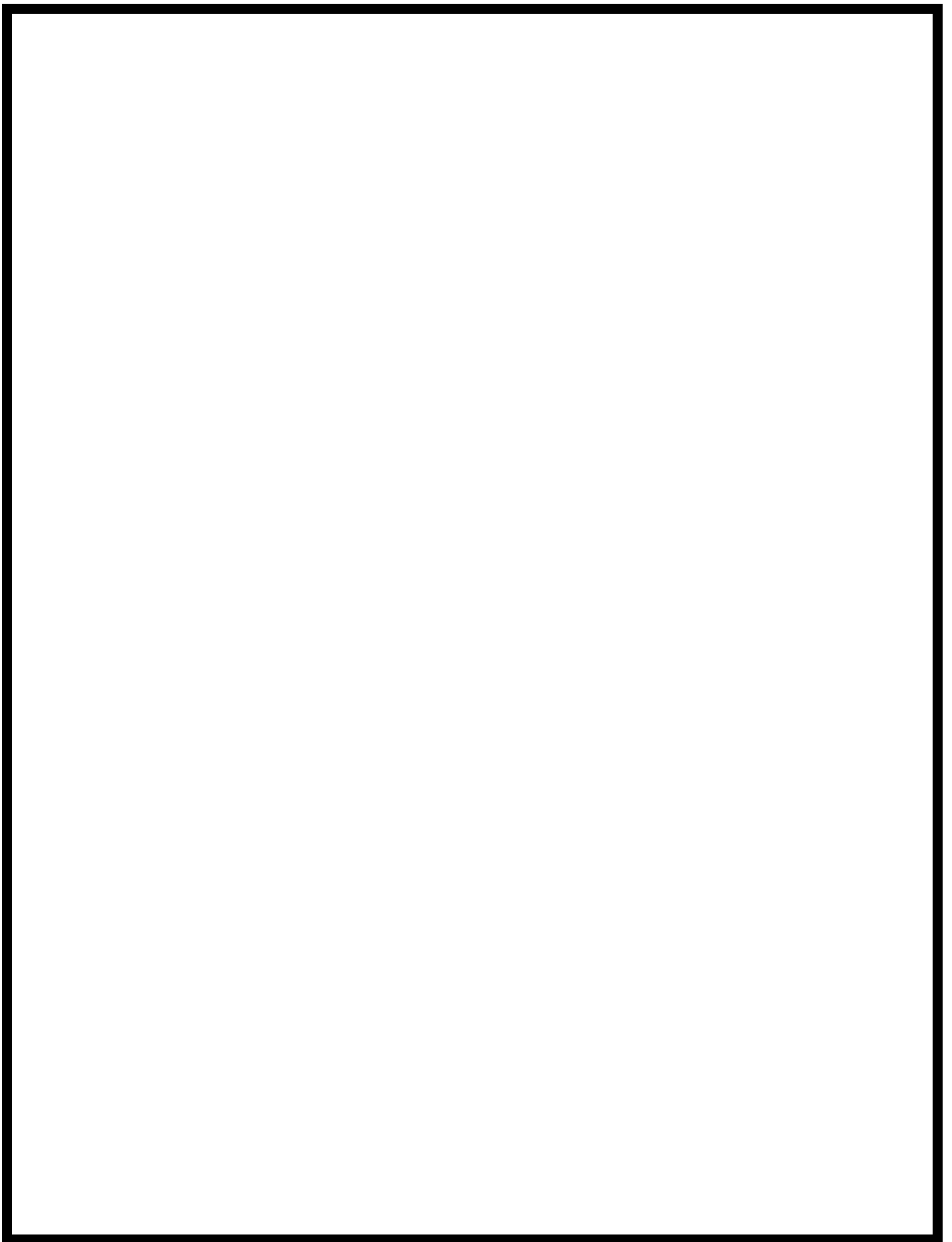


# Wahkiakum County



## Basic Life Support Protocols

Effective 8/2016



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# GENERAL ORDERS

## Introduction

- A. The following \*WAHKIAKUM COUNTY PROTOCOLS\* are intended as treatment guidelines for EMS personnel functioning under the direction of the Medical Program Director for Wahkiakum County. They represent a consolidation of recommendations for patient care related issues from local and national sources.
- B. They are intended to:
- 1) Standardize pre-hospital emergency medical care for Wahkiakum County.
  - 2) Provide the Emergency Medical Services Personnel with a framework for emergency medical care and an anticipation of supportive orders from Medical Control.
  - 3) Provide an understanding and course of action for confusing situations that may arise during the course of providing EMS services.
  - 4) Provide Medical Control physicians with an understanding of the knowledge and treatment capabilities of EMS personnel.
  - 5) Provide the basic framework on which the EMS System can be measured and compared for Quality Assessment and Improvement processes.
- C. They are NOT intended to:
- 1) Be absolute treatment doctrines, but rather guidelines with the understanding of sufficient flexibility to meet the needs of complex or extraordinary situations.
  - 2) Be a teaching manual for EMS personnel.
    - a) All EMS personnel are expected to be trained to a level of competency according to their certification.
      - i. All EMS personnel must maintain the expected competency level through continuing medical education and training (this may include traditional CME and/or OTEP).
    - b) All EMS personnel are expected to be knowledgeable of the county protocols and guidelines for their respective certification level.
  - 3) Withhold life saving treatments in circumstances where on-line medical control cannot be established.
  - 4) Interfere with the wishes of the patient or family, or the wishes of the patient's physician.
  - 5) Dictate details of care to advising physicians.
  - 6) Warrant EMS personnel to act as independent field practitioners.
- D. It is expected that all certified EMS personnel functioning in Wahkiakum County would be familiar with the portion of the protocols and guidelines appropriate to their certification level. When signing the Washington State Department of Health Office of Emergency and Trauma Prevention application form for certification, EMS personnel are verifying that they have access to a copy of the appropriate protocols.

## **Medical Control**

- A. The receiving hospital is designated as Medical Control for clarification of orders, patient disposition, cases of disparity between the pre-hospital care guidelines and other physician wishes, medical and controlled substance information and direction, and other extraordinary situations related to patient care that may occur.

## **Communicable Disease Prevention**

- A. All EMS personnel must remain current with Infectious Disease Continuing Medical Education according to the standards set forth by the Office of Emergency Medical and Trauma Prevention.
- B. General Recommendations
  - 1) Treat all patient contacts as potentially infectious.
  - 2) Always wear appropriate personal protective equipment and observe standard precautions when in contact with a patient.
  - 3) Handle sharp items with extreme caution – Needles, scalpel blades and other sharp objects must be treated as potentially infective once they have been used.
    - a) Place sharp items into puncture resistant containers located as close to the area of use as possible.
    - b) Do not recap, bend, or purposefully break needles.
  - 4) Wash hands thoroughly as soon as possible after patient contact. Use an antiseptic soap and running water and rinse thoroughly, even if gloves were worn. Alcohol based antiseptic solutions are an acceptable alternative if hand washing is not possible, but hands should be washed as soon as possible.
  - 5) Personnel suspecting exposure to an infective disease must inform their supervisor immediately.
    - a) If the mouth, eyes, or an unprotected cut are directly exposed to blood or body secretions, or in the event of a needle stick injury, affected personnel should wash the area thoroughly and immediately seek medical attention.
  - 6) After each patient contact clean all equipment used and vehicles according to the manufacturer recommendations or according to the most recent Department of Health or OSHA standards and guidelines.

## **General Patient Care**

- A. Initial (Primary) Survey: A primary survey must be performed initially on every patient and repeated every few minutes as appropriate.
  - 1) Check responsiveness.
  - 2) Airway: Is it patent? Identify and correct airway problems.
  - 3) Breathing: Rate and quality. Identify and correct compromising factors.
  - 4) Circulation: Pulse, rate, quality and location.
  - 5) Control external bleeding.
  - 6) Check for shock, treat per protocol.

- B. Focused (Secondary) Survey: Complete as indicated by patient condition.
  - 1) Level of consciousness. Verify.
  - 2) Reassure patient, inform him/her about exam and treatment.
  - 3) Obtain a brief history of illness or injury from patient, family or bystanders as indicated, check for medical alert identification.
  - 4) Perform a head-to-toe assessment as appropriate for setting / situation, record findings per Documentation Protocol.
  - 5) Prior to administering any medications in these guidelines, it must be determined that the patient is not allergic to the medication.
- C. Multiple Patients Situations
  - 1) Triage problems according to severity.
  - 2) Treat appropriate to priority using treatment protocols.
  - 3) Request additional personnel, Mutual Aid or activate MCI as appropriate when the number of patients or severity of patients exceeds usual response capabilities
- D. Initiation of Transportation
  - 1) Transportation of the patient(s) should be initiated as rapidly as possible.
  - 2) Delay in transportation should only occur for life threatening stabilization procedures (e.g. defibrillation, intubation, IV glucose for hypoglycemia, etc.).

## **Communications**

- A. Medical Control / Emergency Department (ED) Communications
  - 1) Pre-arrival information via radio (H.E.A.R.), cell phones, land-line phone, Nextel, or other means of approved communication must be made to the receiving hospital prior to or during patient transport. An exception would be in the case of a Mass Casualty Incident (refer to MCI protocol). ALL COMMUNICATIONS SHOULD BE KEPT AS SHORT AS POSSIBLE. The following protocols for EMS to ED / Medical Control communications should be used. If the hospital or Medical Control feel additional communications are necessary, they will contact the transporting unit.
    - a) Acceptable Emergency Pre-Hospital H.E.A.R. Report format:
      - i. Unit identification.
      - ii. Transport code.
      - iii. Age and sex of patient.
      - iv. Chief complaint or reason for transport.
        - 1. Notification of Trauma System patients.
        - 2. Notification of potential MI patient.
        - 3. Notification of potential CVA patient whose symptoms started <3.5 hours ago.

4. Notification of immediate need airway or respiratory care.
  5. Notification for security.
  - v. Condition of patient.
  - vi. Very brief pertinent medical history.
  - vii. Vital signs.
  - viii. Pertinent treatment rendered.
  - ix. Request for additional information or treatment.
  - x. Estimated time of arrival.
- b) Advise the receiving ED or Medical Control of any significant changes in the patient's condition.
  - c) All reports should be in the above format and kept to a maximum of 20 seconds on most patients. The report is not meant to be a full patient report and should relay only pertinent patient care information.
  - d) Patient identification information is inappropriate to be given on the H.E.A.R. frequency. Where patient care will be improved with patient identification, the information should be given by telephone.
  - e) The format for trauma patients must be in accordance with the Washington State Trauma Triage Tool (see Trauma Protocols).
- 2) Upon arrival at the ED, a verbal report must be provided to the attending physician and the receiving nurse. This report should provide details about the scene, patient's medical history, assessment findings, and a complete report on interventions and the patient's response.

#### B. Patient Care Report

- 1) A Medical Program Director approved Patient Care Report (PCR) must be completed on all patient encounters. The main purpose of the PCR is to provide information about the patient's condition, treatment, and response to treatment in the pre-hospital setting. It is, therefore, crucial that the MIR be completed and submitted as soon as possible. The PCR is also a legal document of evidence verifying adherence to protocols and patient care guidelines.
- 2) All Wahkiakum County Medical Incident Reports shall follow the narrative format indicated below. The narrative section of the PCR shall be in the S.O.A.P.I.E.R. method of report writing. A consistent format assures effective communications of patient information among all members of the healthcare team. NOTE: UNAPPROVED ABBREVIATIONS SHALL NOT BE USED.
  - a) S – SUBJECTIVE and SCENE. The information that the patient, family, bystanders or other witnesses tell you pertinent to the situation. Age of the patient, gender, mass in kg, chief complaint, scene description, history of the event, pertinent medical history of the patient, patient's physician, medications, allergies, other extenuating circumstances, history of smoking, if known, etc. The acronyms SAMPLE and OPQRST will help ensure that all pertinent information is included in the subjective section.



**S** - Symptoms

O - Onset

P - Provocation

Q - Quality

R - Region / Radiation

S - Severity (The initial pain rating on a scale of 1 to 10 should be documented in this section. Additional pain scale ratings should be documented in the Flow section and the last pain scale rating should be documented in the Evaluation section.)

T - Time

**A** - Allergies

**M** - Medications

**P** - Past medical history

**L** - Last oral intake

**E** - Event(s) leading to injury or illness

b) **O – OBJECTIVE.** The pertinent information and pertinent negatives found during the physical assessment or diagnostic equipment (ECG, Sat Monitor, etc).

- i. Initial observations of the patient.
- ii. Neurological / Mental status (Aox4, AVPU, GCS).
- iii. Skin characteristics.
- iv. Baseline vital signs (May be documented in Flow section).
- v. H.E.E.N.T.
- vi. Spine.
- vii. Thoracic / Chest.
  1. Pertinent cardiovascular findings; pulse rate, rhythm, intensity, heart sounds, etc.
  2. Pertinent pulmonary findings; rate, rhythm, use of accessory muscles, chest expansion, lung sounds, cough, sputum, etc.
- viii. Abdominal.
- ix. Pelvis.
- x. Extremities including circulation, motor, sensation, edema, etc. The acronyms DCAP and BTLS will assist with documentation.

D - Deformities

C - Contusions

A – Abrasions

P – Punctures

B – Burns

T – Tenderness

L – Lacerations

S – Swelling

xi. Note placement and content of Medical Alert tags.

- c) A / P – ANALYSIS OF ASSESSMENT / PLAN / PROTOCOL. The statement of the suspected condition and the associated protocol to be initiated. There may be more than one. EMS personnel cannot legally make a medical diagnosis. Therefore, always begin your statement with words or initials such as “Suspect,” “R/O,” “Possible,” i.e. “Suspect \_\_\_\_\_, \_\_\_\_\_ Protocol Initiated.”
  - d) Submission of the Medical Incident Report to the MPD office:
    - i. For routine cases the MIR should be submitted within 1 week.
    - ii. For cases involving refusals, deaths, intubation, CPR, defibrillation, or any other critical care MIR should be submitted within 24 hours.
  - e) I/E – IMPLEMENTATION EVALUATION (Protocol Template)
    - i. Chronological listing of treatment provided according to the protocol.
    - ii. Evaluation or response to each aspect of treatment.
    - iii. Invasive procedures must be documented in this section identifying the outcomes of the attempted procedure, the number of attempts, and the EMS personnel attempting the procedure.
    - iv. Clarification of Flow section documentation.
  - f) R – REPORT. The information that verifies continuity of care and accountability for the patient and their belongings.
    - i. Fluid volume infused.
    - ii. To whom patient care was transferred and verbal reports given, including any new patient information not given in H.E.A.R. report.
    - iii. Belongings of patient transferred, i.e. valuables, clothing, medications, etc.
    - iv. Time transfer of care occurred.
- 3) Flow Chart Section. A timeline of patient’s vital signs,, changes in diagnostic findings, medications administered, invasive procedures and critical patient response such as Pain Scale Ratings.
- a) Vital Signs
    - i. Transported patients must have vital sign taken at least every 15 minutes and more frequently as the situation dictates. There must be at least two sets of vital signs on all transported patients.
    - ii. Refusal patients must have an attempt at taking vital signs at least once. (See Non-transport of Patients Protocol if vital signs are outside of normal ranges for the patient.)
  - b) Medications administered.
    - i. Identify the patient, the medication, the dose, the route and the time.

- 4) The Patient Demographic section must be completed prior to submission to the MPD.
- 5) Call and response times, Unit and personnel identification and all other sections of the MIR must be completed prior to submission.
- 6) Responsibility of Medical Incident Report.
  - a) The EMS personnel that provided care to the patient are responsible for documentation.
  - b) Regardless of which EMS personnel provided care to the patient or documented the care, the EMS personnel with the highest level of certification is ultimately responsible for the quality, the timeliness and the accuracy of the documentation.
- 7) Patient Care Report Submission.
  - a) Will be submitted through WEMSYS.
  - b) The Patient Care Report must be completed in full prior to submission.
  - c) The Patient Care Report shall be completed prior to leaving the Emergency Department.
    - i. In the event that the Medical Incident Report cannot be completed in the ED, the following shall occur:
      1. Critical or seriously injured patients, patients that received medications, or patients that are likely to be transferred must have the PCR submitted within 1 hour. (Unless dispatched to another call during that hour, then as soon as possible).
      2. If dispatched on another call, the PCR shall be submitted directly or by fax to the ED within 1 hour after completion of transporting the last patient.

### **Medical Professionals at the Scene**

- A. Medical professionals at the scene of an emergency can provide valuable assistance to EMS personnel and care should be taken to treat them with professional courtesy.
  - 1) Medical professionals who offer their assistance should identify themselves and provide proof of their identity.
  - 2) Assistance from a medical professional should not be accepted if it will delay treatment of an emergency condition.
  - 3) There should be no diversion of the ambulance to stop at local clinics to see medical providers.
- B. When the patient's private physician is in attendance at the scene, EMS personnel will comply with the private physician's instructions for the patient following these guidelines:
  - 1) If orders are given which are inconsistent with established protocols or there is a potential for harm to the patient, contact Medical Control for advice and clarification.
  - 2) The Physician at the scene may:

- a) Request to talk directly to the Medical Control to offer advice and assistance.
  - b) Offer assistance with another pair of eyes, hands, or suggestions.
  - c) Take total responsibility for the patient with the concurrence of Medical Control
- 3) If during transport the patient's condition should warrant treatment other than that requested by the private physician, Medical Control must be contacted for advice and concurrence.
- 4) **THANK YOU FOR YOUR OFFER OF ASSISTANCE Cards**
- a) Each agency will be responsible for making and copying cards "Thank You for your Offer of Assistance Cards" using the exact language as below.

(FRONT OF CARD)

**THANK YOU FOR YOUR OFFER OF ASSISTANCE**

The Emergency Medical Services team is operating under Washington State Law and local EMS policy. The EMS team is functioning under standing orders from the Medical Program Director of Wahkiakum County and has the capability to contact the authorized Medical Control Physician. If you wish to assist, please see the other side for options.

PAUL SCHNEIDER, MD  
 WAHAKIAKUM COUNTY EMS  
 MEDICAL PROGRAM DIRECTOR

(BACK OF CARD)

In general, the physician who has the most expertise in management of the emergency should take control. This is usually the Medical Control Physician.

You May:

- 1) Request to talk directly to the Medical Control Physician to offer your advice and assistance.
- 2) Offer your assistance to the EMS team with another pair of eyes, hands, or suggestions, but allow the EMS team to remain under Medical Control of the base hospital physician.
- 3) If you have an area of special expertise for the patient's problem, you may take **total responsibility**, if delegated by the Medical Control Physician, **and accompany the patient to the hospital.**

**Do Not Resuscitate (DNR) Orders**

A. Definitions:

- 1) A DNR (DO NOT RESUSCITATE OR NO CODE) Order is an order issued by a Physician directing that in the event the patient experiences a cardiopulmonary arrest (i.e., clinical death) cardiopulmonary resuscitation will not be administered. Washington State POLST (Physician Order for Live Sustaining Treatment) is the preferred method/form for identifying a patient's wishes with a physician order.

- 2) A Living Will is a legally executed document expressing the patient's wishes with regard to ALS resuscitation.
  - 3) Resuscitation includes attempts to restore failed cardiac and/or ventilator function by procedures such as endotracheal intubation, mechanical ventilation, closed chest massage, defibrillation, and use of ACLS medications.
- B. The responding EMS provider should perform routine patient assessment and resuscitation or interventions until they confirm the POLST-DNR status in one of the following ways:
- 1) Look for the **original** POLST form at the bedside, on the back of the bedroom door, or on the refrigerator. In extended or intermediate care facilities, look for the POLST form in the patient's chart.
  - 2) A copied or faxed and signed POLST form can be used if it does not seem altered or fraudulent.
  - 3) Begin resuscitation if a valid POLST form cannot be located.
  - 4) Begin resuscitation if, in your medical judgment, your patient has attempted suicide or is a victim of an attempted homicide.
- C. When the patient is determined to be "obviously dead," resuscitation measures shall not be initiated.
- 1) The "obviously dead" are victims who, in addition to absence of respiration and cardiac activity, have suffered one or more of the following:
    - a) Decapitation
    - b) Evisceration of heart or brain
    - c) Incineration
    - d) Rigor Mortis
    - e) Dependent Lividity
    - f) Decomposition
- D. After confirming the patient has a valid POLST form requesting DNR and comfort care only, the EMS provider should carry out these standard POLST orders and provide comfort care measures.
- E. If resuscitation efforts have been started before learning of a valid POLST form, then the EMS provider should STOP these treatment measures:
- 1) Basic CPR.
  - 2) Intubation (leave the endotracheal tube in place, but stop any positive pressure ventilations).
  - 3) Cardiac defibrillation or pacing.
  - 4) Administration of resuscitation medications.
  - 5) Any positive pressure ventilation (through bag valve masks, pocket face masks, endotracheal tubes).
- F. Other DNR Orders. We continue to encourage medical facilities to use the Department of Health POLST form. Sometimes health care facilities prefer to use their own health care DNR orders. When EMS providers see other DNR orders, they should do the following:

- 1) Verify that the order has a physician signature requesting "Do Not Resuscitate."
  - 2) Verify the presence of the patient's name on the order.
  - 3) Contact on-line medical control for further consultation. In most cases, on-line medical control will advise to withhold CPR following verification of a valid physician-signed DNR order.
- G. Revoking a DNR order. The following people can inform the EMS system that POLST has been revoked:
- 1) The patient (by destroying the POLST form or by verbally revoking the directive).
  - 2) The physician expressing the patient's revocation of the directive.
  - 3) The legal surrogate for the patient expressing the patient's revocation of the directive when the patient does not have the capacity to communicate his/her wishes. If the legal surrogate has a durable power of attorney, it must be for health care and not just finances.
- H. Documentation
- 1) Complete the Medical Incident Report (MIR) directive approved by your Medical Program Director.
  - 2) State in writing in the upper left hand corner of the narrative summary: "**Patient identified as DNR by POLST form.**"
  - 3) Record the name of the patient's physician and state whether you contacted the physician.
  - 4) Record the reason why the EMS system was activated.
  - 5) Comfort the family and bystanders when patients have expired.
  - 6) Contact the local coroner's office. Also contact, if appropriate, local law enforcement, chaplain service, or funeral home.
- I. Comfort Care Measures
- 1) "No CPR" does not mean No Treatment or No Caring. Providing comfort care measures is an important responsibility and service you provide to patients and their families at a crucial moment in their lives.
  - 2) Comfort care measures for the dying patient may include:
    - a) Suctioning the airway.
    - b) Administering oxygen.
    - c) Positioning for comfort.
    - d) Splinting.
    - e) Controlling bleeding.
    - f) Providing emotional support.
    - g) Contacting patient's physician or on-line medical control if questions or problems arise
- J. Special situations:
- 1) A patient's wishes in regard to resuscitation should always be respected. Sometimes, however, the family may vigorously and persistently insist on CPR even if a valid POLST form exists and is located. These verbal requests are not consistent with the patient's directive. However, in such circumstances:

- a) Attempt to convince family to honor the patient's decision to withhold CPR. If family persists, then
- b) Initiate resuscitation efforts until relieved by paramedics (for First Responders and EMT's).
- c) Advanced life support personnel should continue treatment and consult medical control.

