

WHATCOM COUNTY'S  
BLS PROTOCOL  
ADDENDUM  
and  
PROCEDURES

Revision  
January 2006

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## Introduction

These Whatcom County supplemental BLS Protocols are to accompany the "Washington State Department of Health Basic Life Support Field Protocols for EMT-B, (Revision date September 2005) and First Responder, (Revision date September 1998) Trained Personnel." The Washington state protocols are available online at <http://www.doh.wa.gov/hsga/emtp/PUB&REPT.HTM>, or hard copies can be ordered through the Department of Health.

*This protocol addendum shall replace and supersede all prior revisions.*

Revised January 2006.

The Washington State protocols used with the following addendum is to serve as the guidelines for First Responders and Emergency Medical Technicians working in Whatcom County. They will permit a standardization of care, and outline the limits of care that First Responders and Emergency Medical Technicians and BLS personnel can provide. In certain unusual situations, procedures not outlined here may be approved or ordered by Medical Control.

When an incident occurs beyond the normal capacity of our system (MCI) normal procedures may be rescinded. EMTs and Paramedics may operate via protocols and BLS providers, at the discretion of the field medical supervisor or Medical Control, may transport ALS patients.

In all appropriate patients, routine use of oxygen, pulse oximetry, and vital signs should be considered as standard operating procedures.

At any time the EMT/FR is not certain that the patient meets the criteria set forth, **First Responders and Emergency Medical Technicians may contact the incoming Medic unit or the Medical Control Physician for guidance.**

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Marvin A. Wayne, M.D., F.A.C.E.P.  
Whatcom County Medical Program Director

# Automated External Defibrillator

EMT/FR Skill

(AED)

Whatcom County EMT and FR trained personnel will follow the most current American Heart Association/American Red Cross or equivalent guidelines for AED use, with the following Modifications.

*The expectation is that every provider receives, at a minimum, annual training and testing on American Heart Association current CPR and AED guidelines.*

**Procedure:** You are authorized to perform the following:

- A. Upon arrival, verify respiratory and circulatory arrest by the absence of consciousness, respirations and pulse.
- B. Initiate CPR. Continue with defibrillation protocol **The AED is configured to shock patients over 20 kg (45 lbs).**
  1. Patients less than 20 kg (45lbs) without a pulse can benefit from AED defibrillation after airway issues have been resolved. If electrode pads fit, there is no significant harm in applying the AED. Anterior posterior position may be used on pediatric patients.

C. **GENERAL DEFIBRILLATION PROTOCOL:**

Emergency personnel are authorized to deliver electric shocks with an automatic external defibrillator (AED) to patients unconscious and pulseless when a shockable rhythm is recognized by the device. This should be done as quickly as possible, with minimum interruptions of CPR. For an unwitnessed collapse, 2 minutes of CPR before delivering first shock is recommended. The exact details of sequencing can vary as long as the following overall goals are met:

1. CPR is interrupted for a minimum of time.
2. Overall patient care and EMS personnel safety are never neglected.
3. Current cardiac care guidelines endorsed by the county MPD are followed.

# Defibrillation Guidelines

## WITNESSED COLLAPSE

1. Assess ABCs
2. Perform effective CPR  
(see CPR Guidelines)
3. Attach Electrodes as quickly as possible
4. Clear Patient

## UNWITNESSED COLLAPSE

*Delay in CPR Delivery > 4 min*

1. Assess ABCs
2. Perform effective CPR for 5 cycles  
(2 Min - see CPR Guidelines)
3. Attach Electrodes
4. Clear Patient



**5. ANALYZE**

### SHOCK ADVISED

- Deliver Shock
- Check Pulse
- No Pulse- Perform 2 min CPR
- Repeat #5

### NO SHOCK ADVISED

- Check Pulse
- No Pulse-Perform 2 min CPR
- Repeat #5



**Pulse Present**

- Check Airway
- Provide Rescue Breathing
- Provide Oxygen
- Check Blood Pressure
- Continue with Patient Care

