflate cuff until a seal is obtained.
F. Connect the LMA to an ambu bag and assess breath sounds, air entry and an end tidal CO2 detector.
G. Monitor oxygen saturation with pulse oximetry and heart rhythm with ECG.
H. Re-verify LMA placement after every move and on arrival to ED.
I. Document the procedure, time and results (success) on/with the patient care form.

LMA SIZES	Patient Size	Max Cuff Inflation
Size 3	Children 30 – 50 kg	20 mL
Size 4	Adults 50 – 70 kg	30 mL
Size 5	Adults 70 – 100 kg	40 mL

ATTACHMENT 8
PROCUREMENT SCHEDULE

Unless notified in writing by the Procurement Office of a schedule change, Proposers should assume that this procurement would adhere to the following schedule:

December 11, 2006	The County Commission reviews the EMS system specifications and criteria.
February 3, 2007	The County's "Request for Proposal" document is released. (This document and its attachments constitute the County's request for proposal).
February 23, 2007	Deadline for Proposers to submit written questions for clarification.
April 3, 2007	The Request for Proposals is due at 10:00 a.m. CST. All proposals must be in writing and delivered by hand, mail or Fed Ex to the Santa Rosa County Procurement Department, 6495 Caroline Street, Suite G, Milton, FL 32570, and must be received by 10:00 a.m., CST, April 3, 2007. Only proposals received by the aforestated time and date will be considered. All proposals shall be clearly labeled "Santa Rosa County EMS Proposal".
April/May 2007	County reviews Request for Proposals and hears oral presentations. Oral presentations are mandatory.
1st Commission Meeting June, 2007	Commission awards contract for services.
October 1, 2007	Contractor Agreement start date.

ATTACHMENT 9
INVESTIGATIVE RELEASES

INVESTIGATIVE AUTHORIZATION – COMPANY

THE UNDERSIGNED COMPANY, A PROSPECTIVE CONTRACTOR TO PROVIDE AMBULANCE SERVICE FOR SANTA ROSA COUNTY, FL RECOGNIZES THAT PUBLIC HEALTH AND SAFETY REQUIRE ASSURANCE OF SAFE, RELIABLE, AND COST-EFFECTIVE AMBULANCE SERVICE. THAT ASSURANCE MAY REQUIRE INQUIRY INTO ASPECTS OF COMPANY OPERATIONS DEEMED RELEVANT BY SANTA ROSA COUNTY OR THEIR AGENTS. THE COMPANY SPECIFICALLY AGREES THAT SANTA ROSA COUNTY OR THEIR AGENTS MAY CONDUCT AN INVESTIGATION FOR THE PURPOSES INTO BUT NOT LIMITED TO THE FOLLOWING MATTERS.

1. THE FINANCIAL STABILITY OF THE COMPANY, INCLUDING ITS OWNERS AND OFFICERS, ANY INFORMATION REGARDING POTENTIAL CONFLICT OF INTERESTS, PAST PROBLEMS IN DEALING WITH OTHER CLIENTS OR CITIES WHERE THE COMPANY HAS RENDERED SERVICE, OR ANY OTHER ASPECT OF THE COMPANY OPERATIONS OR ITS STRUCTURE, OWNERSHIP, OR KEY PERSONNEL WHICH MIGHT REASONABLY BE EXPECTED TO INFLUENCE SANTA ROSA COUNTY'S QUALIFICATION AND SELECTION DECISION.

2. THE COMPANY'S CURRENT BUSINESS PRACTICES, INCLUDING EMPLOYEE COMPENSATION AND BENEFITS ARRANGEMENTS, PRICING PRACTICES, BILLINGS AND COLLECTIONS PRACTICES, EQUIPMENT REPLACEMENT AND MAINTENANCE PRACTICES, IN-SERVICE TRAINING PROGRAMS, MEANS OF COMPETING WITH OTHER COMPANIES, EMPLOYEE DISCIPLINE PRACTICES, PUBLIC RELATIONS EFFORTS, CURRENT AND POTENTIAL OBLIGATIONS TO OTHER BUYERS, AND GENERAL INTERNAL PERSONNEL RELATIONS.

3. THE ATTITUDE OF CURRENT AND PREVIOUS CUSTOMERS OF THE COMPANY TOWARD THE COMPANY'S SERVICES AND GENERAL BUSINESS PRACTICES, INCLUDING PATIENTS OR FAMILIES OF PATIENTS SERVED BY THE COMPANY, PHYSICIANS OR OTHER HEALTH CARE PROFESSIONALS KNOWLEDGEABLE OF THE COMPANY'S PAST WORK, AS WELL AS OTHER UNITS OF LOCAL GOVERNMENT WITH WHICH THE COMPANY HAS DEALT IN THE PAST.