K. Remember: Once a death has occurred, the family and relatives become your patient.

### **Death in the Field**

- A. EMT's may **withhold resuscitation** only if the patient is in a cardio/respiratory arrest and:
  - 1) There is a valid POLST form with the box checked for Comfort Measures Only, DNR;
  - 2) Physician signed DNR and patient in skilled nursing facility.
  - 3) Signed and witnessed Living Will (**consult with Medical Control**).
  - 4) There is an obvious sign of death, e.g.:
    - a) Blunt / penetrating head trauma and no vital signs.
    - b) Evisceration of heart or brain.
    - c) Decapitation.
    - d) Rigor mortis.
    - e) Dependent lividity.
    - f) Decomposition.
    - g) A pulseless, apneic victim of a mass casualty incident where EMS resources are required for stabilization of other patients.
  - 5) Any questionable decision to determine a death in the field should be done only after:
    - a) Consultation with Medical Control or, if present, the patient's physician.
- B. In all other cases, patient resuscitation should begin immediately, e.g.,
  - 1) Hypothermic patients.
  - 2) Possible drug overdoses.
  - 3) Victims of electrocution or lightning.
  - 4) Drowning victims
- C. Once resuscitation has been initiated, resuscitation may be ceased only by order of Medical Control or private physician on-scene with confirmation of medical control.
  - 1) EMS personnel may **discontinue resuscitation** if patient is:
    - a) Initial asystolic/PEA in 3 leads ECG unresponsive to ACLS after 20 minutes and concurrence with Medical Control.
    - b) Initial asystolic in 3 leads ECG and patient is nonviable in paramedic's judgment and concurrence with Medical Control.
    - c) A drowning victim with greater than 20 minutes submersion and are pulseless and apneic; and with Medical Control concurrence.
    - d) Trauma victims that are pulseless and apneic.

- 2) All non-resuscitation and termination of resuscitation situations must be documented according to protocol with an ECG strip documenting cardiac rhythm (strip to include calibration marker), with time and date recorded on the 6 sec. strip.
- 3) Document conversation with Medical Control, include time, physician's names, and instructions given.

### **Transport / Non-Transport of Patients**

#### **A. Patient Treatment Rights**

- 1) The protocols are intended for use with a conscious, consenting patient, or an unconscious (implied consent) patient.
- 2) A rational patient, a patient's family or personal physician may select the hospital to be transported so long as the transport time does not jeopardize the patient's condition and the receiving facility is appropriate to the patient's condition, e.g. trauma, high risk OB, etc., if the transport will not result in decreased EMS coverage to the county.
- 3) When in doubt, contact the Medical Control and fully document your actions.
- 4) If a patient is a minor and no consenting adult is available and the minor refuses treatment, the EMT should contact Medical Control and/or law enforcement as necessary.

#### **B. Non-Transport of Patients**

- 1) The decision to seek emergency medical services resides with the patient or with legal custodians. Similarly, the decision to transport or not transport should reside with the patient or legal custodian. The EMT may believe the patient does not need to be transported, but unless the patient and/or custodian agrees transport will proceed.
- 2) In general, the only reasons for a non-transport are:
  - a) No living patient (DOA, death at scene, etc.)
  - b) Signed "Refusal for Transport," completed by competent patient, family or custodian.
- 3) Criteria that must be met for determining competence:
  - a) No judgment impairment by alcohol, drugs, psychiatric conditions, head injury, shock, dementia (Alzheimer's) language or communication barriers or any other conditions.
  - b) Ability to repeat (and convey that they understand) in their own words the risks of refusing treatment/transport.
  - c) Age 18 or older.
- 4) A competent patient must be orientated and understand the potential consequences of refusal. A person determined to be incapable of normal decision making processes is assumed to require a medical screening evaluation. EMS personnel will use available resources to have that person transported, including assistance from relatives/friends, contact with Medical Control, police and/or mental health providers, if necessary.



- 5) Determine medical need by complete assessment (Hx, vital signs, physical exam).
  - a) If no apparent medical need exists and competent patient/custodian agrees, transport is not necessary.
  - b) Complete Wahkiakum County approved patient Refusal Form and document:
    - i. *“After a basic physical exam no apparent EMERGENCY medical need exists at this time. We do, however, highly recommend a complete follow up exam by a physician immediately.”*
  - c) Read refusal form to patient and obtain appropriate signatures. Document all findings and refusal process on MIR.
- 6) If medical need exists and competent patient/custodian refuses care, contact Medical Control and follow instructions.
  - a) If refusal is confirmed, read refusal form and risks to patient, have them repeat in their own words the risks of refusal. Obtain signatures and document on PCR: Situation, Hx, mental status, vital signs, physician exam findings, time Medical Control contacted, name of physician, orders, and outcome (i.e., patient to follow-up with own physician, in care of relative, friend for law enforcement, etc.).
  - b) If refusal is not confirmed, follow Medical Control instructions.
- 7) If the patient is not competent and refuses care, or if the patient is a minor and the parent refuses care and in your judgment the minor needs care:
  - a) Elicit the help of police to involuntary transport patient.
    - i. If police refuse to assist after explaining the medical need:
      1. Document the officer’s name, time, and ask officer to sign that assistance to transport was refused.
      2. Do not attempt to physically restrain a violent patient without the assistance from police.
      3. Contact Medical Control for advice.
  - b) Elicit help from other individuals if available.
    - i. Other family members.
    - ii. Pastoral care.
    - iii. Mental health professionals.
    - iv. The patients primary care provider.

**Guidelines for Activation of an air ambulance**

Policy:

**General principles:**

An air ambulance should be activated when life or limb threatening problems are present and activation is likely to result in a positive intervention. With the exception of when a tertiary care center is likely to be the patient's ultimate destination an air ambulance should only be activated when advanced medical intervention is necessary and not otherwise available, or when the transport time by air will be significantly less than transport time by ground and in the patient's best interest.

**Conditions where an air ambulances almost always preferable to ground transportation:**

- Patients meeting criteria for STEMI by ECG machine interpretation.
- Patients with sudden onset of a significant neurologic deficit of less than 210 minutes duration. Examples:
  - Inability to move an arm or a leg.
  - Inability to speak.
- Multiple trauma patients with at least one meeting criteria for full trauma activation.
- Patients with evidence of severe head injury. As an example, a Glasgow coma score of less than 12.

**Conditions where an air ambulance may be preferable to ground transportation and should be considered:**

- Any patient that is unstable and in the judgment of the EMT would benefit from critical care intervention and rapid air transport
- Examples include:
  - Patients with chest pain and systolic blood pressure less than 90.
  - Patients with severe shortness of breath and O2 oxygen saturation less than 90 despite treatment and oxygen.
  - Patients with severe abdomen pain and systolic blood pressure less than 90.
  - Injured patients with potential for deterioration and a very remote location.

**Procedure:**

- As soon as there is a probability that an air ambulance may be requested:
  - The communications center will contact an air ambulance to place them on stand-by.
  - If a multiple patient scene is involved, advise how many helicopters you would like on stand-by.

- Advanced life support EMS will be called to respond if available.
- In extreme circumstances, an air ambulance can be activated prior to reaching the scene (I.e., logging accident in a rural area with significant injuries).
- Once the patient has been evaluated, an air ambulance can be activated if:
  - Conditions are met for an air ambulance activation and there is agreement with either a paramedic or medical control if available.
  - The patient does not have documentation expressing that heroic measures should be avoided to prolong life.
  - The patient is not refusing transport by an air ambulance. (If they meet criteria for refusing treatment.)
  - Once Life Flight is activated, the patient will be transported to the landing zone and prepared according to air ambulance procedures (flat terrain, 100 x 100, with no overhead obstructions).
  - If at anytime prior to an air ambulance's evaluation of the patient, the use of an air ambulance appears to be unsafe for the patient or others, Wahkiakum EMS can cancel the air ambulance.
  - If at any time the patient stabilizes and no longer meets criteria for air ambulance transport, they may be canceled, preferably with agreement with medical control.

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# MEDICAL

## **General Medical Assessment**

- A. Scene Size-up
- B. Initial Patient Assessment
- C. Focused History and Physical Exam
  - 1) Assess complaints and signs and symptoms, responsive patient
    - a) O-P-Q-R-S-T assessment guidelines
    - b) Obtain SAMPLE history
    - c) Obtain vital signs
    - d) Conduct AVPU mental status exam as needed
    - e) Intervention
- D. Perform Ongoing and/or Detailed Assessment as Needed
- E. Transport

## **Allergies**

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

### A. Scene Size-up

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

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

### B. Emergency Medical Care

- 1) Remove any offending agent. (i.e. stinger, contacts, glasses)
- 2) Clear the airway, provide oxygen and/or ventilatory assistance as necessary; if not done during Initial Patient Assessment. (see Oxygen Delivery appendix)
- 3) Anaphylaxis/allergic reaction with severe respiratory distress.
  - a) Circulation
  - b) Epinephrine 1:1000 administered via intramuscular (IM) injection or via auto injector.
    - i) Dosage:
      - a. Adult: (30 kg or 66 lbs. and higher) – 0.3mg
      - b. Infant and child: (Under 30 kg or 66 lbs.) – 0.15mg
    - ii) Obtain verbal permission from the patient, or if less than 18 years old, from patient's parent or guardian, to administer Epinephrine.
    - iii) Confirm that the patient has evidence of a current prescription for epinephrine.
    - iv) Patients 18 years of age or older, with no evidence of a prescription:
      - a. Contact Medical Control
      - b. Provide supportive care and transport
  - c) If the administration of Epi is refused, do not administer Epi, contact Medical Control and continue supportive care

- 4) Pulse Oximetry,
- 5) Establish saline lock

Procedure for IM injection of epinephrine:

- a. Prepare the equipment.
- b. Confirm the medication.
- c. Draw up the correct dose of medication for patient.
- d. Prepare the injection site.
- e. Inject needle at 90°angle.
- f. Aspirate needle once in muscle to ensure a blood vessel was not entered. If it was, stop restart procedure.
- g. Inject correct dosage of medication.
- h. Remove needle and cover puncture site.
- i. Record time of administration.
- j. Reassess in two minutes.

## **Altered Mental Status**

- A. Use AVPU Mnemonic to determine level of responsiveness
  - 1) **A**lert and oriented
  - 2) Responsiveness to **v**erbal stimuli
  - 3) Responsiveness to **p**ainful stimuli
  - 4) **U**nresponsiveness
- B. Attempt to determine cause of altered mental status if possible; e.g., overdoses, medical condition by SAMPLE history or trauma assessment
  - 1) **S**igns and symptoms
  - 2) **A**llergies
  - 3) **M**edications
  - 4) **P**ertinent past history
  - 5) **L**ast oral intake
  - 6) **E**vents leading to the injury or illness
- C. Emergency Medical Care
  - 1) Provide oxygen and/or ventilatory assistance as necessary, if not done during initial patient assessment (see Oxygen Delivery, page 34)
  - 2) Do not leave unattended
  - 3) Establish saline lock
- D. Pediatric Considerations
  - 1) Attempt to determine cause e.g., hypoglycemia, poisoning, post seizure, infection, head trauma, hypoperfusion
  - 2) See above for emergency medical care



## EMT NALOXONE ADMINISTRATION FOR SUSPECTED OPIATE OVERDOSAGE

### Indications:

- Respiratory compromise
- Abnormal breathing
- RR <10
- Decreased level of consciousness
- Pinpoint pupils

**Contraindications:** None when used in a life-threatening emergency

### Intervention/ Treatment Protocol

1. Scene-Size-Up: Personnel Safety, drug paraphernalia (needles, cooking material, pill bottles etc.).
2. Intervention:
  - a. Obtain history as possible
  - b. Rapid physical assessment
    1. Decreased level of consciousness
    2. Respiratory rate, abnormal breathing
    3. Pulse rate, BP if possible
    4. Pupillary size, look for pinpoint pupils
    5. Evidence of drug use (needle tracks, syringes, pills, powder)
  - c. If pulseless: CPR as per ACLS guidelines (delay supraglottic airway)  
Apnea with pulse: oral airway (not supraglottic airway) ventilate with 100% O<sup>2</sup>
  - d. Administer Naloxone (Narcan)
    1. Open kit and or load 2 mg ( 2 ml) Naloxone in syringe
    2. Attach atomizer to syringe
    3. Place atomizer into nostril
    4. Briskly compress syringe to administer 1 ml of atomized spray
    5. Remove atomizer and repeat above in the other nostril
  - e. Reevaluate LOC, respirations, pulse continuously, Rescue breathing and CPR as needed. Naloxone IN will take 3-5 minutes to take effect. Spontaneous breathing is the goal.
  - f. If no improvement in 3-5 minutes, the 2mg dose may be repeated.
  - g. Be prepared to manage patient agitation and combativeness.

**NOTE:** Supraglottic airway should be used only if Naloxone has no effect and CPR is continued

## **Behavioral Emergencies**

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

- A. If Scene is Not Secure
  - 1) Guarantee your own safety
  - 2) Call the police
  - 3) Locate the patient if scene is safe for EMS.
  - 4) Obtain permission from police to search for patient if safety is a concern.
  - 5) Assess and treat life-threatening problems
  - 6) If show of force necessary to render care, contact law enforcement and Medical Control
- B. If Scene Seems Secure
  - 1) Scan for signs of items contributing to crisis (e.g., medications, drugs, alcohol)
- C. Signs and Symptoms
  - 1) Psychological Crisis
    - a) Panic
    - b) Agitation
    - c) Bizarre behavior
    - d) Danger to self or others
  - 2) Suicide Risk
    - a) Depression
    - b) Suicidal gestures
    - c) Mental status examination (see Altered Mental Status, page 19)
- D. Emergency Medical Care
  - 1) One EMT to assume control of situation
  - 2) Speak in a calm quiet voice, maintain eye contact and move slowly
  - 3) Answer questions honestly
  - 4) Do not leave the patient alone or turn your back
  - 5) Restrain only if necessary for your protection or that of the patient.
- E. Transport
  - 1) If patient consents, follow general medical assessment guidelines (see page 16)
  - 2) If patient refuses, obtain consent according to local protocol

## **Chest Pain Suggesting Cardiac Origin**

- A. In the age of thrombolytics, patients still need to be stabilized on scene but transported as soon as possible; other scene delays are to be avoided.
- B. ALS/ILS upgrade and evaluation required unless ALS/ILS is unavailable.
- C. Treatment
  - 1. Position of comfort.
  - 2. Document Pain Scale initially and after each medication.
  - 3. O<sub>2</sub>
  - 4. Establish saline lock
  - 5. 12 Lead ECG if available (should be done en route).
    - a. If machine recognizes an acute myocardial infarction call for helicopter transport if available or notify the hospital about the patient having an acute myocardial infarction (transmit ECG to receiving hospital if possible).
  - 6. Nitroglycerin:
    - a. Indicated in patients thought to have chest pain of cardiac origin, SBP >100 , no erectile dysfunction medications and no evidence of intracranial bleeding.
    - b. Obtain verbal permission from the patient.
    - c. Confirm that the medication is the patient's medication. Only administer patient's own nitro.
    - d. Question patient about the use of erectile dysfunction medications like Viagra (generic names often end in ...afil).
    - e. If erectile dysfunction medications like Viagra used within the last 48 hours:
      - 1. DO NOT administer nitroglycerin and contact Medical Control.
    - f. If no erectile dysfunction medications like Viagra used within last 48 hours:
      - 1. Assist patient with their Nitroglycerin 0.4 mg sublingual tablet or spray.
      - 2. May repeat q 5 min. prn. up to 3 doses.
      - 3. Check blood pressure before giving each repeat dose.
  - 7. Aspirin

### **INDICATIONS FOR USE IN AN ACUTE CORONARY EVENT**

- a. Patient exhibits any of the following signs of symptoms:
  - 1. **Uncomfortable** pressure, fullness, squeezing or pain in the center of the chest that lasts more than a few minutes, squeezing or pain in the center of the chest that lasts more than a few minutes, or goes away and comes back.

2. **Pain** that spreads to the shoulders, neck or arms.
3. Chest **discomfort** with lightheadedness, fainting, sweating, nausea or shortness of breath.

-OR-

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

#### CONTRAINDICATIONS FOR USE

- a. Patient is allergic to aspirin or other nonsteroidal anti-inflammatory medications like ibuprofen (Motrin®, Advil®).
- b. If they have just taken aspirin for this event in last 12 hours, do not administer aspirin.
- c. Active significant bleeding from any location.
- d. The patient is unable to take oral medication safely.

#### Procedure

1. Have the patient chew 4, 81 mg baby aspirin or 1 adult 325 mg aspirin if the patient meets the above criteria.
2. Contact medical control if in doubt about giving aspirin.

## **Cardiovascular Emergencies**

- A. **Onsset/**Provocation/**Quality/**Radiation/**Severity/**Time************
- B. Signs and Symptoms
  - 1) Chest pain
  - 2) Difficulty breathing
  - 3) Skin changes (pale, sweaty, cyanotic)
  - 4) Anxiety/irritability (feeling of impending doom)
  - 5) Circulatory (irregular pulse/BP, shock, pulseless)
  - 6) Nausea/vomiting
- C. Allergies/Medications/Previous Hx/Last Intake/Events Prior
- D. Emergency Medical Care
  - 1) Patient responsive, c/o chest pain/pressure/SOB/sweating
    - a) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery appendix).
    - b) Patient's own physician prescribed Nitroglycerin available; assist patient with self administration of Nitroglycerin after consulting on or off line medical control:
      - i) Patient systolic BP >100.
      - ii) Given every 3-5 minutes (max. 3 doses).
    - c) If patient's own physician prescribed Nitroglycerin not available or appropriate:
      - i) Continue oxygen.
      - ii) Allow patient to achieve safe position of comfort
  - 2) Patient unresponsive
    - a) Check respirations and pulse.
    - b) Begin CPR according to current AHA CPR/AED guidelines if not provided during Initial Patient Assessment. If POLST-DNR form/bracelet intact, follow protocol for POLST-DNR.
    - c) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
    - d) Attach Automatic External Defibrillator (AED) if available.

## **Diabetic Emergencies**

### **A. Signs and Symptoms**

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

### **B. Emergency Medical Care**

- 1) If patient is able to swallow and not at risk to aspirate, administer one tube of oral glucose, or substance high in simple sugar; i.e. honey, glucose or other sugar gel, orange juice with 2-3 tsp. of sugar.
- 2) Be prepared if the patient vomits by turning head and suction as needed.
- 3) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery appendix).
- 4) Establish IV saline lock.
  - a) If pt. is unable to swallow – Start IVF D5W, leave wide open and then titrate to patient's condition.
  - b) Recheck CBG every ten minutes.
- 5) Maintain body temperature.

### **C. Transport**

- 1) Place patient in position of comfort, preferably lying on their side.
- 2) If patient regains full consciousness and refuses transport, consult with medical control.

## **Gynecological Emergencies**

### *Excessive Vaginal Bleeding*

#### A. Emergency Care

- 1) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery appendix)
- 2) Treat for shock (see Shock section).
- 3) If bleeding due to trauma to external genitalia, place appropriate external dressings and pressure as needed to any wounds.
- 4) Establish saline lock.

## **Sexual Assault**

Note: Protect potential crime scene and any evidence as much as possible

#### A. Emergency Care

- 1) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery appendix).
- 2) Follow treatment protocols for victims of trauma.
- 3) Advise patient not to wash, douche, urinate or defecate prior to physical exam.
- 4) Do not examine genitalia unless obvious bleeding requires the application of a dressing.
- 5) Provide non-judgmental emotional support.

## **Obstetrical Emergencies**

### *Emergency Delivery*

- A. Determine
  - 1) Date of expected birth.
  - 2) Onset of contractions/pain.
  - 3) Any bleeding or discharge.
  - 4) Number of pregnancies/births.
  - 5) Duration and frequency of contractions.
- B. Signs and symptoms of imminent delivery.
  - 1) Perineum bulging or baby crowning.
  - 2) Contractions <2 minutes apart.
  - 3) Mother expresses the need to “push” or “bear down”.
- C. Emergency Medical Care
  - 1) Have mother lie supine with knees drawn up and spread apart.
  - 2) Prepare OB kit.
  - 3) When the infant’s head appears during crowning, place fingers on bony part of skull and exert very gentle pressure to prevent explosive delivery.
  - 4) When head is delivered, suction infant’s nose and mouth with bulb syringe.
  - 5) Assist delivery of shoulders and body; do not pull on infant.
  - 6) When baby is delivered:
    - 1) Wipe blood and mucus from mouth and nose, suction mouth and nose again.
    - 2) Keep infant level with vagina until the cord is cut.
    - 3) Assure patent airway, stimulate crying by tapping soles of feet.
    - 4) Repeat suctioning as needed.
    - 5) Provide supplemental oxygen for cyanosis.
    - 6) Provide BVM ventilation with 100% O<sub>2</sub> for apnea, persistent cyanosis or HR <100.
    - 7) Continue to dry, warm, stimulate and reposition.
    - 8) Chest compressions for persistent HR <60.
    - 9) If it will not interfere with patient care note APGAR assessment on infant one minute after delivery and 5 minutes (appearance, pulse, grimace, activity, respiratory effort).
    - 10) Wrap infant in warm blanket and place on its side, head slightly lower than trunk.
    - 11) As pulsations cease, double clamp, tie and cut cord between two clamps.
    - 12) Let placenta deliver normally.



Note: Do not pull on cord

- a. Place in plastic bag and transport with mother.
  - b. Massage mother's lower abdomen until firm.
  - c. Place sterile pad over vaginal opening.
- 13) Estimate blood loss, treat for shock as necessary.
  - 14) Record time of delivery.

## **Complications of Deliveries**

### *Miscarriage – Spontaneous Abortion*

- A. Signs and Symptoms
  - 1) Cramp-like lower abdominal pain similar to labor
  - 2) Moderate to severe vaginal bleeding, which may be bright or dark red
  - 3) Passage of tissue or blood clots
- B. Emergency Medical Care
  - 1) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery).
  - 2) Establish saline lock.
  - 3) Treat for shock (see Shock)
  - 4) Place sterile pad over vaginal opening
  - 5) Bring fetal tissues to the hospital

### *Prolapsed Cord*

- A. Signs and Symptoms
  - 1) Cord presents through the birth canal before delivery
  - 2) Normally occurs early in labor
- B. Emergency Medical Care
  - 1) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery).
  - 2) Position mother in knee chest position or extreme as much Trendelenburg as possible.
  - 3) Insert sterile gloved hand into vagina pushing the presenting part of the fetus away from the pulsating cord
  - 4) Keep pressure on presenting fetal part and monitor pulsations in the cord
  - 5) Continue monitoring pulsations until relieved at the hospital

### *Breech Birth and/or Limb Presentation*

- A. Signs and Symptoms
  - 1) Buttocks or extremities present first during the delivery process
- B. Emergency Medical Care
  - 1) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery appendix).
  - 2) Allow delivery to progress spontaneously
  - 3) Support Infant's body as it is delivered

- 4) If head delivers spontaneously, proceed as with normal delivery – if head does not deliver within 4-6 minutes, insert gloved hand into vagina, create an airway for the baby
- 5) Place mother in head down position with pelvis elevated
- 6) Do not remove hand from inside vagina until relieved by hospital staff

#### *Meconium Stain*

##### A. Signs and Symptoms

- 1) Greenish or brownish-yellow amniotic fluid rather than clear
- 2) Discoloration/staining on infant's face
- 3) Often indicates possible fetal distress during labor

##### B. Emergency Medical Care

- 1) Do not stimulate infant to breathe prior to suctioning
- 2) Suction oropharynx and nasopharynx
- 3) Maintain infant's airway

#### *Pre-Delivery Seizures*

##### A. Signs and Symptoms

- 1) Mild pre-eclampsia
  - a) Hypertension (moderate, above 140 systolic and below 160 systolic)
  - b) Edema
  - c) Rapid weight gain
- 2) Moderate to severe
  - a) Hypertension above 160 systolic
  - b) Headache
  - c) Changes in behavior
  - d) Visual disturbances
  - e) Dyspnea
  - f) Cyanosis
- 3) Eclampsia (any of the above plus)
  - a) Seizure
  - b) Postictal

##### B. Emergency Care

- 1) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
- 2) Take seizure precautions (see Seizures section).
- 3) Transport patient preferably lying on left side.
- 4) Established saline lock.

## **Poisoning/Overdose**

**CAUTION:** Do not expose yourself to toxic atmospheres or substances without proper training, PPE and other equipment. If caregiver or patient is exposed consider primary HAZMAT decontamination.