## CLINICAL GUIDELINES:

- 1. Pediatric Considerations:** The AED is configured to shock patients over 20 kg (45 lbs). Patients less than 20 kg (45lbs) without a pulse can benefit from AED defibrillation after airway issues have been resolved. If electrode pads fit in either the traditional anterior (white to right, red to ribs) placement or in an anterior/posterior placement there is no significant harm in applying the AED and it could potentially be life saving.
- 2. Rapid defibrillation.** No prescribed period for initial CPR in a witnessed collapse. The first shock should be delivered within 60-90 seconds of the provider's arrival at the patient's side. However it may be reasonable to do CPR for 2 minutes if down time of 4 or more minutes is suspected.
- 3. Defibrillation takes precedence** over basic CPR, oxygenation, suctioning, history-taking, etc.
- 4. No excessive interruptions of CPR.** If delays in CPR of 5 seconds or more are encountered (e.g. battery problems), resume CPR until the problem is resolved. Then reassess. Delays in CPR for more than 5 seconds are permitted only during rhythm assessment. In particular, do not delay CPR while checking to see if a rhythm is producing a pulse. **CPR must be performed continuously for 1 to 2 minutes to achieve central circulation.**
- 5. Should the patient vomit during the analyze mode:** Do not delay the delivery of electrical shocks to respond to the airway. Clear the airway at the first opportunity during the CPR cycle.
- 6. Blood pressure less than 60.** If the patient's systolic blood pressure persists  $\leq 60$  mm/Hg, after treating for shock, and the patient remains unconscious, continue CPR. Do not stop compressions just because the heart has started to beat. The beat may be inadequate for survival but still give a pulse. Use of CPR in these patients may also be determined by the clinical picture i.e., does the patient appear to have evidence of adequate perfusion?
- 7. Hypothermia,** AED in the setting of severe hypothermia is usually ineffective. Limit shocks to three unless long delays to ALS, then several minutes of CPR between shocks with core warming efforts.
- 8. Written documentation,** in accordance with WCEMS Policies, must be made on all cases in which an AED attempt was made whether successful or unsuccessful. The EMT/FR who is in charge of patient care is responsible for the written **reports**. *In addition to standard MIR reports kept at the user's agency, reports of AED use, for statistical and quality assurance purposes, will be forwarded to the EMS/TC Council office. This report needs to be done for **ALL** events including those initiated by the lay public. Reports can be submitted either electronically with Medtronic Physio-Control software or with the written AED use report. Either method requires forwarding of reports to the Whatcom County Medical Program Director at the **EMSC/TC Council office.***

## CPR Standards

From American Heart Association/American Red Cross guidelines to be implemented in 2006 as instructor materials become available. As per Whatcom County MPD, Health Care Providers will need to use this standard beginning January 1, 2006.