4. OTHER BUSINESS IN WHICH COMPANY OWNERS AND/OR KEY PERSONNEL IN THE COMPANY CURRENTLY HAVE A BUSINESS INTEREST.

5. THE ACCURACY AND TRUTHFULNESS OF ANY INFORMATION SUBMITTED BY THE COMPANY IN CONNECTION WITH SUCH EVALUATION.

AUTHORIZATION FOR SUCH INVESTIGATION IS HEREBY EXPRESSLY GIVEN BY:

DATE: _____ _____

COMPANY NAME

BY: _____

NAME AND TITLE

STATE OF _____

COUNTY OF _____

INVESTIGATIVE AUTHORIZATION – COMPANY

ON THIS ____ DAY OF _____ , 2007, BEFORE ME APPEARED _____ TO ME PERSONALLY KNOWN, WHO, BEING BY ME DULY SWORN, DID SAY THAT (S)HE IS THE _____ OF _____ AND THAT SAID INSTRUMENT WAS SIGNED IN BEHALF OF SAID CORPORATION BY AUTHORITY DELEGATED TO HIM/HER, AND SAID AFFIANT ACKNOWLEDGES SAID INSTRUMENT TO BE THE FREE ACT AND DEED OF SAID CORPORATION.

IN WITNESS WHEEOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED MY OFFICIAL SEAL THE DAY AND YEAR LAST ABOVE WRITTEN.

(SEAL) _____

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

INVESTIGATIVE AUTHORIZATION – INDIVIDUAL

THE UNDERSIGNED, BEING _____ (TITLE) FOR _____ (COMPANY) WHICH IS A PROSPECTIVE CONTRACTOR TO PROVIDE AMBULANCE SERVICES TO SANTA ROSA COUNTY, FL RECOGNIZES THAT PUBLIC HEALTH AND SAFETY REQUIRE ASSURANCES OF SAFE, RELIABLE, AND COST-EFFECTIVE AMBULANCE SERVICE. THAT ASSURANCE MAY REQUIRE AN INQUIRY INTO MATTERS WHICH ARE DEEMED RELEVANT BY SANTA ROSA COUNTY OR THEIR AGENTS, SUCH AS, BUT NOT LIMITED TO, THE CHARACTER, REPUTATION, COMPETENCE OF THE COMPANY'S OWNERS AND KEY EMPLOYEES.

THE UNDERSIGNED SPECIFICALLY ACKNOWLEDGES THAT SUCH INQUIRY MAY INVOLVE AN INVESTIGATION OF HIS/HER PERSONAL WORK EXPERIENCE, EDUCATION QUALIFICATIONS, MORAL CHARACTER, FINANCIAL STABILITY, AND GENERAL BACKGROUND, AND SPECIFICALLY AGREES THAT SANTA ROSA COUNTY OR THEIR AGENTS, MAY UNDERTAKE A PERSONAL INVESTIGATION OF THE UNDERSIGNED FOR THE PURPOSE STATED.

AUTHORIZATION FOR SUCH PERSONAL INVESTIGATION IS HEREBY EXPRESSLY GIVEN:

DATE: _____ _____

INDIVIDUAL NAME

STATE OF _____

COUNTY OF _____

ON THIS _____ DAY OF _____ , 2006, BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED _____ TO ME KNOWN TO BE THE PERSON DESCRIBED HEREIN AND WHO EXECUTED THE FOREGOING INVESTIGATIVE AUTHORIZATION, AND ACKNOWLEDGED THAT (S)HE EXECUTED THE SAME AND HIS/HER FREE ACT AND DEED.

IN WITNESS MY HAND AND NOTARIAL SEAL SUBSCRIBED AND AFFIXED IN SAID COUNTY AND STATE THE DAY AND YEAR ABOVE WRITTEN.

(SEAL) _____

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

ATTACHMENT 10
OFFICIAL OFFER REQUIRED FOR SUBMISSION

Subsidy/User Fee — Official Offer Submission

The Contractor shall reveal its requested first year subsidy and its aggregate first year maximum average user fees for providing Emergency Ambulance services considering all compensation mechanisms as outlined herein.

Annual Subsidy	**Maximum Average Fee/Transport**
$ -0- Subsidy/year	$_____/transport
$25,000 Subsidy/year	$_____/transport
$50,000 Subsidy/year	$_____/transport
$75,000 Subsidy/year	$_____/transport

Other

$_____ Subsidy/year	$_____/transport