**Note:** Life threatening airway/respiratory compromise or shock may develop as the reaction progresses, consider ALS.

- A. Ingested Substances
  - 1) Signs and Symptoms
    - a) History of ingestion. Nausea, vomiting, diarrhea, altered mental status, abdominal pain, chemical burns around the mouth, different breath odors
  - 2) Emergency Medical Care
    - a) Remove pills, tablets or fragments from patient's mouth, and save to go with patient. Take any bottles suspected of being ingested.
    - b) Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery appendix).
    - c) Consult Medical Control
      - i) Consult poison control as directed
      - ii) Activated Charcoal – 1 gram per kilogram of body weight, the usual adult dose is 50 gm.
      - iii) Contraindications include altered mental status, ingestion of acids/alkalis, inability to swallow and loss of gag reflex
      - iv) Establish saline lock.
- B. Inhaled Substances
  - 1) Signs and Symptoms
    - a) History of inhalation of toxic substance, difficulty breathing, chest pain, cough, hoarseness, dizziness, headache, confusion, seizures, altered mental status.
  - 2) Emergency Medical Care
    - a) Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (see Oxygen Delivery appendix)
    - b) Establish saline lock.
- C. Toxic Injection (see Bites and Stings section)
  - 1) Signs and Symptoms.

- a) Weakness, dizziness, chills, fever, nausea, vomiting.
- 2) Emergency Medical Care.
  - a) Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
  - b) Treat open wounds.
  - c) Establish saline lock.
- D. Absorbed Substances.
  - 1) Signs and Symptoms.
    - a) History of exposure, liquid or powder on patient's skin, burns, itching, irritation, redness.
  - 2) Emergency Medical Care.
    - a) Skin – remove contaminated clothing while protecting self from contamination.
      - i) If powder present, brush off patient, then irrigate (as with liquid in ii below).
      - ii) Irrigate with water for at least 20 minutes, continuing enroute to the hospital, if possible.
    - b) Eye – irrigate with clean water away from unaffected eye for at least 20 minutes, while enroute to the hospital.
      - i) With the patient laying down and towels around the head.
      - ii) Hang a liter bag of saline and open the tubing to maintain a steady flow in to the affected eye(s).
      - iii) Repeat as needed to maintain irrigation.
      - iv) Contact medical control as needed.
- E. Be prepared for vomiting, seizures or further deterioration of the patient.
- F. Bring all containers, bottles, labels, etc., of poison agents to the receiving facility.

## **Respiratory Emergencies**

- A. Assess **O**nset/**P**rovocation/**Q**uality/**R**adiation/**S**everity/**T**ime
- B. Signs and Symptoms
  - 1) Anxious/restless
  - 2) Shortness of breath (air hunger, increased/decreased/absent respirations)
  - 3) Skin color changes (cyanotic, pale/clammy, redness/flushing)
  - 4) Abnormal airway noises (wheezing, stridor, gurgling, snoring)
  - 5) Mechanics of respiration (fatigue due to breathing effort, diaphragmatic breathing, retractions, irregular breathing pattern)
  - 6) Patient position (upright, feet dependent, tripod)
  - 7) Drooling, difficulty swallowing, seal bark cough
- C. Allergies/Medications/PM Hx/Last Oral Intake/Events Prior
- D. Emergency Medical Care
  - 1) Patient c/o SOB/inadequate respirations
    - a) Remove obstruction if any
    - b) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment,
    - c) Allow patient to achieve position of comfort (POC)
    - d) Prepare to manage/assist respirations as necessary
      - i) Patient not breathing
      - ii) Patient unable to maintain adequate breathing on their own
    - e) Establish saline lock.
  - 2) Patient c/o SOB with wheezing
    - a) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment
    - b) Establish saline lock.
    - c) Assist with self administration of albuterol inhaler
      - i) If available and prescribed for patient
      - ii) Consult with Medical Control
- E. Pediatric Consideration
  - 1) Airway obstruction
    - a) Use infant/child foreign body airway procedures if complete obstruction
      - i) Deliver 5 back blows.
      - ii) Deliver 5 Heimlich in older children or chest thrusts in younger children (less than 1 year old).

- iii) Finger sweep to manually remove foreign body.
  - b) If incomplete obstruction
    - i) Do not agitate patient
    - ii) Allow patient position of comfort
    - iii) Oxygen/limited exam
- 2) Patient drooling, with difficulty swallowing, or seal bark cough
  - Note: Do not attempt to visualize oropharynx
    - a) Assist ventilations if respiratory arrest.
    - b) Provide supplemental oxygen if not done during Initial Patient Assessment (See Oxygen Delivery appendix).
    - c) Allow patient to achieve position of comfort and optimal breathing ease which may be in the sitting position. Do not force patient to lay down.
- F. Be prepared to provide positive pressure ventilation should patient deteriorate
- G. Monitor patient and vital signs closely

## Seizures

### A. Signs and Symptoms

- 1) May experience sensory changes
  - a) Aura
  - b) Abnormal twitch
  - c) Anxiety
  - d) Dizziness
  - e) Smell, vision, taste
- 2) Sudden unresponsiveness
- 3) Convulsions
- 4) Loss of bowel and bladder control
- 5) Trauma from seizure activity
  - a) Tongue biting
  - b) Extremity injuries
  - c) Abrasions and contusions
- 6) Postictal (recovery phase)
  - a) Confusion, disoriented and possibly combative
  - b) Exhausted and weak

### B. Emergency Medical Care

- 1) Maintain airway
- 2) Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
- 3) Suction as needed
- 4) Prevent injury to the patient
- 5) Establish saline lock.

### C. Pediatric Considerations – Febrile Seizure

- 1) Signs and symptoms
  - a) Oral or rectal temperature  $>100^{\circ}$
  - b) Convulsions
- 2) Emergency Medical Care
  - a) Remove heavy or swaddling clothes, keep lightly dressed
  - b) Maintain airway
  - c) Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
  - d) Suction as needed



e) Establish saline lock.

D. Transport patient on their side

Note: Conditions that may cause seizures:

- Epilepsy • Fever • Infections • Poisoning • Hypoglycemia (low blood sugar) • Stroke
- Head trauma • Hypoxia (oxygen starvation) • Dysrhythmia (abnormal heart rhythms)
- Pre-delivery seizure, usually related to severe high blood pressure (Eclampsia)

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## ENVIRONMENTAL

### **Bites & Stings (Venomous)**

#### A. Signs and Symptoms

- 1) History of bite (spider, snake) or sting (insect, scorpion or marine animal)
- 2) Pain
- 3) Redness and/or swelling
- 4) Weakness and/or dizziness
- 5) Chills or fever
- 6) Nausea and vomiting
- 7) Bite marks or stinger

#### B. Emergency Medical Care

- 1) If stinger is present, scrape the sting site with a stiff plastic card to remove the stinger  
Note: Do not attempt to pull the stinger
- 2) Wash area gently
- 3) Remove jewelry from the affected limb before swelling begins if possible
- 4) Keep limb immobilized and below the level of the heart and keep patient at rest
- 5) Do not apply cold to a snakebite
- 6) Consult medical direction regarding constricting band for snakebite
- 7) Observe for development of signs and symptoms of an allergic reaction (see Allergies section)

## **Drowning and Near Drowning**

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

- A. Signs and Symptoms
  - 1) Consider length of time in cold water drowning. Any pulseless, non-breathing patient who has been submerged in cold water should have resuscitation efforts initiated, (See Hypothermia section).
  - 2) Suspect spinal injury
- B. Emergency Medical Care
  - 1) All drowning and near-drowning patients:
    - a) In-line immobilization and removal from water with a backboard if spinal injury is suspected (e.g., diving into shallow water, high speed boating accident).
    - b) If there is no suspected spinal injury, place patient on left side to allow water, vomitus and secretions to drain from the upper airway
    - c) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (see Oxygen Delivery appendix)
  - 2) For pulseless and non-breathing drowning patients, follow the Cardiovascular Emergencies protocol
    - a) For pulseless and apneic drowning patients, consult Medical Control

## Heat Emergencies

### A. Signs and Symptoms

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

### B. Emergency Medical Care

- 1) Patient with moist, normal to cool temperature skin, normal temperature, normal mental status.
  - a) Remove patient from the hot environment and place patient in a cool environment (back of an air conditioned ambulance)
  - b) Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery appendix).
  - c) Loosen or remove clothing
  - d) Cool patient by fanning
  - e) Place patient in supine position with legs elevated
  - f) If patient is responsive and not nauseated, have patient drink water
  - g) If the patient is unresponsive or is vomiting, transport to hospital with patient on left side
- 2) Patient hot with dry or moist skin, elevated temperature, altered mental status.
  - a) Remove patient from the hot environment and place patient in a cool environment (back of an air conditioned ambulance with air conditioner running on high)
  - b) Provide supplemental oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment (See Oxygen Delivery appendix).
  - c) Remove clothing
  - d) Apply cool packs to neck, groin and arm pits
  - e) Keep skin wet by applying water by sponge or wet towels or preferably misting with room temperature water
  - f) Fan aggressively
  - g) Transport to hospital immediately

## Hypothermia

### A. Signs and Symptoms

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

### B. Emergency Medical Care

- 1) Obtain temperature using hypothermia thermometer. If not available, estimate temperature using the Core Body Temperature chart (Pg. 84).
- 2) Remove patient from the cold environment and protect the patient from further heat loss
- 3) Remove patient's wet clothing and wrap the patient in blankets
- 4) Handle with extreme care (rough handling may cause ventricular fibrillation)
- 5) Care for shock and provide oxygen (warm and humidify the oxygen, if possible)
- 6) Assess pulse for 30 to 45 seconds before starting CPR
  - a) If no pulse, begin CPR (see Cardiopulmonary Resuscitation)
  - b) Place AED
  - c) Continue efforts to rewarm
  - d) If pulseless and directed by the machine, defibrillate (defibrillation may be successful after warming)
  - e) If pulseless, continue CPR and warming throughout transport
  - f) Although patients suffering from hypothermia should be evaluated on an individual basis, in general, patients should be warmed to normal temperatures before stopping resuscitation
- 7) If the patient is alert and responding appropriately, actively rewarm
  - a) Warm blankets
  - b) Heat packs or hot water bottles to groin, auxiliary and cervical regions

- c) Turn up heat high in the patients compartment of the ambulance
- d) Do not allow patient to have any stimulants (caffeine, chocolate, etc.)
- e) Do not allow patient to walk or exert themselves
- 8) If the patient is unresponsive or not responding appropriately, rewarm passively
  - a) Warm blankets
  - b) Turn up heat high in the patient compartment of the ambulance
- 9) Do not massage extremities
- 10) Do not allow patient to remain in, or return to, a cold environment
- 11) Do not permit the patient to become colder, don't leave them exposed
- C. Check and record pulse and vitals, including temperature
- D. Transport all but the very mildest cases
- E. Handle patient gently (ventricular fibrillation may result from rough handling)

## **Local Cold Injuries**

### **A. Signs and Symptoms**

- 1) Local injury with clear demarcation
- 2) Early or superficial injury
  - a) Blanching of the skin
  - b) Loss of feeling and sensation in the injured area and the skin remains soft
  - c) If rewarmed, tingling sensation
- 3) Late or deep injury
  - a) White, waxy skin which feels firm to frozen on palpation
  - b) Swelling and/or blisters may be present
  - c) If thawed or partially thawed, the skin may appear flushed with areas of purple and blanching or mottled and cyanotic

### **B. Emergency Medical Care**

- 1) Remove patient from the cold environment and protect the patient from further heat loss
- 2) Protect the cold injured part from further injury
- 3) Remove wet or restrictive clothing
- 4) If early or superficial
  - a) If the injury is to an extremity, splint and cover the extremity
  - b) Do not rub, massage, or re-expose to the cold
- 5) If the injury is late or a deep cold
  - a) Remove jewelry
  - b) Cover with dry clothing or dressings
  - c) Do not rub, massage, apply heat, or rewarm
  - d) Do not allow the patient to walk on the affected extremity
- 6) Do not allow patient to remain in, or return to, a cold environment
- 7) When an extremely long or delayed transport is inevitable then active rapid rewarming should be done as follows:
  - a) Obtain medical direction prior to initiating rewarming
  - b) Use warm water (100F – 104F)
  - c) Fill container with water. Remove clothing, jewelry, bands, or straps from the injured extremity
  - d) Fully immerse the injured part
  - e) Continuously stir the water
  - f) When water cools to below 100F, remove limb and add more warm water



- g) When extremity is rewarmed (it is soft and the color and sensation has returned)
  - i) Gently dry affected area and apply a dry sterile dressing
  - ii) Be sure fingers and toes are separated by sterile dressings
- 8) Keep the area warm and do not put any pressure on the site
- 9) Keep patient at rest and protect the part from refreezing
- 10) Expect the patient to complain of severe pain

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# TRAUMA

## General Trauma Assessment

1. Scene Size-up
  - A. Assess for number of multiple trauma patients (see the MCI protocol)
    - 1) The numbers and severity of injured patients should match the resources requested.
  - B. Activate local emergency system as necessary following regional patient care procedures.
  - C. Consider requesting assistance from helicopter transport and ground agencies from other counties as needed.
2. Initial Patient Assessment
  - A. A. B. C.
  - B. Establish patient care priorities as soon as possible
    - 1) Triage multiple patients.
      - a. Notify receiving facility as soon as possible.
  - C. Rapid or focused History and Physical Exam (Trauma).
    - 1) **D**eformities, **C**ontusions, **A**brasions, **P**unctures- **B**urns, **T**enderness, **L**acerations, and **S**welling (DECAP-BTLS).
    - 2) **P**ulse, **M**ovement, **S**ensation (PMS).
    - 3) Vital Signs.
    - 4) SAMPLE History.
    - 5) **G**lasgow **C**oma **S**cale (GCS (see Glasgow Coma Scale)).
  - D. Ongoing Assessment
    - 1) Re-evaluate Initial Patient Assessment items.
      - a. Unstable patient a maximum of every 5 minutes.
      - b. Stable patient every 15 minutes.
  - E. Transport
    - 1) Mode of transportation and destination based on regional patient care procedures.
    - 2) Prioritize patient transport.

## General Considerations

1. Time is an important consideration when caring for trauma victims. Trauma life support requires transport to a designated Trauma Center as quickly as possible; in other words, a **modified scoop and run (load and go)** approach is the standard of care for trauma victims. It is expected that trauma patients will be transported immediately after extrication and the airway is secured. Initiation of IV's and other time consuming procedures should be done en route. Intubation should be limited to one or two quick attempts on scene if appropriate and further attempts should be made en route.
2. Use a high index of suspicion for trauma related incidents. Consider the following:
  - A. The mechanism of injury.
  - B. Time elapsed since the injury event.
  - C. The age of the patient.
  - D. Pain from one injury may mask the pain from another injury.
  - E. Transport time.
3. Multiple Patient or Mass Casualty Situations.
  - A. Simple Triage and Rapid Transport (for severe or unusual cases, treatment and release may be warranted, see MCI protocols)
    - 1) Able to walk?
      - a. If yes, tag green or yellow.
    - 2) If no, assess respirations.
      - a. If absent, open airway.
        - i. If still apneic, tag black.
        - ii. If breathing starts, tag red. Keep airway open.
      - b. If greater than 30, tag red.
    - 3) Assess circulation, control bleeding.
      - a. If cap refill greater than 2 seconds, tag red.
    - 4) Assess mental status.
      - a. Follow commands, tag green.
      - b. Unable to follow commands, tag red.
  - B. Protect c-spine as appropriate.

## **Tourniquet**

### **Indications:**

- 1) Severe extremity bleeding not controlled by direct pressure that may result in significant, life threatening blood loss.

### **Application procedure:**

- 1) Continue to attempt to control bleeding by direct pressure over the site of bleeding.
- 2) Remove clothing and all other items to expose the affected area.
- 3) Place directly on the skin at least 5 cm proximal to the bleeding site.
- 4) Pass the band through the outside slit of the buckle.
- 5) Pull the self-adhering band tight.
- 6) Twist the rod until bright red bleeding stops.
- 7) Lock the rod in place with the clip.
- 8) Record the date/time of application on the tourniquet.

### **Monitoring:**

- 1) Recheck the bleeding site frequently to ensure that all significant bleeding has been stopped.
- 2) Tighten the tourniquet further if any significant bleeding returns.

### **Reporting/Transportation:**

- 1) Use of the tourniquet should be reported to the receiving hospital or other EMS transporting agency.
- 2) Transportation by helicopter should be considered if it is a safe option that will improve transport time.

## TRAUMA SYSTEM ACTIVATION

1. The Trauma System is to be activated or alerted according to the most current version of the Washington State Prehospital Trauma Triage (Destination) Procedures.

A. Alert receiving facility as soon as possible.

### **FYI: Trauma Activation Criteria, St. John Medical Center**

St. John Medical Center

Trauma Team Activation Process

Revised 11/05

Purpose:

- To provide guidelines for the mobilization of the multidisciplinary Trauma Team in the event of a Life/Limb threatening event.
- If pre-hospital patient information fits any of the below criteria, the appropriate Trauma Team is automatically activated by notifying the ED Charge Nurse, ED Physician and Switchboard.

### **Full Trauma Activation Criteria:**

**Called by ED/Medical Control when patient meets at least one of the following criteria:**

- Systolic Blood Pressure <90
- Heart Rate >120 bpm
- Respiratory Rate <10 or >29
- GCS ≤10: other than isolated Head (GSW, Fall)
- Deep penetrating wounds to neck, chest or abdomen with hemodynamic instability

**For Pediatric patient:**

- **Infant/Toddler 6 mo. to 3 yrs: SBP <80 and/or HR >160**
- School Age <14 yrs: SBP <85 and/or HR >140

### **Modified Trauma Activation Criteria: May upgrade upon assessment**

**Called by ED/Medical Control when patient meets at least one of the following criteria:**

- GCS 11 to 13: Isolated head injury (GSW/Fall)
- Penetrating head injury
- Paralysis
- Flail chest
- Two or more obvious proximal long bone fractures (femur/humerus)
- Combination of burns >20% or involving face, airway, hand, feet, genitalia
- Amputation above the wrist or ankle

**Biomechanics of injury:**

- Ejection from enclosed vehicle
- Fall >20 feet
- Pedestrian hit at >20 mpg or thrown >15 feet
- Hanging
- Drowning with associated trauma

**Discretionary Criteria for FULL or MODIFIED Trauma Activations:**

(Other considerations, which should cause a high index of suspicion that the patient may have sustained a severe injury.)

1. MD, Nurse, Paramedic “gut feeling” of injury severity
2. Co-Morbid factors:
  - Extremes of age
  - Hostile environment (heat or cold)
  - Medical illness (COPD, CHF, renal failure, heart disease/anticoagulant therapy)
  - Presence of intoxicants
  - Second or third trimester of pregnancy – **See OB Trauma Plan**
3. High Energy transfer situation
  - Rollover
  - Motorcycle, ATV or bicycle crash
  - Extrication time >20 minutes
  - Significant intrusion
4. Death of same car occupant

*Trauma Team Activation (ED-Trauma) 11/05*

**OB Trauma Plan:**

It is important to inform the receiving hospital of the patient’s obstetrician or prenatal care clinic during the HEAR report so that the correct obstetrician can be ready to receive the patient upon patient arrival.

If possible provide gestational age and the method that it was obtained (e.g., last menstrual period (LMP), ultrasound).

**FYI for EMS: St. John Medical Center OB Trauma Plan**

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All possible attempts will be made to identify the patient’s obstetrician prior to patient arrival at the hospital. If this information is not available or the patient does not have a local obstetrician, the City Call OB will be called.

## **Spinal Immobilization**

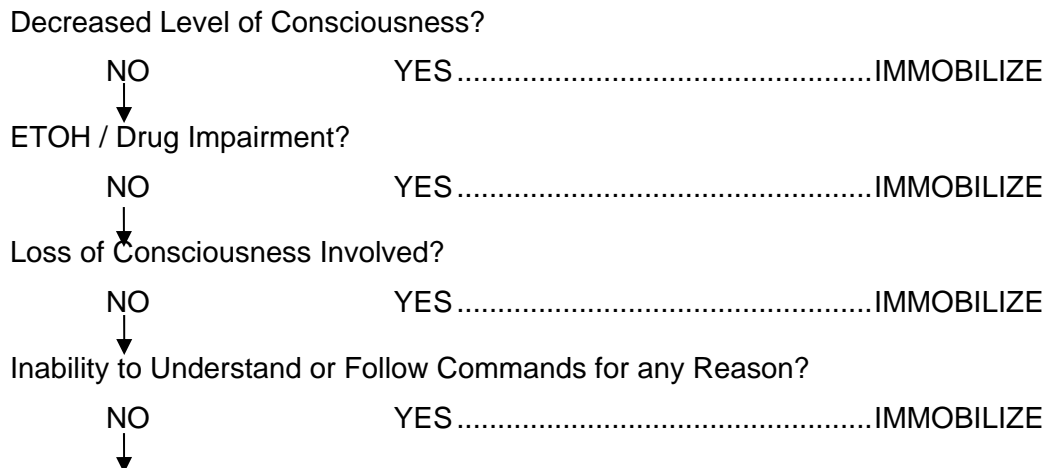
1. General Considerations.
  - A. Consider mechanism of injury and use a high index of suspicion, if any doubt immobilize.
2. Helmet Removal.
  - A. Indications.
    1. Helmet fits too loosely to allow immobilization of head and neck.
    2. Inability to control airway without helmet removal.
    3. External bleeding under helmet that needs control.
  - B. Helmet removal.
    1. Remove chinstrap and cheek pads.
    2. Head and neck stabilized by one person holding the patient's occiput and mandible and the other person slowly removing the helmet under direction of the person stabilizing the neck.
    3. Place padding under the patient's head to maintain c-spine in neutral position.
    4. Continue immobilization as with any other patient.
3. EMS Spinal Immobilization for Adults ( $\geq 16$  years old).
  - A. Assess patient mentation.
    1. Decreased level of consciousness?
      - a. If yes, immobilize.
    2. ETOH / drug impairment?
      - a. If yes, immobilize.
    3. Loss of consciousness involved?
      - a. If yes, immobilize.
    4. Inability to understand or follow commands for any reason?
      - a. If yes, immobilize.
  - B. Subjective Assessment.
    1. Cervical / Thoracic / Lumbar Spinal Pain?
      - a. If yes, immobilize.
    2. Numbness / tingling / burning / weakness?
      - a. If yes, immobilize.
  - C. Objective Assessment.
    1. Cervical, thoracic, lumbar deformity or tenderness on palpation?
      - a. If yes, immobilize.



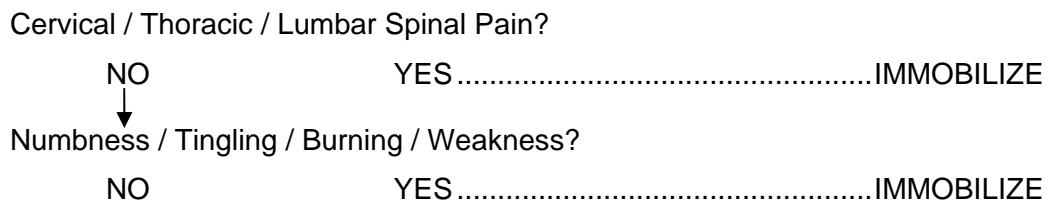
2. Other severe injury or significant distracting pain, e.g. head, pelvic,  $\geq 2$  extremity fractures?
    - a. If yes, immobilize
  3. Pain with gentle ACTIVE (the patient lifts and turns their head without assistance) Cervical Range of Motion?
    - a. If yes, immobilize.
  4. Continued concern due to Mechanism of Injury or other factors?
    - a. If yes, immobilize.
- D. If no to all of the above, may treat and/or transport without spinal immobilization.
- E. Women greater than 20 weeks pregnant should be immobilized on the backboard with the board tilted at least 30 degrees so the patient is tilted on her left side.