<b>Maneuver</b>	<b>Adult</b>	<b>Child</b>	<b>Infant</b>
<b>ACTIVATE EMS</b> (lone rescuer)	As soon victim found HCP: Asphyxial arrest likely do 2 min of CPR first	After performing 5 cycles of CPR For Sudden witnessed collapse active after verifying unresponsiveness	See Child
<b>AIRWAY</b>	Head tilt-chin-lift	For all (HCP: trauma)	use jaw thrust)
<b>Breaths initial</b>	2 breaths at 1 sec/breath	2 effective breaths	1 sec/breath
<b>HCP rescue breathing</b>	10-12 breaths/min (1 breath 5 to 6 sec)	12-20 breath/min (1 breath 3 to 5 sec)	See child
<b>HCP rescue breath with advanced airway</b>	8-10 breaths/min	For all	
<b>FBAO</b>	Abdominal Thrust	See adult	Back slap-chest thrust
<b>Circulation HCP</b>	Carotid	Carotid (femoral optional)	Brachial or femoral
<b>Compression Landmarks</b>	Center of chest between nipples	See adult	Just below nipple line
<b>Compression method</b>	2 hands: heel of 1 hand with other on top	2 hands: as adult -or- 1 hand: heel of 1 hand	1 rescuer: 2 fingers HCP: 2 rescuer: 2 thumbs- encircling hands
<b>Compression Depth</b>	1 ½ to 2 inches	1/3 to ½ depth of chest	See child
<b>Compression Rate</b>	100/ min for all		
<b>Compression/ventilation ratio</b>	30:2	30:2 (single rescuer) HCP:15:2 without interrupting compressions (2 rescuer)	See child
<b>AED</b>	Use adult pads HCP: 5 cycles of CPR before shock if response > than 4 minutes and arrest not witnessed	HCP: after 5 cycles of CPR use child pad/system if available or use adult pads	HCP: after 5 cycles of CPR if the pads fit there is no harm and could potentially save them

# Behavioral Disorders/Refusal of Care

## EMT/FR Skill

### I. Competent Adults

- A. Competent adults have the right to refuse medical care in most circumstances. **You must first determine that the patient is competent to refuse care. No one can refuse medical care for potentially life threatening conditions for a minor or an incompetent adult.**
- B. Attempt to convince the person of the need for medical care including consequences for not seeking care. Solicit assistance from friends and family.
- C. Contact Medical Control (Medic unit or ER physician) and inform the patient of the recommendation for treatment.
- D. Complete the Release of Responsibility Form on any patient refusing recommended medical care. Include witnesses if possible. Document all of the facts on the EMS Medical Incident Report (MIR) form, including topics covered regarding possible untoward effects of no transport/treatment, and the basis for your determination of patient competency.

### II. Incompetent Adults

- A. Patients under the influence of drugs, medications, or alcohol, or who demonstrate a lack of ability to make reasonable judgments regarding their care, are not considered competent.
- B. No EMS personnel are required to put themselves at risk in order to restrain an uncooperative patient. Elicit help from law enforcement, mental health, and Medical Control as needed for transport to the medical facility. If law enforcement is reluctant to help, ask them to speak to Medical Control.
- C. If no life threat is apparent, with consent of Medical Control, a patient may be left in the care of a sober, competent adult who assumes responsibility for them. This adult should sign the Release of Responsibility form.
- D. Document all facts on the MIR with attention to the patient's neurological and mental status, as well as specific advice given regarding possible adverse consequences of refusing care, and alternatives for obtaining care.

# COMBI/EASY -TUBE

## EMT/COMBI/EASY-TUBE TECH SKILL

We will be using either a Combi/Easy-tube or an Easy-tube until the Combi/Easy-tubes currently in stock have been replaced with the Easy-tube.

### I. Indications

Patient is apneic and without a gag reflex and,

#### A. Combi/Easy -tube SA (Small Adult)

Patient is between four feet and five feet nine inches (4'-0" to 5'-9") tall or,

#### B. Combi/Easy -tube Standard Size:

Patient is over five feet six inches (5'-6") tall.

NOTE: Patients between 5'-6" and 5'-9" tall may get either size tube with the small adult (SA) size being preferred. In addition the (SA) may be used with patients over five feet nine inches (5'-9") tall with abnormally small airway anatomy.

### II. Contraindications

The Combi/Easy -tube is contraindicated and should not be used in the following situations:

- A. An intact gag reflex
- B. Under four feet (4'-0") tall
- C. Cases of known or suspected caustic poisoning
- D. Known esophageal disease, or esophageal trauma

### III. General items

A. For patients in cardiopulmonary arrest, early defibrillation takes precedence over the placement of the Combi/Easy-tube.