## Spinal Immobilization Algorithm For Adults Over 16 Years Old

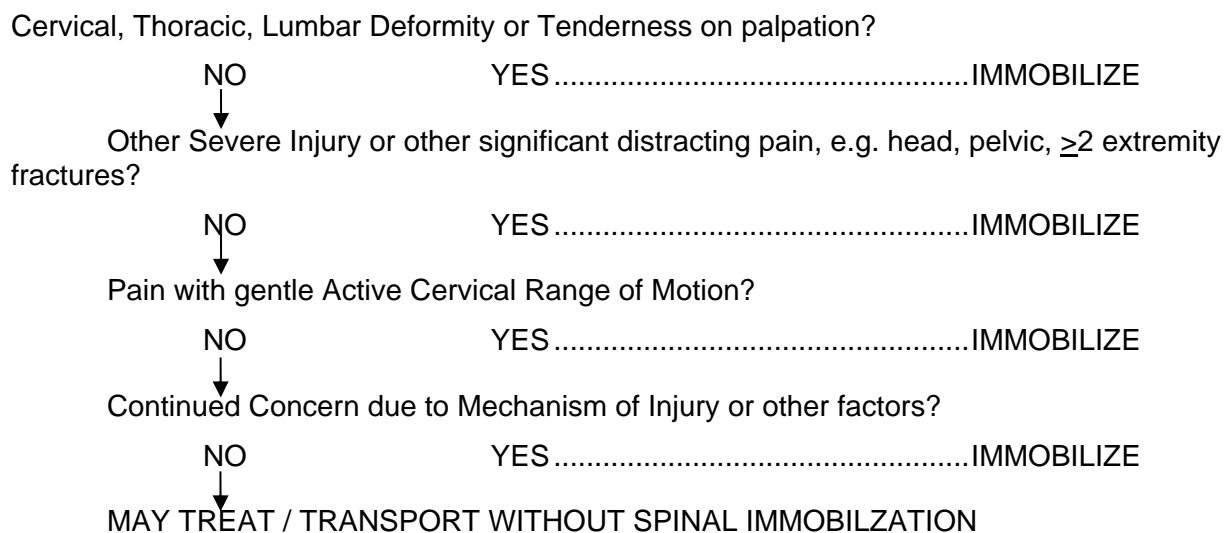
### **Patient Mentation:**



### **Subjective Assessment:**



### **Objective Assessment:**



## **Abdominal Injury**

### A. Signs and Symptoms

- 1) Tender, rigid or distended abdomen
- 2) Position (guarding)
- 3) Signs and symptoms of shock
- 4) Consider abdominal spinal injury
- 5) Wounds, (entrance/exit), bruising
- 6) Consider pregnancy (See Obstetrical Emergencies)

### B. Emergency Medical Care

- 1) Assure patent airway
- 2) Provide oxygen and/or ventilatory assistance as necessary if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
- 3) Do not touch or try to replace exposed organs
  - a) Cover exposed organs with sterile/moist dressing
- 4) Control bleeding
- 5) Treat for shock (see Shock)
- 6) Provide special care for the pregnant patient
- 7) Mechanical head and spine immobilization as necessary
- 8) Give nothing by mouth
- 9) Position supine with flexed knees, if no contraindications
- 10) Establish saline lock

## **Burn Injury**

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

Note: Stop the burning process.

Note: For burns involving chemicals, refer to the Poisoning/Overdose protocol

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

### A. Signs and Symptoms

- 1) Evaluate depth and area by using Rule of Nines appendix
- 2) Carefully evaluate respiratory tract for involvement
- 3) Shock

### B. Emergency Medical Care

- 1) Assure patent airway
- 2) Treat patient as a regular trauma patient if:
  - a) Blast injury
  - b) Any other possible blunt or penetrating trauma
- 3) Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
  - a) Continuously reassess respiratory status
- 4) Remove jewelry and non-adhered clothing as necessary
- 5) Cover burns with dry sterile dressing
- 6) Control bleeding
- 7) Treat for shock (see Shock section)

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

## **Chest Injury**

### A. Signs and Symptoms

- 1) Changes in respiratory rate/quality
- 2) Breath sounds diminished, unequal, or absent
- 3) Flail chest
- 4) Use of accessory muscles
- 5) Distended neck veins (JVD)
- 6) Consider thoracic spinal injury
- 7) Shock
- 8) Wounds, (entrance/exit), bruising
- 9) Complains of pain with inspiration or expiration

### B. Emergency Medical Care

- 1) Assure patent airway
- 2) Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
  - a) Continuously reassess respiratory status
- 3) Open Pneumothorax
  - a) Cover immediately
  - b) When time allows, place an occlusive dressing taped on 3 sides to allow air to leave the chest cavity, but not enter.
  - c) If evidence of a tension pneumothorax develops remove dressing
    - i) Increased respiratory difficulty
    - ii) Decreased breath sounds on affected side
    - iii) JVD
    - iv) Tracheal deviation
- 4) Flail Chest
  - a) Apply gentle pressure to moving segment and adjust pressure based on:
    - i) Patient work of breathing
    - ii) Pain
    - iii) Vital signs
- 5) Control bleeding
- 6) Treat for shock (see Shock section)

## **External Bleeding & Amputation**

- A. Signs and Symptoms
  - 1) Spurting/steady flowing or oozing blood
  - 2) Bright red or dark blood
  - 3) Separated or displacement of body part or tissue
  - 4) Shock
- B. Emergency Medical Care
  - 1) Assure patent airway
  - 2) Provide oxygen and/or ventilatory assistance as necessary, if not done during Initial Patient Assessment, (See Oxygen Delivery, page 90).
  - 3) Control bleeding
    - a) Direct pressure/pressure point
    - b) Elevation
    - c) Splints
    - d) Tourniquet
    - e) Apply dressing and bandage
  - 4) Do not remove impaled objects
    - a) Unless impaled in cheek and airway is compromised by the object
    - b) Secure in place
- C. Treat for shock (see Shock section)
- D. Amputations
  - 1) Wrap severed body part in dry sterile dressing
  - 2) Wrap or bag amputated part in plastic and keep cool (do not allow to freeze)
  - 3) Transport severed part with patient, if possible
  - 4) Treat for shock (see Shock section)

**Note:** Do not complete partial amputations.

## **Extremity Injury**

### **A. Signs and Symptoms**

- 1) Exposed bone ends
- 2) Joints locked in position
- 3) Loss of feeling or movement
- 4) Loss of distal pulse
- 5) Bruising/swelling
- 6) Pain
- 7) Shock
- 8) Deformity

### **B. Emergency Medical Care**

- 1) Assure patent airway
- 2) Provide oxygen and/or ventilatory assistance as necessary if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
- 3) Consider alignment with gentle traction if pulses absent or gross deformity noted
- 4) Mechanical immobilization
  - a) Reassess distal PMS after applying splint
  - b) Consider application of cold pack to painful or swollen area
  - c) Consider elevation of extremity
  - d) Splint in position of comfort so that it immobilizes the affected area
- 5) Control bleeding
- 6) Treat for shock (see Shock section)

### **C. Pelvic Bone Fractures**

- 1) Place and secure a pelvic sling.
  - a) Wrap a sheet around the greater trochanters of both hips and tighten securely anteriorly: or
  - b) Use an FDA/MPD approved device to immobilize the pelvis.
- 2) Limit assessment of pelvic instability.
- 3) Monitor closely for hypovolemic shock and treat accordingly.

## **Head & Spine Injury**

### A. Signs and Symptoms

- 1) Cerebrospinal fluid or blood from nose, ears, mouth
- 2) Glasgow coma scale score (see Glasgow Coma Scale)
- 3) Bruising around eyes, or behind ears
- 4) Altered mental status
- 5) Irregular breathing
- 6) Changes in pulse rate
- 7) Changes in blood pressure
- 8) Neurologic disability
- 9) Loss of bowel or bladder control
- 10) Unequal pupils with altered mental status
- 11) Seizures

### B. Emergency Medical Care

- 1) Immediate manual head and C-spine immobilization
- 2) Assure patent airway
- 3) Provide oxygen and/or ventilatory assistance as necessary if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
- 4) Control bleeding
- 5) Treat for shock (see Shock section)
- 6) Mechanical head and spine immobilization



## **Multi-System/Time Critical Trauma**

- A. Begin extrication (if necessary) and treatment simultaneously, if possible
  - 1) Immediate manual head and C-spine immobilization
- B. Treat life threatening injuries as they are found
- C. On-scene time should be limited to 5 minutes, barring extrication or rescue
- D. Notify the Trauma Center as soon as possible
- E. Assess for other signs and symptoms
  - 1) Provide rapid survey of head, chest, abdomen
- F. Provide emergency medical care as necessary
  - 1) Provide any urgent treatment required
- G. If life threatening problems are controlled
  - 1) Assess response to treatment provided
  - 2) Immobilize patient

## **Shock**

**Note:** For anaphylaxis, refer to Allergies (see Allergies section)

### A. Signs and Symptoms

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

### B. Emergency Medical Care

- 1) Assure patent airway
- 2) Provide oxygen and/or ventilatory assistance as necessary if not done during Initial Patient Assessment, (See Oxygen Delivery appendix).
  - a) Continuously reassess respiratory status
- 3) Control bleeding
- 4) Give nothing by mouth
- 5) Elevate lower extremities if no contraindications
- 6) Splint fractures
- 7) Prevent heat loss

### C. Established Saline and start IVF's as follows:

- 1) Give up to two liters NS as rapidly as possible or until:
  - a) B/P > 90 -100 systolic (a very rough guide).
  - b) Jugular vein distention develops.
  - c) Pulmonary rales develop.

Pediatric fluid challenge 20cc/kg rapidly; may repeat x 1 as indicated

1. Further doses with medical control concurrence.

### D. Rapid transport.

## PEDIATRIC / GERIATRIC

### Pediatric Assessment

1. Scene Size-up and Initial Patient Assessment
  - A. Assess ABC.
    - 1) **A**irway – Do not hyperextend or hyperflex child’s neck.
    - 2) **B**reathing – Check for obstructions.
    - 3) **C**irculation – Check capillary refill.
  - B. Consider possible domestic violence or abuse by adults.
2. Focused Assessment and Physical Examination.
  - A. Consider the patient’s developmental stage when assessing signs and symptoms.
  - B. Physical exam may be better tolerated if conducted from trunk to head.
  - C. Be alert for signs of child abuse and neglect (see Physical Abuse and Neglect section).
3. On-going Assessment.
4. Transport.
  - A. Utilizing Regional PCP’s, local guidelines, and protocols regarding pediatric trauma destinations.

## **Fever**

**CAUTION:** Consider full body substance isolation procedures.

- A. Signs and Symptoms.
  - 1) Flushed, warm dry skin.
  - 2) Restless.
  - 3) May have rash or stiff neck.
  - 4) Seizures.
  - 5) Dehydration, decreased urine output.
- B. Emergency Medical Care
  - 1) Provide supplemental oxygen and/or ventilatory assistance as necessary if not done during Initial Patient Assessment (See Oxygen Delivery appendix).
  - 2) If prolonged transport is necessary:
    - a) Undress child to the point needed to allow for heat removal

## **Geriatric Emergencies**

1. Scene Size-up and Initial Patient Assessment
  - A. General cleanliness of the environment
  - B. Availability of food and water
  - C. Hazards in the home
  - D. Observe for signs of physical abuse/neglect
  - E. Bring all OTC and prescription medications or list with doses
2. Focused Assessment
  - A. Determine
    - 1) Establish quick and effective rapport with patient and family
    - 2) Level of function with his/her own function prior to problem
    - 3) Past medical history to assess present condition and anticipate effect of one disease on another
    - 4) If in long-term care, determine reason for their being there and present condition requiring EMS
  - B. Emergency Medical Care
    - 1) Medical
      - a. Altered mental status
      - b. Behavioral Emergencies
      - c. Cardiovascular Emergencies
      - d. Diabetic Emergencies
      - e. Environmental Emergencies
      - f. Gynecological Emergencies
    - 2) Trauma
      - a. Cause of trauma may be medical
      - b. Age >60 at higher risk for mortality and morbidity
      - c. Treat according to trauma treatment protocols for specific trauma

## **Abandoned Newborns**

1. Introduction
  - A. RCW 13.34.360 allows for the relinquishment of newborn children at hospitals or fire stations.
  - B. The key provisions of this law include:
    - 1) Protecting the parents' anonymity.
    - 2) Gathering the medical history of the parents and child.
    - 3) Providing referral information to the parent about adoption options, counseling, medical and emotional aftercare services, domestic violence, and the legal rights of the transferring parent.
    - 4) Notifying and releasing the newborn to Child Protective Services (CPS).
      - a. RCW 13.34.360 defines newborn as less than 3 days (72 hours) old.
2. Procedure:
  - A. If a delivery has not occurred and appears imminent, follow Emergency Delivery protocol. Provide appropriate care to mother per protocol.
  - B. If EMS is presented with a newborn or child that appears severely ill:
    - 1) Follow Newborn Resuscitation or Management of the Severely Ill or Injured Child protocol.
  - C. If the newborn is not in immediate need of medical care:
    - 1) Ascertain child's medical history as appropriate.
      - a. History of birth including complications, date, time, etc.
      - b. Known congenital anomalies.
    - 2) Paternal/Maternal medical history.
      - a. Prenatal care.
      - b. Drug use during pregnancy.
      - c. Other factors influencing child's health.
  - D. Transport
    - 1) Notify staff en-route of need for CPS referral.
3. Circumstances:
  - A. Maintaining parent confidentiality is paramount. Ascertain as much history as appropriate while providing a non-judgmental environment.
  - B. Provide the following referral information to the parent(s) as time allows (Patient care is the priority).
    - 1) Medical and emotional aftercare (i.e. chaplaincy, etc.)
    - 2) CPS

## **Physical Abuse & Neglect**

- A. Signs and Symptoms of Suspected Abuse and Neglect
  - 1) Multiple bruises in various stages of healing
  - 2) Injury inconsistent with mechanism described
  - 3) Repeated calls to the same address
  - 4) Fresh burns
  - 5) Parents or caregiver seem inappropriately unconcerned
  - 6) Conflicting stories
  - 7) Fear on the part of the patient to discuss how the injury occurred
  - 8) Lack of adult supervision
  - 9) Malnourished appearance
  - 10) Unsafe living environment
  - 11) Untreated chronic illness
- B. Medical Treatment
  - 1) Follow appropriate treatment protocol

## **Sudden Infant Death Syndrome**

1. Infants usually less than six (6) months of age occurring suddenly without apparent cause, during sleep. It may be very difficult to differentiate SIDS from suspected child abuse.
  - A. Primary Survey.
  - B. CPR unless there are obvious signs of death (rigor, lividity, etc.).
    1. Resuscitation may be terminated only by order of Medical Control or family physician at the scene.
  - C. Support the parents.
    1. Avoid questions or comments suggesting blame.
  - D. Observe carefully and note:
    1. Location and position of child.
    2. Objects immediately surrounding the child.
    3. Behavior of all adults present.
    4. The explanations provided.
    5. Vomitus in mouth or foreign body present.
  - E. Report all observations to Medical Control or to county coroner and document on MIR.



## **Child Abuse**

1. Follow Mandatory Reporting Requirements per RCW 26.44.030 (1).
2. Be alert to findings suspicious of child abuse:
  - A. Explanations of mechanisms of injury conflicting with actual injury.
  - B. Suspicious injuries, e.g., cigarette burns, multiple bruises of varied age, belt marks, etc..
  - C. Child with history of repeated injuries.
  - D. Blame placed upon others.
  - E. Procrastination by caretaker(s) in seeking aid.
  - F. Sexual abuse accompanying physical abuse, or may be present without signs of apparent physical abuse.
3. Treatment
  - A. Primary and Secondary Surveys.
  - B. Treat injuries/shock per protocols.
  - C. Transport without delay for critical cases.
  - D. Document as carefully as possible caretaker's descriptions of the event(s).
    1. Note the environment carefully.
    2. Note the reaction of all adults (include all caretakers).
    3. Note condition of clothing, stains, condition of surroundings, bring clothing in with parent.
  - E. Support and reassure the child.
    1. Be non-judgmental, yet be supportive to family concerns.
    2. Encourage the caretaker(s) to allow transport of the child to the hospital for medical evaluation and/or treatment.
    3. Should caretaker(s) not allow transport, notify Medical Control, which will contact Child Protective Services (CPS).

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## APPENDIX

### Appgar Scoring

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

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

## **Blood Glucometry and Hypoglycemia Treatment**

EMT may encounter patients with altered levels of consciousness or with signs or symptoms suggestive of hypoglycemia. This may include patients with the following:

### **Indications for Glucometry Use**

- Unconsciousness
- Confusion
- Unexplained diaphoresis or tremor
- Suspected diabetic-related problem
- Signs and symptoms of stroke
- Suspicion of drug or alcohol intoxication
- Any altered mental status
- Seizures
- Dizziness
- Hypotension or tachycardia

### **Use and application**

Perform the testing procedure as outlined in the instructions for your specific device. Record all readings on the incident report form.

**Under no circumstances should the presence of a blood glucose  
monitor distract from basic patient care. (e.g., ABCs)**

### **Treatment of Hypoglycemia**

#### **Indications:**

- Glucose less than 60mg/dl
- Glucose less than 80mg/dl with symptoms of hypoglycemia
- The patient is alert enough to take oral glucose or other sugars without risk of aspiration

#### **Treatment:**

- Sit the patient up with the upper body elevated at least 30 degrees. Assist the patient in taking glucose or a drink high in simple sugars (extra sugar may be mixed into the drink).
- Watch the patient for possible deterioration and be prepared to suction the airway if needed
- Transport the patient unless the patient meets criteria for not being transported (see criteria below)
- Perform blood glucose evaluations after the ABCs and initial assessment have been completed. **If a patient is treated with oral glucose you must perform a second glucose level check.**

**Disposition:**

All patients with hypoglycemia should be encouraged to seek medical attention. The best option is to transport the patient to the emergency department unless they are stable by the criteria below and they can see their medical provider immediately.

Patients who take oral medications for diabetes who are initially found to be hypoglycemic should be strongly advised to seek further evaluation by a physician due to the high likelihood of repeated hypoglycemic secondary to long medication half-life.

Criteria for not transporting patients with hypoglycemia at home:

- The patient refuses transport and is competent to refuse
- The patient returns to their normal mental status
- The patient is not taking any oral hypoglycemic agents
- If a responsible adult will stay with the patient to monitor and assist the patient
- The patient has a repeat glucose level that is **at least 80 mg/dl**
- There are no other acute medical issues
- There is agreement about the care from online medical control
- The patient is willing and able to begin eating immediately
- Vital signs are normal
- 

If the target glucose level is not met initially, EMT's may consider repeating treatment and repeating the glucose in several minutes. EMT's must record:

- Initial and final glucose level
- If patient has a history of diabetes
- If patient is on diabetic medications
- The patients response and final mental status
- Vital signs

## Cardiopulmonary Resuscitation (CPR)

Follow the current AHA Cardiopulmonary Resuscitation Guidelines

Below are the 2015 AHA guidelines

**Table 2** Summary of High-Quality CPR Components for BLS Providers

Component	Adults and Adolescents	Children (Age 1 Year to Puberty)	Infants (Age Less Than 1 Year, Excluding Newborns)
<b>Scene safety</b>	Make sure the environment is safe for rescuers and victim		
<b>Recognition of cardiac arrest</b>	Check for responsiveness  No breathing or only gasping (ie, no normal breathing)  No definite pulse felt within 10 seconds  (Breathing and pulse check can be performed simultaneously in less than 10 seconds)		
<b>Activation of emergency response system</b>	If you are alone with no mobile phone, leave the victim to activate the emergency response system and get the AED before beginning CPR  Otherwise, send someone and begin CPR immediately; use the AED as soon as it is available	<b>Witnessed collapse</b> Follow steps for adults and adolescents on the left  <b>Unwitnessed collapse</b> Give 2 minutes of CPR  Leave the victim to activate the emergency response system and get the AED  Return to the child or infant and resume CPR; use the AED as soon as it is available	
<b>Compression-ventilation ratio without advanced airway</b>	<b>1 or 2 rescuers</b> 30:2	<b>1 rescuer</b> 30:2  <b>2 or more rescuers</b> 15:2	
<b>Compression-ventilation ratio with advanced airway</b>	Continuous compressions at a rate of 100-120/min  Give 1 breath every 6 seconds (10 breaths/min)		
<b>Compression rate</b>	100-120/min		
<b>Compression depth</b>	At least 2 inches (5 cm)*	At least one third AP diameter of chest  About 2 inches (5 cm)	At least one third AP diameter of chest  About 1½ inches (4 cm)
<b>Hand placement</b>	2 hands on the lower half of the breastbone (sternum)	2 hands or 1 hand (optional for very small child) on the lower half of the breastbone (sternum)	<b>1 rescuer</b> 2 fingers in the center of the chest, just below the nipple line  <b>2 or more rescuers</b> 2 thumb-encircling hands in the center of the chest, just below the nipple line
<b>Chest recoil</b>	Allow full recoil of chest after each compression; do not lean on the chest after each compression		
<b>Minimizing interruptions</b>	Limit interruptions in chest compressions to less than 10 seconds		

\*Compression depth should be no more than 2.4 inches (6 cm).

Abbreviations: AED, automated external defibrillator; AP, anteroposterior; CPR, cardiopulmonary resuscitation.

## **EMT PROTOCOLS FOR CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP)**

### **INDICATIONS**

1. Any patient who is in respiratory distress with signs and symptoms consistent with: Congestive Heart Failure (CHF); Pulmonary Edema; asthma; COPD; or pneumonia
2. Other measures to improve oxygenation and decrease the work of breathing have failed (i.e., 100% O<sub>2</sub> via NRBM)
3. And who is:
  - A. Awake and able to follow commands;
  - B. Is over 12 years of age and is able to fit the CPAP mask;
  - C. Has the ability to maintain an open airway;  
And
  - D. Exhibits two or more:
    - RR > 25 BPM
    - SpO<sub>2</sub> < 94% at any time
    - use of accessory muscles of breathing

### **CONTRAINDICATIONS**

- A. Patient is apneic
- B. Patient is suspected of having a pneumothorax
- C. Patient is a trauma patient with injury to the chest
- D. Patient has a tracheostomy
- E. Patient is actively vomiting or has upper GI bleeding

### **PROCEDURE**

- A. EXPLAIN THE PROCEDURE TO THE PATIENT
- B. Ensure adequate oxygen supply to the CPAP device
- C. Place patient on continuous pulse oximetry
- D. Position head of bed at 45 degrees or patient position of comfort
- E. Place CPAP mask over mouth and nose, secure with straps provided
- F. Use 5 cm H<sub>2</sub>O of PEEP
- G. Check for air leaks
- H. Monitor and document the patient's respiratory response to treatment
- I. Check and document vital signs including SpO<sub>2</sub> % every 5 minutes
- J. Assist with appropriate PATIENT PRESCRIBED medication (nitroglycerin tablets for CHF, nebulized Albuterol for COPD/Asthma)
- K. Coach patient to keep mask in place, readjust as needed
- L. Contact Medical Control and / or responding ALS unit to advise of CPAP initiation
- M. Request ALS intercept if available
- N. If respiratory status deteriorates, remove device and consider bagging the patient with a bag valve mask.

## **REMOVAL PROCEDURE**

- A.** CPAP needs to be continuous and should not be removed unless the patient cannot tolerate the mask or experiences respiratory arrest and/or begins to vomit.
- B.** Intermittent positive pressure ventilation (IPPV) with a BVM should be considered if CPAP is removed.
- C.** A Laryngeal Tracheal Device (King Airway) should be used with a bag valve device if the patient is in respiratory arrest.

## **SPECIAL CONSIDERATIONS**

- A.** Do not remove CPAP until hospital therapy is ready.
- B.** Watch for gastric distention which can cause vomiting.
- C.** CPAP may be used with patients who have POLST forms or DNR orders.



**CPAP Monitoring Form:**

Ambulance Service Provider: \_\_\_\_\_ Level of Provider \_\_\_\_\_  
 Medical Incident Record #: \_\_\_\_\_  
 Date of service: \_\_\_\_\_ Time of initial contact: \_\_\_\_\_

**1. Patient Demographics:**

- Age \_\_\_\_\_
- Sex: [ ] Male, [ ] Female

**2. Inclusion Criteria:** [ ] Yes [ ] No

- Retractions or accessory muscle use
- Respiratory Rate > 25/min
- Pulse Ox < 94%

**3. Suspected Indication for CPAP Use:**

[ ] CHF [ ] Asthma/COPD [ ] Pneumonia [ ] Unsure

**4.**

	HR	RR	BP	O2 Sat	RDS*	LOC	Medications Given
Initial			___/___			A V P U	
5 Mins.			___/___			A V P U	
10 Mins			___/___			A V P U	
15 Mins.			___/___			A V P U	
20 Mins.			___/___			A V P U	
25 Mins.			___/___			A V P U	
30 mins			___/___			A V P U	
35 mins			___/___			A V P U	
Hospital			___/___			A V P U	

\*RDS = Respiratory Distress Score 0-10 (10 being the worst)

**5. EMT perception of pt. Condition upon ED Arrival:** [ ] Better [ ] Same [ ] Worse

**6. Procedural Complications/Technical Difficulties:** \_\_\_\_\_

**7. CPAP continued before ED arrival?** [ ] Yes [ ] No

If YES, why: \_\_\_\_\_

**8. ALS Intercept?** [ ] Yes [ ] No

=====

**TO BE COMPLETED BY AMBULANCE SERVICE MEDICAL DIRECTOR:**

Patient required intubation? [ ] Yes [ ] No If yes by whom? [ ] ALS [ ] ED [ ] ICU [ ] Floor  
 Patient Disposition: Admitted: [ ] ICU [ ] Floor [ ] LOS [ ] Date of Death [ ] Transferred to: \_\_\_\_\_  
 Admission Diagnosis: [ ] CHF [ ] COPD [ ] Asthma [ ] Pneumonia [ ] Other: \_\_\_\_\_  
 Was CPAP indicated and used correctly? [ ] Yes [ ] No  
 Comment: \_\_\_\_\_

=====

**WHITE- HOME AGENCY COPY, YELLOW - M.P.D. COPY**

# **RESPIRATORY DISTRESS SCORE**

Have the patient point to the level of their distress and mark the point with a pen.

"On a scale of 0 to 10, with 10 being the worst trouble breathing you have ever had, please rate the severity of your breathing"

<b>Initial</b>	<b>0</b> ----- <b>5</b> ----- <b>10</b>
<b>5 Minutes</b>	<b>0</b> ----- <b>5</b> ----- <b>10</b>
<b>10 Minutes</b>	<b>0</b> ----- <b>5</b> ----- <b>10</b>
<b>15 Minutes</b>	<b>0</b> ----- <b>5</b> ----- <b>10</b>
<b>20 Minutes</b>	<b>0</b> ----- <b>5</b> ----- <b>10</b>
<b>25 Minutes</b>	<b>0</b> ----- <b>5</b> ----- <b>10</b>
<b>30 Minutes</b>	<b>0</b> ----- <b>5</b> ----- <b>10</b>
<b>35 Minutes</b>	<b>0</b> ----- <b>5</b> ----- <b>10</b>
<b>Hospital</b>	<b>0</b> ----- <b>5</b> ----- <b>10</b>

Was CPAP indicated and used correctly? [  ]Yes [  ]No

Comment \_\_\_\_\_  
\_\_\_\_\_

## **Core Body Temperature**

Note: Use a hypothermia thermometer.

### **CORE BODY TEMPERATURE**

99 F – 96 F                      37.0 C – 35.5 C

95 F – 91 F                      35.5 C – 32.7 C

90 F – 86 F                      32.0 C – 30.0 C

85 F – 81 F                      29.4 C – 27.2 C

80 F – 78 F                      26.6 C – 20.5 C

### **SYMPTOMS**

Shivering.

Intense shivering. If conscious, patient has difficulty speaking.

Shivering decreases. Strong muscular rigidity. Thinking is less clear, general comprehension is dulled, possible total amnesia. Muscle coordination erratic and jerky. Patient generally able to maintain the appearance of psychological contact with surroundings.

Irrational. Loses contact with environment, drifts into a stuporous state. Muscular rigidity continues. Pulse and respirations are slow and cardiac arrhythmias may develop.

Patient loses consciousness and does not respond to spoken words. Most reflexes cease to function. Heart-beat becomes erratic.

**Glasgow Coma Scale**

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

## Oxygen Delivery

<b>OXYGEN ADMINISTRATION REFERENCE CHART</b>		
<b>Method</b>	<b>Flow Rate (in liters per minute)</b>	<b>% Oxygen Delivered</b>
Room Air		21
Nasal Cannula (prongs)	1	24
	2	28
	4	31
Face Mask (simple)	6	35 – 40
	10	40 – 50
Non-rebreather Face Mask <i>*(1)</i>	12	80
	15	90
Face Mask with Oxygen Reservoir Bag	10 – 12	90
Pocket Mask	10	50
	15	80
	30	100 <i>*(2)</i>
Bag Valve Mask	Room Air	21
	12	40 – 90 <i>*(3)</i>
Positive Pressure Device (demand valve) <i>*(4)</i>	100	100
<p><i>*(1)</i> Delivery system of choice for patients with inadequate breathing and patients who are cyanotic, cool, clammy, short of breath, or suffering chest pain, suffering severe injuries, or displaying an altered mental status, well being transported.</p> <p><i>*(2)</i> This is accomplished by occluding breathing port with thumb.</p> <p><i>*(3)</i> Depends on brand of bag valve mask and provisions for occluding room air inlet.</p> <p><i>*(4)</i> Should not be used on children under 12 years old</p>		
<p><b>NOTES:</b></p> <p>Administration rates by nasal cannula of over 4 L/min. are uncomfortable.</p> <p>Use humidified oxygen, when possible, on infants, children, suspected respiratory tract burns, and transports exceeding one hour duration.</p> <p>Bag Valve mask is not recommended for use in patients in transport situations.</p> <p>Most hypoxic patients will feel better with an increase in delivered oxygen from 21% to 24%.</p> <p>Pressure cycled ventilators are NOT acceptable alternatives to oxygen therapy.</p> <p>Percentages of delivered oxygen listed above are based on optimal conditions. Attitude, equipment, etc., may decrease percentages of delivered oxygen.</p>		

<b>OXYGEN BOTTLE VOLUME AND FLOW</b>				
Bottle Size	Volume in Liters	Time @ 5 L/min.	Time @ 10 L/min.	Time @ 15 L/min.
D	360	1 hr. 12 min	36 min.	34 min.
E	625	2 hrs. 5 min.	1 hr. 3 min.	42 min.
M	3,200	10 hrs.	5 hrs.	3 hrs. 20 min.
G	5,300	17 hrs. 40 min.	8 hrs. 50 min.	5 hrs. 53 min.
H	6,900	23 hrs.	11 hrs. 30 min.	7 hrs. 40 min.
<p>The above values are based on full bottle (2,000 to 2,200 p.s.i.) @ 70 degrees F.            Allow for pressure drop of 5 p.s.i. for every 1 degree drop in temperature below 70 degrees F.</p>				

## **Penetrating Trauma from Taser® Weapons**

1. Unlike other forms of penetrating foreign bodies, Taser barbed darts, because of their short length (1/4 in.) may be safely removed by EMS personnel when requested by law enforcement.
2. The darts should only be removed in the field if they do not involve the eye, face, neck, breast, and groin. Patients with retained darts in these areas should be transported to a hospital to have them removed by a physician.
3. The individual must be in police custody and EMS personnel must be convinced that the patient is adequately restrained.
4. Gloves must be worn.
5. Ensure that wires are disconnected from the gun or the wires have been cut.
6. Push on the body part which the barbed dart (straight #8 fish hook) is imbedded and simultaneously pull the dart straight out.
7. Apply alcohol or iodine to the puncture area and dress as needed.
8. Treat the dart as a “contaminated sharp.” The darts should be placed in a biohazard sharps container and turned over to law enforcement.
9. All patients must be thoroughly assessed to determine if other medical problems or injuries are present.
10. If the individual does not have any other presenting injuries/illness, they may be left in the custody/care of law enforcement.

## Pulse, Blood Pressure, & Respiration – Ranges

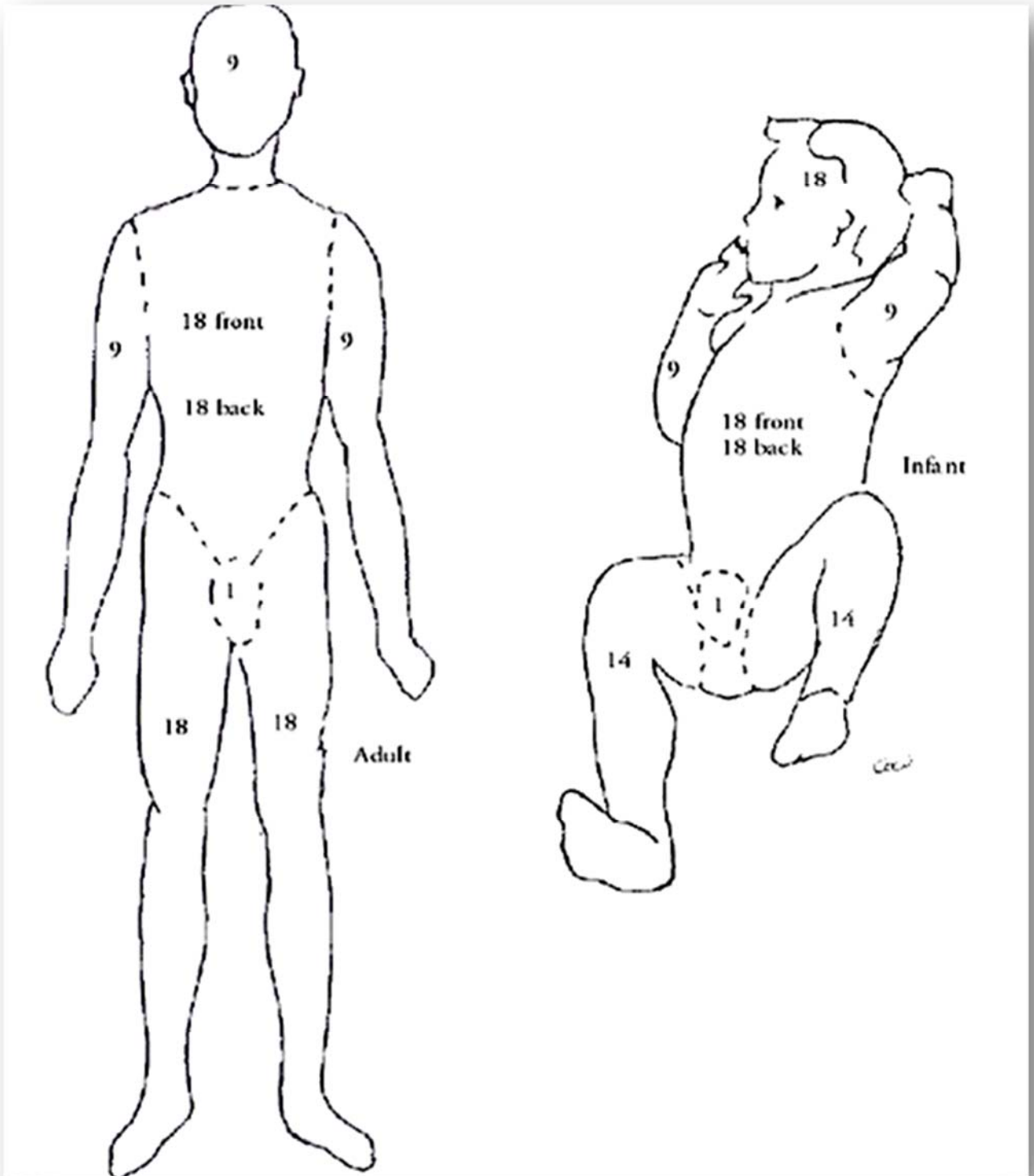
<b>NORMAL RANGES OF ARTERIAL BLOOD PRESSURES (mm/Hg)</b>			
Newborn	80 / 46	8 – 9 Years	106 / 58
6 – 12 Months	89 / 60	9 – 10 Years	108 / 58
1 Year	96 / 66	10 – 11 Years	112 / 58
2 Years	98 / 64	11 – 12 Years	114 / 60
3 Years	100 / 68	12 – 13 Years	116 / 60
4 Years	98 / 66	13 – 14 Years	118 / 60
5 Years	94 / 56	Adult Male	Systolic: Patient's Age + 100 (Up to 160 mmHg)  Diastolic: 60 to 90 mmHg
6 – 7 Years	100 / 56	Adult Female	Systolic: Patients Age + 90 (Up to 140 mmHg)
<p>Note:</p> <p>The systolic values given above may vary up or down from the mean significantly, and still remain in the normal range as follows:</p> <p>Newborn           + or - 16          6 Mos. – 4 Years       + or - 25          4 Years – 10 Years    + or - 16          10 Years – 14 Years   + or - 18</p> <p>The diastolic values given above (for Newborn through 14 Years old) may vary up to + or – 24 mm/Hg from the mean and still remain in the normal range.</p>			

<b>NORMAL PULSE RATES (Heart Beats Per Minute)</b>			
Newborn	110 – 150	6 Years	80 – 100
11 Months	100 – 140	8 Years	76 – 90
2 Years	90 – 110	10 Years	70 – 110
4 Years	80 – 120	Adult	60 - 100

<b>NORMAL RESPIRATORY RATES (Respirations Per Minute)</b>			
Neonate	30 – 50	10 Years	14 – 22
2 Years	20 – 30	Adolescent and Adult	12 - 20



**Rule of Nines – Estimating Burns**



## **Start Triage**

### **START - Simple Triage And Rapid Treatment**

1. RPM method of identifying immediate patients:
  - A. **R**espirations
  - B. **P**erfusion
  - C. **M**ental Status
2. Triage Criteria
  - A. Immediate (Red)  
Respirations >30 per minute or absent until head repositioned, or  
Radial pulse absent or capillary refill >2 seconds, or  
Cannot follow simple commands
  - B. Delayed (Yellow)  
Respirations present and <30 per minute, and  
Radial pulse present, and  
Can follow simple commands
    - The saying is “30 – 2 – can do,” represents a delayed patient.
  - C. Minor (Green)  
Anyone that can get up and walk when you instruct them to do so
  - D. Decreased (Black)  
Anyone not breathing after you open the airway
3. This system is limited to use in the incident where needs exceed resources immediately available.
4. Frequently reassess patients and perform a more in-depth triage as more rescuers become available.

**RESPIRATORY AND OTHER COMMUNICABLE DISEASES PROTOCOL  
FOR WAHAKIYAKUM EMS  
(INCLUDING THE PANDEMIC FLU)**

- I. Standard Precautions
  - A. Standard precautions will be taken when encountering any individual with the following communicable disease symptoms (CDS):
    - 1. Fever, cough, repetitive sneezing, open wounds, and any time there is a risk of transmission of respiratory or other bodily fluids.
  - B. Standard precautions will include:
    - 1. Personal Protective Equipment (PPE)– including:
      - a) Gloves for all patient interactions.
      - b) Provider mask when in contact with patients with any of the above symptoms.
      - c) Provider eye protection if risk of transmission to eyes is present.
      - d) Protective gowns and shoe covers as needed to provide a barrier to exposure to blood and other bodily fluids.
      - e) Patient mask (regular or O2) for the patient with coughing or sneezing.
      - f) Patient wound coverage.
    - 2. Avoid use of items not needed for patient care that could become contaminated while interacting with the patient.
      - a. Examples include: pens, pencils, computers, radios, computers, cell phones and other nonessential equipment.
      - b. If possible, individuals not involved with patient care should use the communication devices (e.g., driver).
  - C. EMS personnel are encouraged to self-screen themselves and let their agencies know that they will not be responding to calls if they have symptoms consistent with having a CDS.
  - D. Transfer of care from one ambulance to another should not occur unless the patient’s care would be compromised by not transferring the patient. Instead, consider having ALS personnel put on protective gear and coming on to the first ambulance.
  
- II. For Communicable Conditions that are not controlled by Standard Precautions use Enhanced Precautions in addition to the above Standard Precautions
  - A. Notification of the need for Enhanced Precautions:
    - a) EMS agencies will be notified of the need for extraordinary precautions by:
      - 1. MPD
      - 2. Local or State Health Departments
      - 3. Other authorities as designated by the MPD or State EMS
  
  - B. All EMS agencies will provide ongoing daily (or as needed) briefings to personnel that will include:
    - a) Status of outbreak including last 24-hour activity
    - b) Hospital status

- c) PPE, Infection Control
  - d) Status of EMS response
  - e) The need for enhanced equipment – as an example, special provider respirators.
  - f) The need to take vaccinations or medications as prophylaxis.
- C. Vaccination / Antiviral Therapy For Viral Communicable illnesses:
- 1. Emergency Responder Points of Distribution (POD) – Agency management in consultation with the County Health Department will consider/coordinate activation of the Emergency Responder POD's for appropriate vaccination/antiviral therapy.
- D. Staff Entry Control Process:
- a) All EMS agencies shall establish a method of health care screening to clear EMS personnel prior to responding to calls.
  - b) Self screening will be stressed.
  - c) Personnel will be monitored by their supervisors for CDS whenever possible.
- C. Decontamination and Cleaning of Equipment/Work Areas
- 1. Enhanced Decontamination Procedures:
    - a) Clean off all surfaces and equipment (including glasses and stethoscope) using the approved bio spray or alcohol based hand cleaner.
    - b) Dispose of all cleaning supplies in red hazardous waste bag
    - c) Driver Prior to Transport/Attending Technician at end of Transport/patient care will remove disposable gown/overalls, facemask, gloves and disposable BP cuff into hazardous waste bag and secure. The driver will apply clean/new mask before transport.
    - d) First Responders: Place all equipment used during the call in a red hazardous waste bag until decontamination prior or enroute to next call.
    - e) Use bio-wipes or alcohol based hand cleaner to clean hands and forearms until soap and water are available. Clean any additional areas exposed in a similar manner.
    - f) Driver on arrival at receiving facility will use a new suit, gloves, face mask, and eye protection or if possible not have further patient contact.
    - g) Once patient has been transferred, decontaminate inside of ambulance patient care area and equipment prior to arrival at next call.
- III. Patient Care and Transport for those needing Enhanced Precautions.
- A. PPE standard and additional as directed.
  - B. Assess Patient for stability and history
    - 1. Chief Complaint
    - 2. Vital Signs (including check for temperature and O2 saturation)
    - 3. Medical History / Travel History
  - C. Incident Command or medical control will advise 9-1-1 and/or Fire/EMS agencies which of the following Care and Transport options to use:
    - 1. Care and Transport to ED
      - a) Allow patient to achieve position of comfort

- b) Cover patient with surgical face mask, or administer O2 via facemask, to reduce aerosolization of virus
  - c) Follow ALS and/or BLS protocols based on patient's presentation.
  - d) Use proper patient isolation techniques
    - Close off ambulance drivers compartment
    - Drape patient
  - e) Early EMS Report and notify hospital that patient is a possible serious communicable disease patient prior to entering the hospital.
  - f) Take the patient to the area inside or outside the hospital as designated.
2. Care and No Transport
- a) Explain the demand of limited resources and decision of no transport for those individuals with noncritical illness (stable patients without significant respiratory distress, normal O2 sat% for patient, etc.).
  - b) Provide residents with surgical masks and explain that individuals should avoid sharing cups, utensils and other items.
  - c) Advise ill individuals to stay home, practice social distancing and contact their medical providers for advice.
  - c) Advise to call 9-1-1 should symptoms consistent with severe illness occur:
    - Respiratory distress
    - Altered mental status
    - Inability to keep down liquids for several hours
    - Or other severe symptoms
  - d) Document advice given on MIR.
  - e) Contact medical control.
  - f) Document non-transport on refusal form.
  - d) Advise Home Health Care and other services available of patient condition and location for in home support and care.
  - e) If requested by the local health department, if given supplies and if time allows based on patient condition - mouth and throat swabs of individuals within the immediate area patient living/work area.

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**Transfer of newborn to qualified person — Criminal liability —  
Notification to child protective services — Definitions. RCW 13.34.360**

(1) For purposes of this section:

- (a) "Appropriate location" means (i) the emergency department of a hospital licensed under chapter 70.41 RCW during the hours the hospital is in operation; (ii) a fire station during its hours of operation and while fire personnel are present; or (iii) a federally designated rural health clinic during its hours of operation.
- (b) "Newborn" means a live human being who is less than seventy-two hours old.
- (c) "Qualified person" means (i) any person that the parent transferring the newborn reasonably believes is a bona fide employee, volunteer, or medical staff member of the hospital or federally designated rural health clinic and who represents to the parent transferring the newborn that he or she can and will summon appropriate resources to meet the newborn's immediate needs; or (ii) a firefighter, volunteer, or emergency medical technician at a fire station who represents to the parent transferring the newborn that he or she can and will summon appropriate resources to meet the newborn's immediate needs.

(2) A parent of a newborn who transfers the newborn to a qualified person at an appropriate location is not subject to criminal liability under RCW 9A.42.060, 9A.42.070, 9A.42.080, 26.20.030, or 26.20.035.

(3) (a) The qualified person at an appropriate location shall not require the parent transferring the newborn to provide any identifying information in order to transfer the newborn.

(b) The qualified person at an appropriate location shall attempt to protect the anonymity of the parent who transfers the newborn, while providing an opportunity for the parent to anonymously give the qualified person such information as the parent knows about the family medical history of the parents and the newborn. The qualified person at an appropriate location shall provide referral information about adoption options, counseling, appropriate medical and emotional aftercare services, domestic violence, and legal rights to the parent seeking to transfer the newborn.

(c) If a parent of a newborn transfers the newborn to a qualified person at an appropriate location pursuant to this section, the qualified person shall cause child protective services to be notified within twenty-four hours after receipt of such a newborn. Child protective services shall assume custody of the newborn within twenty-four hours after receipt of notification.

(d) A federally designated rural health clinic is not required to provide ongoing medical care of a transferred newborn beyond that already required by law and may transfer the newborn to a hospital licensed under chapter 70.41 RCW. The

federally designated rural health clinic shall notify child protective services of the transfer of the newborn to the hospital.

(e) A hospital, federally designated rural health clinic, or fire station, its employees, volunteers, and medical staff are immune from any criminal or civil liability for accepting or receiving a newborn under this section.

(4) (a) Beginning July 1, 2011, an appropriate location shall post a sign indicating that the location is an appropriate place for the safe and legal transfer of a newborn.

(b) To cover the costs of acquiring and placing signs, appropriate locations may accept nonpublic funds and donations. [2009 c 290 § 1; 2002 c 331 § 2.]

Notes:

**Intent -- 2002 c 331:** "The legislature intends to increase the likelihood that pregnant women will obtain adequate prenatal care and will provide their newborns with adequate health care during the first few days of their lives. The legislature recognizes that prenatal and postdelivery health care for newborns and their mothers is especially critical to their survival and well-being. The legislature does not intend to encourage the abandonment of newborn children nor to change existing law relating to notification to parents under chapter 13.34 RCW, but rather to assure that abandonment does not occur and that all newborns have an opportunity for adequate health care and a stable home life." [2002 c 331 § 1.]

**Effective date -- 2002 c 331:** "Sections 1 through 7 of this act are necessary for the immediate preservation of the public peace, health, or safety, or support of the state government and its existing public institutions, and take effect immediately [April 3, 2002]." [2002 c 331 § 9.]

RCW 13.34.360: Transfer of newborn to qualified person — Criminal liability — Notific...  
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<http://apps.leg.wa.gov/RCW/default.aspx?cite=13.34.360> 3/14/2010



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

(1) (a) When any practitioner, county coroner or medical examiner, law enforcement officer, professional school personnel, registered or licensed nurse, social service counselor, psychologist, pharmacist, employee of the department of early learning, licensed or certified child care providers or their employees, employee of the department, juvenile probation officer, placement and liaison specialist, responsible living skills program staff, HOPE center staff, or state family and children's ombudsman or any volunteer in the ombudsman's office has reasonable cause to believe that a child has suffered abuse or neglect, he or she shall report such incident, or cause a report to be made, to the proper law enforcement agency or to the department as provided in RCW 26.44.040.

(b) When any person, in his or her official supervisory capacity with a nonprofit or for-profit organization, has reasonable cause to believe that a child has suffered abuse or neglect caused by a person over whom he or she regularly exercises supervisory authority, he or she shall report such incident, or cause a report to be made, to the proper law enforcement agency, provided that the person alleged to have caused the abuse or neglect is employed by, contracted by, or volunteers with the organization and coaches, trains, educates, or counsels a child or children or regularly has unsupervised access to a child or children as part of the employment, contract, or voluntary service. No one shall be required to report under this section when he or she obtains the information solely as a result of a privileged communication as provided in RCW 5.60.060.

Nothing in this subsection (1)(b) shall limit a person's duty to report under (a) of this subsection.

For the purposes of this subsection, the following definitions apply:

(i) "Official supervisory capacity" means a position, status, or role created, recognized, or designated by any nonprofit or for-profit organization, either for financial gain or without financial gain, whose scope includes, but is not limited to, overseeing, directing, or managing another person who is employed by, contracted by, or volunteers with the nonprofit or for-profit organization.

(ii) "Regularly exercises supervisory authority" means to act in his or her official supervisory capacity on an ongoing or continuing basis with regards to a particular person.

(c) The reporting requirement also applies to department of corrections personnel who, in the course of their employment, observe offenders or the children with whom the offenders are in contact. If, as a result of observations or information received in the course of his or her employment, any department of corrections

personnel has reasonable cause to believe that a child has suffered abuse or neglect, he or she shall report the incident, or cause a report to be made, to the proper law enforcement agency or to the department as provided in RCW 26.44.040.

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

(e) The reporting requirement also applies to guardians ad litem, including court-appointed special advocates, appointed under Titles 11, 13, and 26 RCW, who in the course of their representation of children in these actions have reasonable cause to believe a child has been abused or neglected.

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

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

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

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

(5) Any law enforcement agency receiving a report of an incident of alleged

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

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

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

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

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

(10) Upon receiving a report of alleged abuse or neglect, the department shall make reasonable efforts to learn the name, address, and telephone number of each person making a report of abuse or neglect under this section. The department shall provide

assurances of appropriate confidentiality of the identification of persons reporting under this section. If the department is unable to learn the information required under this subsection, the department shall only investigate cases in which:

- (a) The department believes there is a serious threat of substantial harm to the child;
- (b) The report indicates conduct involving a criminal offense that has, or is about to occur, in which the child is the victim; or
- (c) The department has a prior founded report of abuse or neglect with regard to a member of the household that is within three years of receipt of the referral.

(11) (a) For reports of alleged abuse or neglect that are accepted for investigation by the department, the investigation shall be conducted within time frames established by the department in rule. In no case shall the investigation extend longer than ninety days from the date the report is received, unless the investigation is being conducted under a written protocol pursuant to RCW 26.44.180 and a law enforcement agency or prosecuting attorney has determined that a longer investigation period is necessary. At the completion of the investigation, the department shall make a finding that the report of child abuse or neglect is founded or unfounded.

(b) If a court in a civil or criminal proceeding, considering the same facts or circumstances as are contained in the report being investigated by the department, makes a judicial finding by a preponderance of the evidence or higher that the subject of the pending investigation has abused or neglected the child, the department shall adopt the finding in its investigation.

(12) In conducting an investigation of alleged abuse or neglect, the department or law enforcement agency:

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

(b) Shall have access to all relevant records of the child in the possession of mandated reporters and their employees.

(13) If a report of alleged abuse or neglect is founded and constitutes the third founded report received by the department within the last twelve months involving the same child or family, the department shall promptly notify the office of the family and children's ombudsman of the contents of the report. The department shall also notify the ombudsman of the disposition of the report.

(14) In investigating and responding to allegations of child abuse and neglect, the department may conduct background checks as authorized by state and federal law.

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

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

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

(18) Upon receiving a report of alleged abuse or neglect involving a child under the court's jurisdiction under chapter 13.34 RCW, the department shall promptly notify the child's guardian ad litem of the report's contents. The department shall also notify the guardian ad litem of the disposition of the report. For purposes of this subsection, "guardian ad litem" has the meaning provided in RCW 13.34.030.

[2009 c 480 § 1; 2008 c 211 § 5; (2008 c 211 § 4 expired October 1, 2008). Prior: 2007 c 387 § 3; 2007 c 220 § 2; 2005 c 417 § 1; 2003 c 207 § 4; prior: 1999 c 267 § 20; 1999 c 176 § 30; 1998 c 328 § 5; 1997 c 386 § 25; 1996 c 278 § 2; 1995 c 311 § 17; prior: 1993 c 412 § 13; 1993 c 237 § 1; 1991 c 111 § 1; 1989 c 22 § 1; prior: 1988 c 142 § 2; 1988 c 39 § 1; prior: 1987 c 524 § 10; 1987 c 512 § 23; 1987 c 206 § 3; 1986 c 145 § 1; 1985 c 259 § 2; 1984 c 97 § 3; 1982 c 129 § 7; 1981 c 164 § 2; 1977 ex.s. c 80 § 26; 1975 1st ex.s. c 217 § 3; 1971 ex.s. c 167 § 1; 1969 ex.s. c 35 § 3; 1965 c 13 § 3.]

Notes:

**Effective date -- 2008 c 211 § 5:** "Section 5 of this act takes effect October 1, 2008."  
[2008 c 211 § 8.]

**Expiration date -- 2008 c 211 § 4:** "Section 4 of this act expires October 1, 2008."  
[2008 c 211 § 7.]

**Effective date -- Implementation -- 2007 c 220 §§ 1-3:** See notes following RCW 26.44.020.

**Severability -- 2005 c 417:** "If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected." [2005 c 417 § 2.]

**Findings -- Intent -- Severability -- 1999 c 267:** See notes following RCW 43.20A.790.

**Short title -- Purpose -- Entitlement not granted -- Federal waivers -- 1999 c 267 §§ 10-26:** See RCW 74.15.900 and 74.15.901.

**Findings -- Purpose -- Severability -- Conflict with federal requirements -- 1999 c 176:** See notes following RCW 74.34.005.

**Application -- Effective date -- 1997 c 386:** See notes following RCW 13.50.010.

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

**Severability -- 1987 c 512:** See RCW 18.19.901.

**Legislative findings -- 1985 c 259:** "The Washington state legislature finds and declares:

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

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

**Severability -- 1984 c 97:** See RCW 74.34.900.

**Severability -- 1982 c 129:** See note following RCW [9A.04.080](#).

**Purpose -- Intent -- Severability -- 1977 ex.s. c 80:** See notes following RCW [4.16.190](#).

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## **KING LT**

### **DESCRIPTION**

The KING LT is supplied clean and is a non-sterile device intended for airway management with ventilation apertures located between two inflatable cuffs. Both cuffs are inflated using a single valve / pilot balloon. The distal cuff is designed to seal the esophagus, while the proximal cuff is intended to seal the oropharynx.

### **INDICATIONS FOR USE**

The KING LT is intended for airway management in patients over 4 ft. in height (122cm), indicated for difficult and emergent airway cases.

### **CONTRAINDICATIONS**

The KING LT does not protect the airway from the effects of regurgitation and aspiration. The following contraindications are applicable for routine use of the KING LT: Patients that are alert and/or still have a gag reflex that would make insertion difficult or painful.

### **INSERTION INSTRUCTIONS**

1. Using the information provided, choose the correct KING LT size, based on patient height.
2. Test cuff inflation system by injecting the maximum recommended volume of air into the cuffs (size 3 - 60 ml; size 4 - 80 ml; size 5 - 90 ml). Prior to insertion, disconnect Valve Actuator from Inflation Valve and remove all air from both cuffs.
3. Apply a water-based lubricant to the beveled distal tip and posterior aspect of the tube, taking care to avoid introduction of lubricant in or near the ventilatory openings.
4. Have a spare KING LT ready and prepared for immediate use.
5. Pre-oxygenate using 100% oxygen by bagging the patient and make sure suction is available.
6. Make sure the patient is unconscious and has no gag. If it is not obvious that the patient has no gag, test the gag by gently touching a tongue blade or other blunt clean object to the patient's posterior pharynx.
7. Position the head. The ideal head position for insertion of the KING LT is the "sniffing position". However, the angle and shortness of the tube also allows it to be inserted with the head in a neutral position.
8. Hold the KING LT at the connector with dominant hand. With non-dominant hand, hold mouth open and apply chin lift.
9. With the KING LT rotated laterally 45-90°, introduce tip into mouth and advance behind base of tongue.
10. Rotate the tube back to the midline as the tip reaches the posterior wall of the pharynx.
11. Without exerting excessive force, advance KING LT until base of connector is aligned with teeth or gums.

12. Inflate cuffs with the minimum volume necessary to seal the airway at the peak ventilatory pressure employed (just seal volume). Typical inflation volumes are as follows:
  - Size 3 45-60ml
  - Size 4 60-80ml
  - Size 5 70-90ml
13. While gently bagging the patient to assess ventilation, simultaneously withdraw the airway until ventilation is easy and free flowing (large tidal volume with minimal airway pressure).
14. Reference marks are provided at the proximal end of the KING LT which, when aligned with the upper teeth, give an indication of the depth of insertion.
15. Confirm proper position by auscultation, chest movement and verification of CO<sub>2</sub> by capnography if available.
16. Readjust cuff inflation to just seal volume.
17. Secure KING LT to patient using tape or other accepted means. A bite block can also be used, if desired.
18. If vomiting occurs the patient should be aggressively suctioned.

### **Use of King airway**

1. Attach the king airway to the ambu bag and ventilate the patient at 14 times per minute and then adjust as indicated.
2. Frequently check the breath sounds to ensure that there is good bilateral air motion.
3. Make sure to use 100% oxygen.
4. Be careful not to be too aggressive with ventilation. Do not force air into the patient. This may result causing a pneumothorax.
5. If small lung volumes are needed due to resistance, the ventilatory rate may be increased.
6. Make sure to allow for the patient's expiration phase, especially in asthma patients.

### **REMOVAL OF THE KING LT**

KING LT removal should always be carried out when suction equipment is available and only if the patient regains consciousness and cannot tolerate the device.

1. Suction above cuffs in the oral cavity if indicated.
2. FULLY deflate both cuffs before removal of the KING LT.
3. Remove the KING LT when protective reflexes have returned.
4. Carefully avoid the teeth while removing the airway.

NOTE: It may require more than one filling of the syringe to achieve complete evacuation of the KING LT cuffs.

### **USER TIPS**

1. The key to insertion is to get the distal tip of KING LT around the corner in the posterior pharynx, under the base of the tongue. Experience has indicated that a lateral approach, in conjunction with a chin lift, facilitates placement of the KING LT. Alternatively, a laryngoscope or tongue depressor can be used to lift the

- tongue anteriorly to allow easy advancement of the KING LT into position. The tongue can also be gently pulled upward using fingers with the aid of a gauze 4x4.
2. Insertion can also be accomplished via a midline approach by applying a chin lift and sliding the distal tip along the palate and into position in the hypopharynx. In this instance, head extension may also be helpful.
  3. As the KING LT is advanced around the corner in the posterior pharynx, it is important that the tip of the device is maintained at the midline. If the tip is placed or deflected laterally, it may enter the piriform fossa and the tube will appear to bounce back upon full insertion and release. Keeping the tip at the midline assures that the distal tip is placed properly in the hypopharynx/upper esophagus.
  4. Depth of insertion is key to providing a patent airway. Ventilatory openings of the KING LT must align with the laryngeal inlet for adequate oxygenation/ventilation to occur. Accordingly, the insertion depth should be adjusted to maximize ventilation. Experience has indicated that initially placing the KING LT deeper (base of connector is aligned with teeth or gums), inflating the cuffs and withdrawing until ventilation is optimized results in the best depth of insertion for the following reasons:
    - It ensures that the distal tip has not been placed laterally in the piriform fossa (see item #3 above).
    - With a deeper initial insertion, only withdrawal of the tube is required to realize a patent airway. A shallow insertion will require deflation of the cuffs to advance the tube deeper (several added steps).
    - As the KING LT is withdrawn, the initial ventilation opening exposed to/aligned with the laryngeal inlet is the proximal opening. Since the proximal opening is closest to, and is partially surrounded by, the proximal cuff, airway obstruction is less likely, especially when spontaneous ventilation is employed.
    - Withdrawal of the KING LT with the balloons inflated results in a retraction of tissue away from the laryngeal inlet, thereby encouraging a patent airway.
  5. When the patient is allowed to breathe spontaneously, airway obstruction can occur even though no obstruction was detected during assisted or positive pressure ventilation. During spontaneous ventilation, the epiglottis or other tissue can be drawn into the distal ventilatory opening, resulting in obstruction. Advancing the KING LT 1-2 cm or initial deeper placement (see item #4 above) normally eliminates this obstruction.
  6. Ensure that the cuffs are not over inflated. Inflate the cuffs with the minimum volume necessary to seal the airway at the peak ventilatory pressure employed. (Oust seal volume).

**King Airway Monitoring Form:**

Ambulance Service Provider: \_\_\_\_\_  
Level of Provider \_\_\_\_\_  
Medical Incident Record #: \_\_\_\_\_  
Date of service: \_\_\_\_\_  
Time of initial contact: \_\_\_\_\_

**Patient Demographics:**

- Age \_\_\_\_\_
- Sex: [ ]M [ ]F

Level patient respiratory distress at EMS arrival:  
[ ]Mild [ ]Moderate [ ]Severe [ ]No respiratory effort

O2 Saturation on Room Air on EMS arrival: \_\_\_\_\_

**Initial interventions:**

- O2 route \_\_\_\_\_ and amount: \_\_\_\_\_
- Albuterol route \_\_\_\_\_ and amount: \_\_\_\_\_
- Solumedrol [ ]Yes [ ]No
- Nitroglycerin X \_\_\_\_\_
- CPR [ ]Yes [ ]No
- Defibrillation [ ]Yes [ ]No
- Epinephrine [ ]Yes [ ]No
- Other: \_\_\_\_\_

Time of King airway insertion: \_\_\_\_\_  
Size of King airway inserted: \_\_\_\_\_

**Complications:**

- Vomiting [ ]Yes [ ]No
- Gagging [ ]Yes [ ]No
- Pneumothorax [ ]Yes [ ]No
- Other: \_\_\_\_\_

=====

**MPD follow up:**

Patient Outcome: \_\_\_\_\_  
Appropriate use of King Airway? [ ]Yes [ ]No

=====

WHITE- HOME AGENCY COPY, YELLOW - M.P.D. COPY

## MEDICAL ABBREVIATIONS POLICY

### Abbreviations – The official “Do Not Use List”



#### Official “Do Not Use” List<sup>1</sup>

Do Not Use	Potential Problem	Use Instead
U (unit)	Mistaken for “0” (zero), the number “4” (four) or “cc”	Write “unit”
IU (International Unit)	Mistaken for IV (intravenous) or the number 10 (ten)	Write “International Unit”
Q.D., QD, q.d., qd (daily)	Mistaken for each other	Write “daily”
Q.O.D., QOD, q.o.d, qod (every other day)	Period after the Q mistaken for “I” and the “O” mistaken for “I”	Write “every other day”
Trailing zero (X.0 mg)* Lack of leading zero (.X mg)	Decimal point is missed	Write X mg Write 0.X mg
MS	Can mean morphine sulfate or magnesium sulfate	Write “morphine sulfate” Write “magnesium sulfate”
MSO <sub>4</sub> and MgSO <sub>4</sub>	Confused for one another	

<sup>1</sup> Applies to all orders and all medication-related documentation that is handwritten (including free-text computer entry) or on pre-printed forms.

\*Exception: A “trailing zero” may be used only where required to demonstrate the level of precision of the value being reported, such as for laboratory results, imaging studies that report size of lesions, or catheter/tube sizes. It may not be used in medication orders or other medication-related documentation.

#### Additional Abbreviations, Acronyms and Symbols (For possible future inclusion in the Official “Do Not Use” List)

Do Not Use	Potential Problem	Use Instead
> (greater than) < (less than)	Misinterpreted as the number “7” (seven) or the letter “L” Confused for one another	Write “greater than” Write “less than”
Abbreviations for drug names	Misinterpreted due to similar abbreviations for multiple drugs	Write drug names in full
Apothecary units	Unfamiliar to many practitioners Confused with metric units	Use metric units
@	Mistaken for the number “2” (two)	Write “at”
cc	Mistaken for U (units) when poorly written	Write “mL” or “ml” or “milliliters” (“mL” is preferred)
µg	Mistaken for mg (milligrams) resulting in one thousand-fold overdose	Write “mcg” or “micrograms”

## MEDICAL ABBREVIATIONS POLICY

The Department of Pharmacy Services will carry out orders with abbreviations and/or symbols only if they appear in the medical staff's approved abbreviations listing. If unacceptable or confusing abbreviations and/or symbols are used, the prescription order will be verified with the prescriber before being entered in the pharmacy computer system or filled by the pharmacy. The use of abbreviated medication names (i.e. MTX for methotrexate or EPI for epinephrine) and/or symbols by prescribers and transcribers for medications is discouraged. Prescribers should use preprinted order forms when available to avoid potential confusing abbreviations and/or symbols.

Abbreviation	Potential Problem	Preferred Term(s)
@(for "at")	mistaken for "2"	Write "at"
Chemical Symbols	not understood	Write full name
Abbreviated Drug Names		Use official generic or trade name
Apothecary Units		Use metric system units
A.S., A.D., A.U., O.S., O.D., O.U.	mistaken for each other	Write "left ear," "right ear," or "both ears," "left eye," "right eye," or "both eyes"
O.D. (for once daily)	interpreted as "right eye"	Write "once daily"
q.o.d. (for every other day)	interpreted as meaning once daily or read as q.i.d.	Write "every other day"
q.d. (for once daily)	read or interpreted as q.i.d.	Write "once daily"
q.n. (for every night)	read as every hour	Write "every night"
q hs. (for every night)		Write "at bedtime"
H.S.	mistaken for half-strength	Write "at bedtime" or "half- strength"
U(for Unit)	read as 0, 4, or CC	Write "unit"
O.J. (for orange juice)	read as O.D. or O.S.	Write "orange juice"
ug (for microgram)	misread as mg	Write "mcg"
MS, MSO4 , MgSO4	incorrectly interpreted as magnesium sulfate or morphine	Write "morphine sulfate" or "magnesium sulfate"
MTX (for methotrexate)	misread as mitoxantrone	Always spell out drug name
Epi Drip (for epidural drip)	misread as epinephrine drip	Always spell out drug name
sq (for subcutaneous)	the s is read as 5 and the q is read as every	Write "subq" S.C.
S.C. (for subcutaneous)	mistaken as SL (sublingual)	Write "subq"
per os	OS read as left eye	Write "by mouth", "orally" or "P.O."
D/C (for discharge)	interpreted as discontinue whatever orders follow (typically discharge meds)	Write "discharge"
i/d (for once daily)	read as T.I.D.	Write "once daily"
IU	mistaken for IV or 10	Write "units"
T.I.W.	interpreted as T.I.D. or twice weekly	Write " 3 times weekly"
Zero after decimal point (1.0mg)	Misread as 10mg	Do not use decimals for whole number doses
No zero before decimal point (.5mg)	Misread as 5mg	Always use a leading 0 before a decimal when the dose unit is <1unit

## SOME APPROVED ABBREVIATIONS

a ----- before	kg ----- kilogram	----- derivative
a c ----- before meals	L ----- liter	PO ----- by mouth
ad lib ---- at pleasure	lb ----- pound	PR ----- per rectum
AM----- morning	liq ----- liquid	PRN ----- as needed
amp ----- ampule		pwd ----- powder
aq ----- water		q ----- every
ASAP --- as soon as possible		qid ----- four times daily
b i d ---- twice daily	mcg ----- microgram	qs ----- as much as is sufficient
c ----- with	med(s) -- medicine	Rx ----- prescription
cap(s) --- capsule	mEq ----- milliequivalent	s ----- without
cm ----- centimeter	mg ----- milligram	sig ----- let it be labeled
d/c ----- discontinue	min ----- minute	sol ----- solution
dL ----- deciliter	mL ----- milliliter	
DS ----- double strength	mm ----- millimeter	
D/W ---- distilled water	mmHg -- millimeters of mercury	
elix ----- elixir	mmol ---- millimole	STAT --- immediately
ETT ---- endotracheal tube	mOsm -- milliosmol	SubQ --- subcutaneous
Eq ----- equivalent	ng ----- nanogram	supp ----- suppository
ext ----- extract	NG----- nasogastric	syr ----- syrup
fl ----- fluid	nka ----- no known allergies	tab(s) --- tablet
g ----- gram	NPO ---- nothing by mouth	tbsp ---- tablespoonful
gr ----- grain	N & V --- nausea & vomiting	tid ----- three times daily
gtt ----- drop	oz ----- ounce	tinc ----- tincture
HR ----- hour	p ----- after	TPN ---- total parenteral nutrition
IG ----- immune globulin	pc ----- after meals	tsp ----- teaspoonful
IM ----- intramuscular	PM----- afternoon	Ung ----- ointment
IUD ----- intrauterine Device	PPD ----- purified protein	W/O ---- without
IV ----- intravenous		wt ----- weight
IVPB ---- intravenous piggyback		x ----- times

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WAHKIAKUM COUNTY  
DEPARTMENT OF EMERGENCY MANAGEMENT

Appendix 1 to Annex AA

Mass Casualty Incident Plan (MCI)  
Protocol

EMERGENCY MEDICAL SERVICES  
SYSTEM COMPONENTS

October 14, 1993  
Updated 2/10/10  
Updated 8/2016

Purpose

The purpose of this Appendix to the Mass Casualty Incident Annex of Wahkiakum County is to make clear the responsibilities and duties of those individuals who would assume or be assigned the following positions. Included in each set of instructions is information as to who each individual is to report to either in person or in writing (via reports).

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### What Constitutes a Multiple Patient Scene (MPS)

Note: MPS = less than 5 CRITICAL PATIENTS or less than 10 TOTAL PATIENTS. (These numbers are intended as a guide only and may be adjusted to meet the needs of the incident).

#### A Multiple Patient Scene does not trigger the implementation of the Mass Casualty Annex.

- A. Protocols require all Wahkiakum County ambulances to contact St. John Medical Center for trauma patients of a disaster. (St. John Medical Center will be used exclusively for all initial medical contact and will be accessed on the existing radio system at VHF 155.340).
- B. LIMIT radio traffic.
- C. Continue use of the organizational chart if possible. During an emergency response, communications are usually a problem and the flow of information is VITAL to the effort. Therefore, following the chain of command. Information can and will be sought from certain individuals at the scene, but all directives must come from the officers responsible for that discipline.

### Protocol

The EMT directing overall patient care is generally the first arriving medical unit. Terminology, responsibilities and duties will be much the same as a Mass Casualty Incident (MCI). All units will utilize the Incident Command System (ICS).

- A. Upon arrival at the scene with multiple patients, the first arriving unit will advise Wahkiakum County communications (9-1-1) of:
  - a. Approximate number of patients.
  - b. Number, type, and code of additional units needed.
  - c. Best access to the scene, if appropriate.
  - d. Any obvious or possible hazardous conditions.
- B. Upon arrival at the scene with multiple patients, the first arriving medical unit \* will:
  - a. Coordinate patient care.
  - b. Assure rapid triage of victims.
  - c. Have incoming EMS units report for patient assignment.
  - d. If necessary, communicate with Medical Control Hospital for patient destination.
  - e. Monitor scene time.

*\* (This position should eventually be filled by a paramedic unless the determination by mutual agreement is made that a senior experienced EMT can better fill the needs of the position).*

If, at any time, the scene escalates to the point that it meets the criteria established for a Mass Casualty Incident (MCI), the MCI plan will be implemented, the MCI protocol will be followed, and Wahkiakum County Communications (9-1-1) shall be notified of the change in status.

### What Constitutes a Mass Casualty Incident (MCI)

Note: MCI = 5 or more CRITICAL PATIENTS or 10 or more TOTAL PATIENTS.

(These numbers are intended as a guide only and may be adjusted to meet the needs of the incident).

- A. Protocols require all Wahkiakum County ambulances to contact St. John Medical Center for trauma patients of a disaster. (St. John Medical Center will be used exclusively for all initial medical contact and will be accessed on the existing radio system at VHF 155.340).
- B. LIMIT radio traffic.
- C. Continue use of the organizational chart if possible. During an emergency response, communications are usually a problem and the flow of information is VITAL to the effort. Therefore, follow the chain of command. Information can and will be sought from certain individuals at the scene, but all directives must come from the officers responsible for that discipline.
- D. Are you first on the scene?
  - YES? Go to Page 5 (First Unit on the Scene)
  - NO? Go to Page 6 (Second Unit on the Scene)

*Note: It is assumed that all responders on either the ambulance or rescue vehicles will be trained to at least the first responder level.*

## FIRST UNIT ON SCENE

### Duties:

1. You are now the “MEDICAL BRANCH DIRECTOR (MBD)” (don vest if available).
2. Initiate the Mass Casualty Incident (MCI) Annex and the proper MCI response by giving the following information by dispatch.
  - A. The EXACT LOCATION of the incident.
    - 1) Use most common terms possible, i.e., nearest major cross street, building, geographical feature, etc.
  - B. YOUR EXACT LOCATION, number of persons and ID of all in your vehicle.
  - C. The TYPE AND NATURE of the incident.
    - 1) Explosion.
    - 2) Plane crash.
    - 3) Train derailment.
    - 4) Fire, etc.
  - D. INCIDENT SIZE-UP (including Immediate Danger Zone (IDZ)).
  - E. TOTAL NUMBER OF PATIENTS expected (estimation based on first observations)
    - 1) The size of any passenger carrying vehicle.
    - 2) The size of any involved buildings.
    - 3) Information from eye witnesses.
  - F. Recommended access routes to the scene and staging area. (Do not allow all units onto the scene).
  - G. Hazardous environmental conditions, if any.
  - H. Additional resources needed: police, fire, ambulances, air transport, PUD, buses, cranes, etc.
  - I. Notify St. John Medical Center and advise them of the situation.
3. ASSUME COMMAND
4. Stay with your unit if at all possible.
5. Are you a paramedic unit?

YES	Maintain MEDICAL until relieved by a Senior Fire Officer – Incident Commander. Then go to page 20/29 (Triage Group Supervisor/Treatment Group Supervisor).
NO	Maintain MEDICAL until relieved by a Senior Fire Officer – Incident Commander. Then go to page 15 (Medical Branch Director).

*Note: Because the first unit(s) on the scene may be other than Fire Service, and because the incident response will be the province of the ranking fire service officer, once the initial size up is completed and an Incident Commander (IC) is determined, discuss your next assignment with the IC.*

SECOND UNIT ON SCENE

1. Are you a paramedic unit?

YES

Are you the first PARAMEDIC UNIT on the scene?

YES Go to page 20/29 (Triage Group Supervisor/Treatment Group Supervisor).

NO Ambulance go to page 26 (Transportation Group Supervisor).  
Fire/Rescue go to page 14 (Medical Branch Director).

NO

Is the first unit on the scene a paramedic unit?

YES Go to page 14 (Medical Branch Director).

NO Go to page 7 (Late arriving units)

*Note: Because the first unit(s) on the scene may be other than Fire Service, and because the incident response will be the province of the ranking fire service officer, once the initial size up is completed and an Incident Commander (IC) is determined, discuss your next assignment with the IC.*

## LATE ARRIVING UNITS

1. Fire/rescue – Go to the Fire Staging Area and report to the Incident Commander or Staging Office where appropriate.
2. AMBULANCES
  - a. Go to the Ambulance Staging area and report your arrival to the Transportation Group Supervisor.
  - b. Stay with your unit and wait for instructions. All ambulances should remain on their main dispatch frequency unless advised otherwise.
  - c. H.E.A.R. radio traffic is restricted. DO NOT use the H.E.A.R. system.
3. ALL LATE ARRIVING UNITS
  - a. Wait for further instructions.
  - b. Forward a copy of any report you may generate to the Incident Commander through appropriate channels. This will assist in identifying problem areas and finding a subsequent solution for those problems.

## INCIDENT COMMANDER (IC)

### RESPONSIBILITY:

Incident Commander (IC) shall manage the entire incident, delegating areas of responsibility to the most qualified individuals available. All special requests for additional equipment, manpower, and other resources will be made by the Incident Commander.

Upon activation of the EOC, overall Incident Command will be the responsibility of the Acting County Fire Chief or his designee, who will be located in the County EOC. The individual passing Incident Command responsibilities on to the EOC staff will remain on the scene and assume the position of "Operations Section Chief."

### NOTE:

Initially, establish command post in an area where it shall be readily identifiable, and in such a position as to be accessible to emergency services officers. Representatives from all responding agencies should be included if at all possible, and until the EOC is activated, at which time the various agency heads, or their designee, should go to the EOC.

Security needs to be established immediately to prevent unnecessary interruptions and distractions by persons who do not need to be there.

Inform dispatch as to who is in command and location of Command Post (CP).



INCIDENT COMMANDER  
Duty Checklist

- \_\_\_\_\_ Establish Command Post and modify dispatch of location.
- \_\_\_\_\_ Don position identification vest.
- \_\_\_\_\_ Identify Group Officers (pre-assigned duties)
  - \_\_\_\_\_ Rescue Group Supervisor
  - \_\_\_\_\_ Triage Group Supervisor
  - \_\_\_\_\_ Transportation Group Supervisor
  - \_\_\_\_\_ Treatment Group Supervisor
- \_\_\_\_\_ Notify the Department of Emergency Management (this can be done through dispatch).
- \_\_\_\_\_ Assume or assign the following positions:
  - \_\_\_\_\_ Medical Branch Director
  - \_\_\_\_\_ Operations Section Chief
  - \_\_\_\_\_ Logistics Officer (will eventually be located in the EOC)
  - \_\_\_\_\_ Safety Officer
  - \_\_\_\_\_ Public Information Officer
  - \_\_\_\_\_ Victim Services Officer (VSO), (also known as Morgue Officer) if necessary. This will eventually be moved to Logistics.
  - \_\_\_\_\_ Staging Area Manager (will eventually be assigned to the Operations Section Chief).
  - \_\_\_\_\_ Landing Zone Officer (will eventually be assigned to the Transportation Group Supervisor).
- \_\_\_\_\_ Consider the need for additional resources (request through dispatch or the EOC if activated).
  - \_\_\_\_\_ Fire/Rescue/Aid Equipment
  - \_\_\_\_\_ Ambulances
  - \_\_\_\_\_ Air Ambulances
  - \_\_\_\_\_ Special Rescue Teams
  - \_\_\_\_\_ Additional Medical Supplies
  - \_\_\_\_\_ Red Cross
  - \_\_\_\_\_ Cellular Phones
  - \_\_\_\_\_ Hazmat Teams

INCIDENT COMMANDER  
Duty Checklist (Cont.)

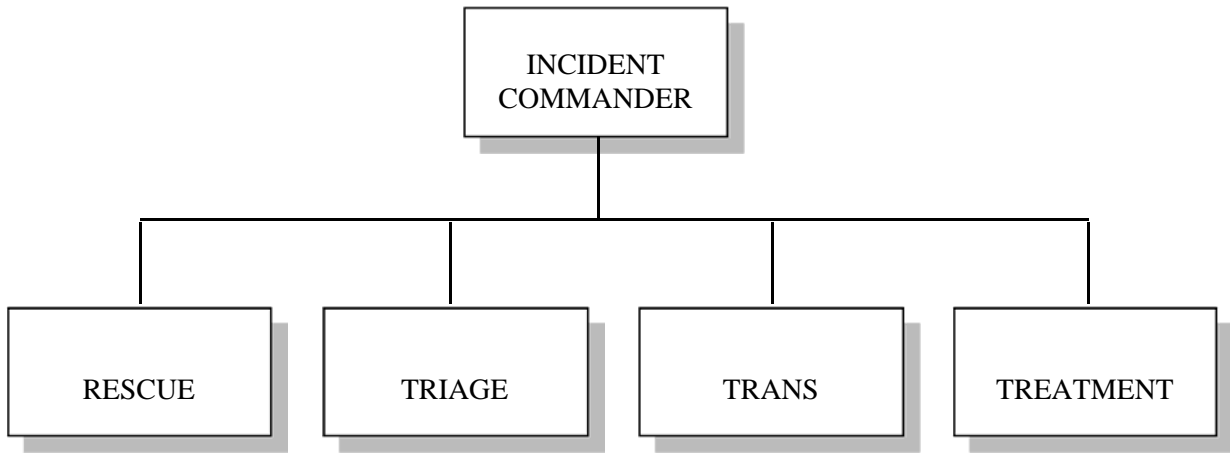
- \_\_\_\_\_ Air Force and Coast Guard rescue and helicopter teams. These can be dispatched DIRECTLY without a declaration of emergency where victims' lives may be at stake.
- \_\_\_\_\_ National Guard units for security, food service, sanitation, accommodations, and possible transportation.
- \_\_\_\_\_ Local school bus services for transportation.
- \_\_\_\_\_ Consider the need for Critical Incident Stress Debriefing team upon termination of command (request team through Fire District #2 of Emergency Mental Health Services).
- \_\_\_\_\_ Estimate number of injuries and notify dispatch.
- \_\_\_\_\_ Order an evacuation of the area as needed. (Obtain assistance from Law Enforcement).
- \_\_\_\_\_ Ensure the following areas are set up:
  - \_\_\_\_\_ Immediate Danger Zone
  - \_\_\_\_\_ Triage Area
  - \_\_\_\_\_ Ambulance Loading Area
  - \_\_\_\_\_ Helicopter Landing Zone
  - \_\_\_\_\_ Ambulance Zone
  - \_\_\_\_\_ Morgue
  - \_\_\_\_\_ Designated Decontamination Area (if required)
- \_\_\_\_\_ Ensure the following notifications are made if necessary:
  - \_\_\_\_\_ Notify PUD (Public Utility Department)
  - \_\_\_\_\_ Have Law Enforcement establish perimeter control.
  - \_\_\_\_\_ Request special equipment.
- \_\_\_\_\_ Provide written "Post Incident" or "After Action Report" that will include comments and observations relative to:
  - \_\_\_\_\_ Initial response and size-up.
  - \_\_\_\_\_ Response and cooperation of organizations providing mutual aid assistance.
  - \_\_\_\_\_ Lessons learned.
  - \_\_\_\_\_ Recommendations for changes in response techniques, or in the Mass Casualty Incident Plan itself.
  - \_\_\_\_\_ Suggestions for training to further prepare for such an event in the future.

Pre-assigned "Group Supervisors" may, at the discretion of the Incident Commander, Operations Section Chief, or Medical Branch Director be changed or combined.

*An organizational chart on page 12 demonstrates the positions that the incident might require and the chain of command.*



## ORGANIZATIONAL CHART #1



### NEXT STEP:

- 1) Assign Medical Branch Director (MGC) and transfer above groups to him.
- 2) Assign Operations and Logistics Chiefs.  
(See *Organization Chart Page 18*)

## OPERATIONS SECTION CHIEF (OSC)

### RESPONSIBILITY:

It shall be the responsibility of the Operations Section Chief to act as the On-Scene eyes and ears of the Incident Commander.

The Operations Section Chief will function as the Medical Branch Director, Law Enforcement Branch Director and the Fire Branch Director, until such time as those positions are appointed by the Incident Commander or by the Operations Section Chief.

The Operations Section Chief will coordinate response activities of all branches involved in the response, and will be in regular communications with the branch directors.

OPERATIONS SECTION CHIEF  
Duty Checklist

- \_\_\_\_\_ Obtain situation briefing from Incident Commander.
- \_\_\_\_\_ Don position identification vest.
- \_\_\_\_\_ READ THE ENTIRE DUTY CHECKLIST.
- \_\_\_\_\_ Assess situation. Think safety!
- \_\_\_\_\_ Direct all on-scene operations.
- \_\_\_\_\_ Report directly to the Incident Commander.
- \_\_\_\_\_ Function as Medical Branch Director, Law Enforcement Branch Director and the Fire Branch Director until such time as those positions are appointed by the Incident Commander or by the Operations Section Chief.
- \_\_\_\_\_ Coordinate the response activities of all branches involved in the response.
- \_\_\_\_\_ Maintain communications with all branch directors.
- \_\_\_\_\_ Maintain communications with the Incident Commander (in the EOC) and provide updates of on-scene operations.
- \_\_\_\_\_ In the absence of the Incident Commander, assume the duties of Incident Commander.
- \_\_\_\_\_ If not previously accomplished, establish a Command Post (CP). (The CP should be easily identifiable and accessible to units responding from the staging area).
- \_\_\_\_\_ If not previously accomplished, establish security. Inform dispatch.
- \_\_\_\_\_ If not previously accomplished, make assignments to fill the following positions:
  - \_\_\_\_\_ Rescue Group Supervisor
  - \_\_\_\_\_ Treatment Group Supervisor
  - \_\_\_\_\_ Transportation Group Supervisor
- \_\_\_\_\_ Assign a Staging Area Manager
- \_\_\_\_\_ Maintain direct communications with the Incident Commander and the EOC.

## MEDICAL BRANCH DIRECTOR (MBD)

### RESPONSIBILITY:

It shall be the responsibility of the Medical Branch Director to assume control over the entire medical response effort the incident may require. The Medical Branch Director shall be appointed by the Incident Commander.

The MBD will act as Transportation Group Supervisor, Rescue Group Supervisor, Triage Group Supervisor, and Treatment Group Supervisor, until such time as other individuals may be appointed to fill those positions. The Medical Branch Director will be responsible for coordinating the on-scene response activities of those units for the duration of the incident. The MBD should be the ONLY person contacting the Operations Chief directly concerning the Transportation, Medical, Triage, or Treatment Groups. All other on-scene activities will be the responsibility of the Operations Section Chief.

*This position doesn't have to be a paramedic, and will most of the time be filled by a fire officer.*

*An organizational chart on page 41 demonstrates the positions that the incident might require and the chain of command.*

MEDICAL BRANCH DIRECTOR  
Duty Checklist

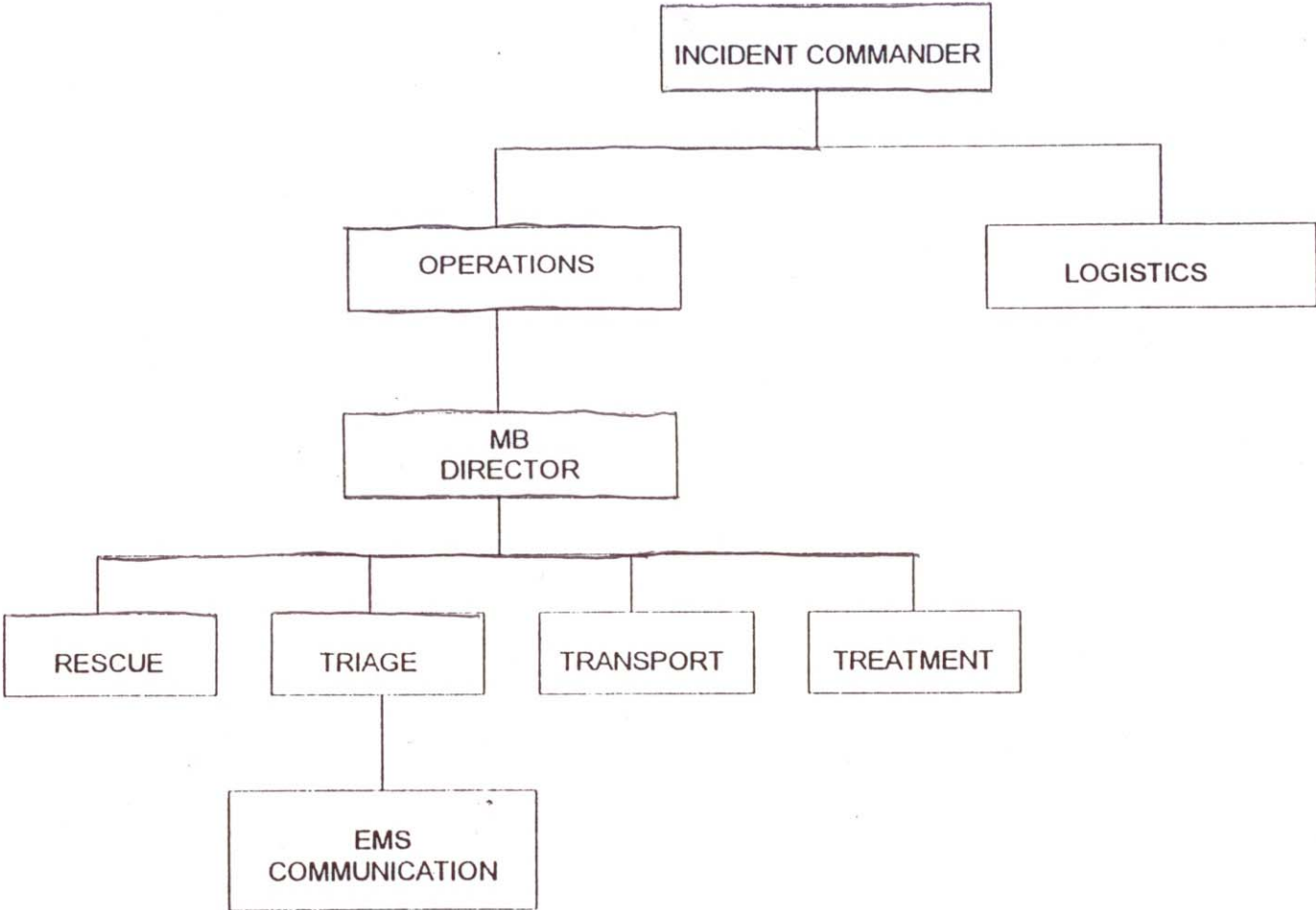
- \_\_\_\_\_ Obtain situation briefing from person you are relieving or your immediate supervisor.
- \_\_\_\_\_ Don position identification vest.
- \_\_\_\_\_ READ THE ENTIRE DUTY CHECKLIST.
- \_\_\_\_\_ Assess situation. Think safety!
- \_\_\_\_\_ If not previously accomplished, establish a command post in a readily identifiable and accessible area.
- \_\_\_\_\_ Request Wahkiakum Communications to contact St. John Medical Center Emergency Department and advise them that the "MCI Plan" is in effect.
- \_\_\_\_\_ Coordinate and supervise all on-scene EMS activities. Report directly to the Operations Section Chief, and in his absence, or upon instruction, to the Incident Commander.
- \_\_\_\_\_ If not already done, contact the Incident Commander or Operations Section Chief and make the following assignments:
  - \_\_\_\_\_ Triage Group Supervisor
  - \_\_\_\_\_ Treatment Group Supervisor
  - \_\_\_\_\_ Transportation Group Supervisor
  - \_\_\_\_\_ Rescue Group Supervisor
- \_\_\_\_\_ Coordinate location of triage, treatment, transportation and morgue areas with unit leaders.
- \_\_\_\_\_ Establish coordination with fire control, hazardous materials control, and extrication divisions and groups.
- \_\_\_\_\_ Ensure that all work areas are out of hazardous areas.
- \_\_\_\_\_ Keep area clear of spectators.
- \_\_\_\_\_ Consider additional resources:
  - \_\_\_\_\_ Additional Medical Supplies.
  - \_\_\_\_\_ Fire/Rescue/Aid Equipment/Special Rescue Teams
  - \_\_\_\_\_ Ambulances/Air Ambulances
  - \_\_\_\_\_ Relief Personnel
  - \_\_\_\_\_ Red Cross
  - \_\_\_\_\_ Cellular Phones
- \_\_\_\_\_ Contact coroner via chain of command.
- \_\_\_\_\_ Demobilize group as directed by Operations.



MEDICAL BRANCH DIRECTOR  
Duty Checklist (Cont.)

- \_\_\_\_\_ Consider the need for Critical Stress Debriefing team upon termination of incident. (Request team through Fired District #2 or Emergency Mental Health Services).
- \_\_\_\_\_ Maintain record of activities and forward to Operations.
- \_\_\_\_\_ Medical Branch Director shall provide the Incident Commander a written "post incident" or "after action" report that will include comments relative to:
  - \_\_\_\_\_ Initial response and size-up.
  - \_\_\_\_\_ Response and cooperation of organizations providing mutual aid assistance.
  - \_\_\_\_\_ Recommendations for changes in response techniques, or in the Mass Casualty Incident Plan itself.
  - \_\_\_\_\_ Suggestions for training to further prepare for such an event in the future.

ORGANIZATIONAL CHART #2



## RESCUE GROUP SUPERVISOR (RGS)

### RESPONSIBILITY:

The rescue group is responsible for initial stabilization and/or control of hazards, including, but not necessarily limited to fire, structural collapse, and hazardous materials, to the extent that extrication of injured or dead may begin. Rescue group will move patients from the scene to either a triage area or a treatment area.

*Note: As triage is often accomplished in the position and where found, the Rescue Group may be directed to move patients directly to the treatment area.*

RESCUE GROUP SUPERVISOR  
Duty Checklist

- \_\_\_\_\_ Obtain situation briefing from person you are relieving or your immediate supervisor.
- \_\_\_\_\_ Don position identification vest.
- \_\_\_\_\_ READ THE ENTIRE DUTY CHECKLIST.
- \_\_\_\_\_ Assess situation. Think safety!
- \_\_\_\_\_ Rescue Group Supervisor will report directly to the Medical Branch Director.
- \_\_\_\_\_ Assist with initial triage and tagging of patients. For patient tagging criteria, see **Triage Group Supervisor** duties, #14.
- \_\_\_\_\_ If triage is not done "where and as found", supervise and accomplish movement of the injured to triage area.
- \_\_\_\_\_ Inspect immediate danger zone (IDZ) for possible contamination by hazardous materials or flammable liquids. Report findings to Incident Commander or Medical Branch Director.
- \_\_\_\_\_ Request resources through Medical Branch Director to form stretcher teams for extrication.
- \_\_\_\_\_ Establish need for special rescue (Le., high angle, dive, etc.) and inform the MBD of need for additional trained personnel.
- \_\_\_\_\_ Prepare and forward an 'After Action Report' to the MBD, detailing events of note during the incident response. Include comments on lessons learned, problems encountered in accomplishing assigned tasks and recommendations for possible solutions to those problems.

## TRIAGE GROUP SUPERVISOR (TGS)

### RESPONSIBILITY:

The Triage Group is responsible for initial assessment and sorting of injured patients according to the extent and severity of their injuries.

- \* **(This position should eventually be filled by a paramedic unless the determination by mutual agreement is made that a senior experienced EMT can better fill the needs of the position)**

TRIAGE GROUP SUPERVISOR  
Duty Checklist

- \_\_\_\_\_ Obtain situation briefing from immediate supervisor.
- \_\_\_\_\_ Don position identification vest.
- \_\_\_\_\_ READ THE ENTIRE DUTY CHECKLIST.
- \_\_\_\_\_ Assess situation. Think safety!
- \_\_\_\_\_ The Triage Group Officer will report directly to the Medical Branch Director, and in his/her absence, to the Operations Section Chief.
- \_\_\_\_\_ Appoint and brief staff as needed.
  - \_\_\_\_\_ Aide(s)
  - \_\_\_\_\_ Litter bearers
- \_\_\_\_\_ If triage is not able to be accomplished on-scene and as the patients lay, locate suitable "Triage Areas" to receive and prioritize patients. This area should be close to, yet safe from the effects of, the IDZ. Patients should be evaluated and tagged in this area.
- \_\_\_\_\_ Supervise all ongoing triage.
- \_\_\_\_\_ Direct sorting and tagging of victims.
- \_\_\_\_\_ Keep supervisor informed regarding:
  - \_\_\_\_\_ Number and extent of injuries.
  - \_\_\_\_\_ Need for morgue and coroner.
- \_\_\_\_\_ Evaluate and request resources, as needed.
- \_\_\_\_\_ Ensure proper medical care procedures as followed.
- \_\_\_\_\_ Expedite movement of victims.
- \_\_\_\_\_ Triage should be accomplished according to the standards set forth in the US DOT, EMT Guidelines. These guidelines recommend the following tagging of all patients:
  - a. RED in need of immediate care (life threatening injuries);
  - b. YELLOW probably not life threatening but need attention;
  - c. GREEN minor injuries, ambulatory;
  - d. BLACK dead or cannot be saved even with medical intervention. DO NOT MOVE/REMOVE THE BODIES UNTIL RELEASED BY THE CORONER.
- \_\_\_\_\_ Maintain record of your activities.
- \_\_\_\_\_ Be sure to record the tag numbers of all patients and enter the number on your master log, and indicate race, approximate age, and sex of patient.
- \_\_\_\_\_ Secure operations when ordered and return ICS materials.

TRIAGE GROUP SUPERVISOR  
Duty Checklist (Cont.)

- \_\_\_\_\_ Prepare and forward to the MBD and “After Action Report” commenting on all phases of incident response relative to Triage. Comment on lessons learned, problem areas identified, and possible solutions to those problems.
- \_\_\_\_\_ Forward reports through channels to Medical Group Leader.
- \_\_\_\_\_ Once triage is completed, report your status to the MBD for additional assignments. You will probably be assigned to the Treatment Group Supervisor.
- \_\_\_\_\_ Keep MBD apprised of needs and of progress.

## TRIAGE TAGGING

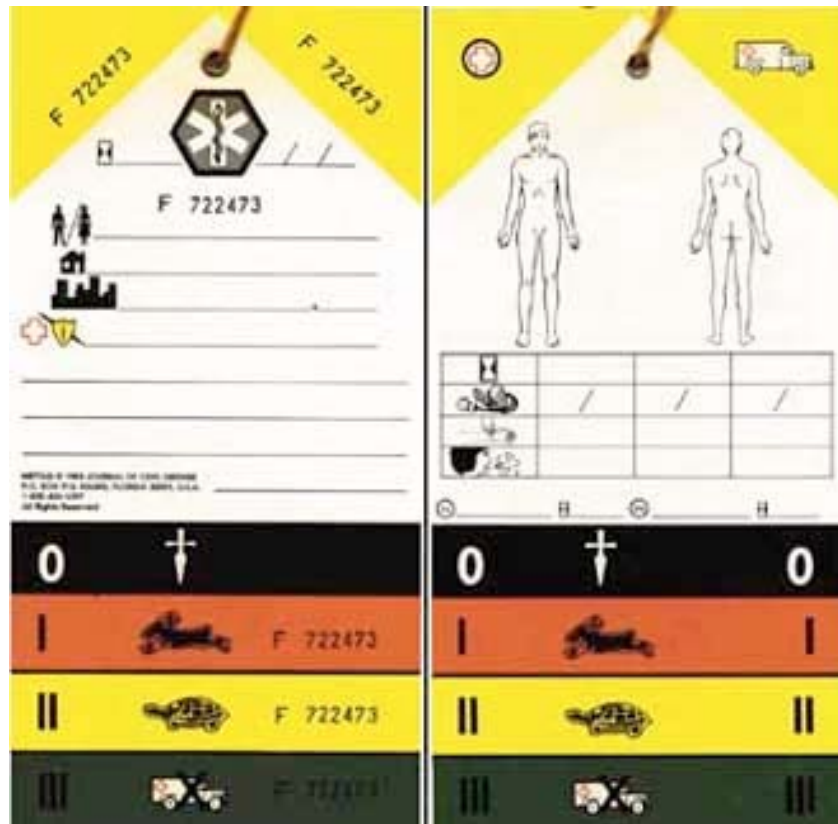
Since first responders will be doing the bulk of field triage in extensive emergency operations, it is important that they understand the use of triage tags.

Identification and priority tags are essential for smooth triage at a disaster site. Color-coded tags help to inform the Transportation Team Leader as to which patients to evacuate next.

The tag can accompany the patient through the hospital process and additional information can be recorded as necessary.

The tags are 4 ½" x 8 ½" and are relatively durable. These tags should be affixed to each casualty during the initial triage.

At plane crashes, it is required that the upper left corner of the injury diagram side of the tag be removed and left where the victim was found.



*This is the tab we use in the field triage. Front and back sides have space for recording patient identification and treatment. Urgency-rating strips at the bottom are color coded green (III), yellow (II), red (I), and black (O).*



The treatment and transportation area must be designed to handle the following priorities:

Priority 1: IMMEDIATE (Red)

Immediate life-threatening situation which can be, more or less, promptly and easily corrected. (i.e. coma with airway obstruction, massive external bleeding, tension Pneumothorax, etc.) Prompt transport

Priority 2: DELAYS (Yellow)

Immediate treatment can be given; life is not immediately threatened. (i.e. active moderate hemorrhage, major fractures, severe pain, hysteria.) Transport and intervention may be delayed for a time without endangering life.

Priority 3: (Green)

The “walking wounded”; minor wounds, minor fractures, small foreign bodies, and minor emotional problems.

Priority 4: DEAD OR CANNOT BE SAVED (Black)

Cannot be saved under the circumstances. Dead or almost dead. (i.e. decapitation, massive chest wounds, total body burns with inhalation injury, etc.) Included are patients in cardiac arrest following trauma; if there are limited resources or personnel available, transportation can be delayed.

## TRIAGE SPECIAL CONSIDERATIONS

1. Wear protective clothing in the Immediate Danger Zone.
2. If there is any overriding danger of fire or explosion, get the victims out of the danger zone immediately, if possible.
3. Remove victims to triage area.
4. Move the dead only if it is necessary for firefighting or rescue effort.
5. Only immediate life saving treatment is to be done in the danger zone. Examples: Opening the airway.
6. Victims brought to the staging area should be placed with their heads toward the center of the trap so the EMT's can better monitor them. NOTE: Tarps should not be placed too close together.
7. If the personnel are too busy in the Staging Area they should contact the Triage Officer. The Triage Officer will contact the Command Post to get more manpower.
8. A manpower may need to be established. The Command Post should be organized to perform additional sweeps over the area.
9. Field assessment can be handled by firefighters. A search should be organized to perform additional sweeps over the area.
10. Crews should stay together as much as possible.
11. No victim should be left unattended in the Staging Area without checking with both the Triage Officer and the Transportation Officer. All victims could be funneled past the Triage Officer for screening. In this way all victims are accounted for.
12. A school bus may provide hand for collecting the ambulatory victims and transporting them to a receiving facility. A church or school guy may be nearby and available to receive these people.
13. All victims, ambulatory or otherwise, will be tagged. All tagged victims will be transported by a designed transport vehicle authorized by the Transportation Officer.
14. Other considerations may be:
  - a. An accurate size-up by the first arriving company?
  - b. Is additional equipment needed?
  - c. How many ambulances needed?
  - d. Are police needed for crowd or traffic control?
  - e. Should the Immediate Danger Zone be roped or sealed off?

## TRANSPORTATION GROUP SUPERVISOR (TGS)

### RESPONSIBILITY:

Direct and coordinate victim loading, working directly with EMS Communications Officer (whom you will assign) and the Treatment Group Supervisor. You may also be required to function as the Victim Services Officer (Morgue), until such time as another individual is appointed to the VSO post.

### NOTES:

1. During many past disasters, the majority of patients presenting themselves at a hospital or clinic did so prior to being seen by EMS personnel. Therefore, be aware that the persons that you are waiting to transport, or have already transported, may NOT be the only patients from this incident at the institution.
2. If needed, the 304<sup>th</sup> Aerospace Rescue and Recovery Squadron, Oregon Air National Guard, may be requested and will respond with a single phone call. A Disaster Declaration does not need to have been made, only the existence of a life threatening situation.  
  
The 304<sup>th</sup> OPERATIONS NUMBER IS **503-335-4000**.
3. The US Coast Guard maintains a fleet of 3 H-65 Dolphins. These can be requested by a phone call, and a Declaration of Emergency does not need to have been made. If a life threatening situation exists, call:  
  
USCG OPERATIONS NUMBER IS **503-861-6211 Emergency 503-861-2242**
4. The Transportation Group Supervisor (TGS) may elect to designate a secondary Staging Area for EMS vehicle ONLY (EMSTA). EMS vehicles are for the exclusive use of the EMS and are not to be utilized by other agencies. Therefore, a separate and distinct Staging Area may provide to be a tremendous asset by reducing confusion and contributing to greater overall efficiency. If a second Staging Area is used, an EMS Staging Area Manager (EMS-SAM) needs to be appointed. This person will function under the supervision of, and report to, the Transportation Group Supervisor (TGS).

TRANSPORTATION GROUP SUPERVISOR  
Duty Checklist

- \_\_\_\_\_ Obtain situation briefing from immediate supervisor.
- \_\_\_\_\_ Don position identification vest.
- \_\_\_\_\_ READ THE ENTIRE DUTY CHECKLIST
- \_\_\_\_\_ Assess situation. Think safety!
- \_\_\_\_\_ The Transportation Group Supervisor will report directly to the Medical Branch Director, and in his/her absence, to the Operations Section Chief.
- \_\_\_\_\_ Appoint and brief staff as needed.
  - \_\_\_\_\_ Aide(s)
  - \_\_\_\_\_ Litter Bearers
- \_\_\_\_\_ Assign an EMS Communications Officer, to establish and maintain contact with all receiving institutions via the H.E.A.R. system)
- \_\_\_\_\_ Establish and identify loading area(s) location.
- \_\_\_\_\_ Establish and locate a morgue area. (See **Annex "B"**, Morgue Plan)

As soon as a Victim Services Officer (Morgue Officer) is assigned by the IC, all responsibility for human remains will be transferred to that individual, except for the act of transporting said remains to the morgue facility. The transportation of human remains to such a facility will remain the responsibility of the Transportation Group Supervisor.
- \_\_\_\_\_ Design and control traffic pattern (casualties and vehicles).
- \_\_\_\_\_ If not already accomplished, assign an individual as Landing Zone Officer.
- \_\_\_\_\_ Evaluate and request resources, as needed.
- \_\_\_\_\_ Request or ensure activation of H.E.A.R. network.
- \_\_\_\_\_ Coordinate ambulance transportation to designated hospital.
- \_\_\_\_\_ Assign patients to ambulance at patient loading zone. Don't load more than one critical patient per ambulance.
- \_\_\_\_\_ Communicate Patient(s) destination to ambulance personnel. You'll receive patient(s) destination information from EMS Communication Officer.
- \_\_\_\_\_ Request ambulances from Staging Area Manager as they are needed.
- \_\_\_\_\_ Request air ambulances personnel from LZ Officer as they are needed.
- \_\_\_\_\_ Keep an ambulance available for loading in the loading zone at all times.
- \_\_\_\_\_ Maintain record of your activities.
- \_\_\_\_\_ Control transportation crews.

TRANSPORTATION GROUP SUPERVISOR  
Duty Checklist (Cont.)

- \_\_\_\_\_ Keep an accurate log of the time you received the patient, identification, age, sex, race, tag number, time out of area, and medical facility destination.
- \_\_\_\_\_ Keep MBS apprised of needs and progress.
- \_\_\_\_\_ Secure operations when ordered and return ICS materials.
- \_\_\_\_\_ Forward reports through channels to Medical Group Leader.
- \_\_\_\_\_ File "After Action Report" with MBD, commenting on lessons learned, problems identified/possible solutions, and recommendations for future training.
- \_\_\_\_\_ Communicate and work with the Coroner or designee to facilitate transportation of the deceased to a morgue or storage area after all medical patients have been evacuated.

## TREATMENT GROUP SUPERVISOR (TRTGS)

### RESPONSIBILITY:

The Treatment Group Supervisor and staff is responsible for the receipt of all victims and patients from the triage crew, and once received, to initiate any or all treatments and/or procedures necessary to alleviate life threatening conditions, and stabilizing patients as much as possible pending transportation to an appropriate medical facility.

- \* The position should be filled by a paramedic as soon as possible.

## TREATMENT GROUP SUPERVISOR

### Duty Checklist

- \_\_\_\_\_ Obtain situation briefing from immediate supervisor.
- \_\_\_\_\_ Don position identification vest.
- \_\_\_\_\_ READ THE ENTIRE DUTY CHECKLIST.
- \_\_\_\_\_ Assess situation. Think safety!
- \_\_\_\_\_ The Treatment Group Supervisor will report directly to the Medical Branch Director, and in his absence to the Operations Section Chief.
- \_\_\_\_\_ Appoint and brief staff as needed.
  - \_\_\_\_\_ Aide(s)
  - \_\_\_\_\_ Litter Bearers
- \_\_\_\_\_ Assume duties of the Transportation Group Supervisor temporarily or until one is appointed.
- \_\_\_\_\_ Establish and identify location (consider transportation needs).
- \_\_\_\_\_ Design and control movement in treatment areas.
- \_\_\_\_\_ Separate victims by triage status.
- \_\_\_\_\_ Review all triage classifications, beginning with the most serious first (RED tag) and ending review with the most minor (GREEN tags). The BLACK tags do not require a review, at this time.
- \_\_\_\_\_ Expedite treatment and movement of victims.
- \_\_\_\_\_ As soon as a patient is stabilized and is able to be transported, inform the Transportation Group Supervisor. Be sure to log the time the patient is transferred to Transportation, the patient's tags code, patient's identification if possible, approximate age, sex, treatment rendered, and apparent condition at the time of transfer.
- \_\_\_\_\_ Position patients to allow working room.
- \_\_\_\_\_ Ensure proper medical treatments have begun and proper medical care procedures are followed. Consider:
  - \_\_\_\_\_ Airway management.
  - \_\_\_\_\_ Proper IV selection and administration.
  - \_\_\_\_\_ Bleeding control.
  - \_\_\_\_\_ Neurological assessment.
  - \_\_\_\_\_ Dressing and bandaging.
  - \_\_\_\_\_ Immobilization.
  - \_\_\_\_\_ Emotional support.
- \_\_\_\_\_ Evaluate and request resources, as needed.

TREATMENT GROUP SUPERVISOR  
Duty Checklist (Cont.)

- \_\_\_\_\_ Stay in close contact with the Medical Branch Director, via frequent updates.
- \_\_\_\_\_ Maintain record of your activities.
- \_\_\_\_\_ Forward an "After Action Report" through channels to Medical Group Leader. Include:
  - \_\_\_\_\_ Lessons learned.
  - \_\_\_\_\_ Problem areas identified.
  - \_\_\_\_\_ Possible solutions to problems.



## LANDING ZONE OFFICER (LZO)

### RESPONSIBILITY:

Coordinate all activities concerning air traffic to and from the scene, maintaining control of air space surrounding the incident site through coordination with the nearest FAA control center and the nearest Rescue Coordination Center of the US Air Force. The LZO will need to maintain lines of communication and the Transportation Group Supervisor and with the Staging Area Manager in order to provide as adequate a supply of transportation vehicles as is possible. The LZO will also need to provide regular updates to the Medical Branch Director.

## LANDING ZONE OFFICER

### Duty Checklist

- \_\_\_\_\_ Establish a LANDING ZONE (LZ) sufficiently clear of the scene so as not to interfere with functions of Rescue, Triage, or Treatment. Also consider the size of the incident scene and establish an LZ accordingly. The larger the incident and the greater the volume of patients, the larger the LZ needs to be to accommodate transportation vehicles and personnel. **ABSOLUTE MINIMUM LZ DIMENSIONS SHOULD BE 60' X 60' WITH 100' X 100' PREFERRED.** Refer to next **page (34)** for further instructions on location and set up of an LZ.
- \_\_\_\_\_ Obtain situation briefing from immediate supervisor.
- \_\_\_\_\_ Don position identification vest.
- \_\_\_\_\_ READ THE ENTIRE DUTY CHECKLIST.
- \_\_\_\_\_ Assess situation. Think safety!
- \_\_\_\_\_ The Landing Zone Officer will report directly to the Transportation Group Supervisor, and in his/her absence, to the Medical Branch Director.
- \_\_\_\_\_ Communicate approach and landing instructions to the air ambulances. **BE SURE YOU KNOW THE "NORTH" COMPASS DIRECTION FROM YOUR LOCATION, AS WELL AS MAJOR LANDMARKS AND TOPOGRAPHICAL FEATURES.**
- \_\_\_\_\_ Set a flare pattern as shown on the following page. The pattern is set as shown to indicate the wind direction, and corners of LZ pad.
- \_\_\_\_\_ Brief and direct the flight crew on instructions from the Transportation Group Officer.
- \_\_\_\_\_ If the LZO needs additional resources for LZ operations, request same from the Transportation Group Supervisor. These resources may be needed to assist with patient movement and loading, and possible off-loading supplies that may be ferried in by air ambulance.
- \_\_\_\_\_ Prepare and forward an "After Action Report" to the MBD immediately upon termination of the incident. Include:
- \_\_\_\_\_ Lessons learned.
  - \_\_\_\_\_ Problem areas identified.
  - \_\_\_\_\_ Possible solutions to problems.

## LANDING ZONE LAYOUT AND INSTRUCTIONS

### FIRST:

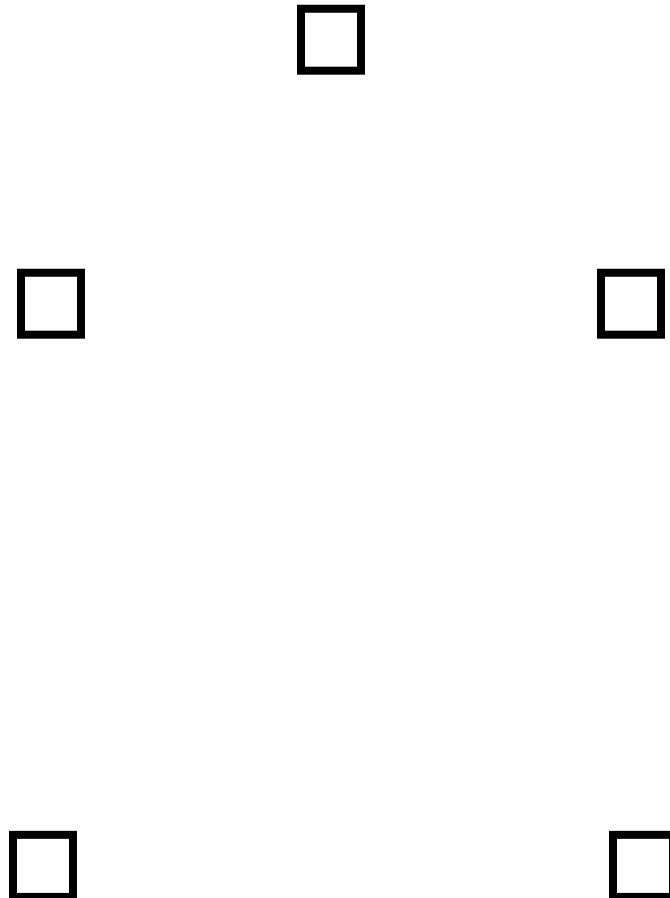
Determine if the area is large enough to land a helicopter safely. The landing surface should be flat and firm, free of debris that would blow up into the rotor system. LZ must be at least ONE MILE from a Hazardous Material Accident site, if poisonous or explosive vapors are present at accident site.

For LIFE FLIGHT, the following dimensions are recommended. Use of the larger craft of the Air Force would require a larger LZ.

NOTE: ABSOLUTE MINIMUM LZ DIMENSIONS ARE 60' X 60', WITH 100' X 100' being preferred.

Use 5 markers. Set one marker at each corner of the LZ, and place the remaining marker approximately 20' outside the LZ, midway between the two corner markers. The placement should form a square with a pointed end. This end will point INTO the wind. Vehicles make outstanding corner markers. If flares are used, be careful of dry grass or other combustibles.

ALERT PILOT as to ground slope, wire, hills, wind direction, and any other hazards.



## PREPARING A LANDING ZONE

### SELECTION OF AN LZ:

Be certain that the area is large enough for helicopter operations. The touchdown area should be a square with 60 foot sides during daylight, 100 foot size at night. A large helicopter may require an LZ with sides of 120 feet during the day and 200 feet at night.

The landing site should be clear of people, vehicles and obstructions, such as trees, poles, and wires. Wires cannot be seen from the air. The LZ must be free of stumps, brush, posts and large loose rocks.

### WIND DIRECTION AND APPROACH:

Helicopters land and take off INTO THE WIND. Observe the approach and departure path. Is it free of wires, poles, antennas, trees, etc? Inform the aircrew as to any obstructions on INITIAL RADIO CONTACT. When using road flares to mark corners of LZ and wind direction, be aware that these are an intense source of ignition and as such must be managed closely.

### PERSONNEL SAFETY AND NIGHT LANDING:

Keep spectators at least 200 feet from the touchdown area. Keep emergency service personnel at least 100 feet away. Have fire equipment standing by if possible. All nearby personnel should be wearing eye protection, and if helmets are worn, the chin straps need to be securely fastened. Wetting down the LZ if it is dusty is a good idea, but don't wet it if the LZ is covered with grass.

ONCE THE HELICOPTER HAS LANDED, DO NOT ALLOW ANYONE TO APPROACH THE AIRCRAFT.

AT NIGHT assure that if spotlights, floodlights, and /or headlights are used to define the area (LZ markers), they are not pointed toward the helicopter. Turn off all non-essential lights. White lights ruin the pilot's night vision and temporarily blind him. Red lights, however, are very helpful in finding accident locations and do not affect the pilot's night vision.

NO GROUND GUIDE IS NECESSARY AS LIFE FLIGHT DOES NOT RESPOND TO SUCH SIGNALS

### GENERAL SAFETY RULES

1. NEVER approach from the rear.
2. ALWAYS approach and depart from the front.
3. Maintain eye contact with the pilot while approaching.
4. Keep low, avoid rotor flex.
5. Keep area in front of craft clear, this may be needed in case of emergency.

## EMS COMMUNICATIONS OFFICER (EMS-CO)

### RESPONSIBILITY:

To open and maintain communication with regional hospitals and relay patient destinations directly to the Transportation Group Supervisor.

USE THE H.E.A.R. SYSTEM VHF 155.340

Open communications with the regional hospitals via the H.E.A.R. System, or via cellular phone if the H.E.A.R. System is not functional, And if it has not already been done, apprise them of the situation (incident). Relay the potential number of patients, and if possible, the number of patients in each of the triage categories. This will assist them in determining how best to manage the tasks of institute assignment, admission and treatment.



## STAGING AREA MANAGER (SAM)

### RESPONSIBILITY:

The Staging Area Manager (SAM) is responsible for the traffic flow into and out of the staging area. This person is also required to maintain a proper log of resource inventory and keep the Operations Section Chief and the Transportation Group Supervisor informed as to the staging area status on a regular basis. This person will also need to coordinate with the Logistics Officer in order to address the problems of food, sanitation, and accommodations, during a long term event. The Staging Area Manager needs to ensure that all vehicles and pieces of apparatus in the staging area are in a constant state of readiness.

STAGING AREA MANAGER  
Duty Checklist

- \_\_\_\_\_ Obtain situation briefing from immediate supervisor.
- \_\_\_\_\_ Don position identification vest.
- \_\_\_\_\_ READ THE ENTIRE DUTY CHECKLIST.
- \_\_\_\_\_ Assess situation: Think safety!
- \_\_\_\_\_ The Staging Area Manager will report directly to the Operations Section Chief, or in his/her absence the Incident Commander.
- \_\_\_\_\_ Assemble responding units at designated staging area(s).
- \_\_\_\_\_ Brief units as necessary.
- \_\_\_\_\_ Ensure that all units in staging are "In The Green," that is they are in a constant state of readiness with proper personnel and fully fueled.
- \_\_\_\_\_ Directs units from the staging area to the area where they are needed upon the direction of the Operations Chief or his/her designee.
- \_\_\_\_\_ Maintain staging status sheet.
- \_\_\_\_\_ Prepare and forward an "After Action Report" to the Operations Section Chief. Comment on:
  - \_\_\_\_\_ The overall operation of the staging area.
  - \_\_\_\_\_ Traffic flow pattern problems.
  - \_\_\_\_\_ Communication problems with staged units.
  - \_\_\_\_\_ Other problem areas and possible solutions.



ORGANIZATIONAL CHART #3