B. The Combi/Easy-tube is not a replacement for standard endotracheal (ET) intubation.

C. Written documentation (on the Whatcom County Combi/Easy-Tube use report) must be made on all cases in which a Combi/Easy-tube attempt was made, whether successful or unsuccessful. The EMT who is in charge of patient care is responsible for the written report. A copy of this report must be forwarded to the Whatcom County Medical Program Director at the **EMS/TC Council office**.

D. Before releasing a patient with a Combi/Easy-tube in place to another level of care (i.e., emergency physician, nurse, paramedic), the EMT must be certain that the receiving person is knowledgeable about proper use and function of the device and is aware that it is in place.

E. In the event that a Combi/Easy-tube has been placed and an aid unit that will transport the patient is not staffed with personnel trained to use the device, the EMT who performed the procedure will accompany the patient to the emergency room, or until personnel with equal or higher level of certification can assume patient care.

1. When facial trauma has resulted in sharp, broken teeth or dentures, remove dentures and exercise extreme caution when passing the Combi/Easy-tube into the mouth to prevent the cuff from tearing.
2. The Combi/Easy-tube is a single patient use device, once it has been used, it should not be reused or recycled.
3. The Combi/Easy-tube is a short term device; it may be left in place for a maximum of two (2) hours unless instructed by Medical Control.
4. Securing the Combi/Easy-tube should be accomplished by ET holder or tape; this is a low priority.

## IV. Procedure

A. Verify cardiac and/or respiratory arrest.

B. Initiate CPR and ventilate per pocket mask, bag mask or MTV with high flow oxygen.

C. Ventilate 30-60 seconds prior to Combi/Easy-tube intubation attempt.

D. If the patient is in cardiopulmonary arrest, and an automatic defibrillator is immediately available, first proceed with defibrillation as per protocols.

E. Placement of the Combi/Easy-tube may be done at any point during the defibrillation protocols where a shock is not indicated or rhythm analysis is not being performed.

F. Continue ventilations while preparing the Combi/Easy-tube.

G. Place the head in a neutral position or hyper-extend the neck if no C-spine injury is suspected.

H. Insert the Combi/Easy-tube into mouth and advance gently until the teeth or gums are aligned between the two black rings on the tube.

I. Inflate proximal and distal cuffs per manufacture recommendations and adjust cuff volumes as needed to achieve and maintain seal.

K. Attach a bag-valve-mask or ventilation device to the Number 1 Tube and begin ventilations.

L. Using a stethoscope, listen for breath sounds in both lateral lung fields and over the epigastrium.

1. If breath sounds are present, with equal chest rise and condensation noted in the Number 1 Tube – Continue ventilations.
2. If breath sounds are absent and air exchange is heard over the epigastrium, tracheal placement has been accomplished.
  - Remove the bag-valve-mask or MTV from the Number 1 Tube, attach the bag-valve-mask or MTV to the Number 2 Tube and begin ventilations.
  - Again, using a stethoscope, listen for breath sounds in both lateral lung fields and over the epigastrium.
  - If breath sounds are absent, and air exchange is heard over the epigastrium – deflate both cuffs, remove the Combi/Easy-tube, and continue ventilations through a bag-valve-mask, MTV or pocket mask.
  - If breath sounds are absent on one side of the chest and air exchange is heard on the other – gently pull back on the Combi/Easy-tube, continuing ventilations, until you hear bilateral breath sounds; secure Combi/Easy-tube and continue to ventilate through a bag-valve-mask or MTV.
  - If unsuccessful after the second attempt to insert the Combi/Easy-tube, the EMT may attempt to use the Combi/Easy-tube SA or discontinue the procedure and continue ventilations via a bag-valve-mask, MTV or pocket mask.

M. Periodically check for appropriate function of the Combi/Easy-tube and adequate ventilation's and pilot balloon changes.

## V. Removal of the Combi/Easy-tube

If the patient regains consciousness or begins to fight the tube, restrain if necessary, and immediately remove the Combi/Easy-tube as follows:

- A. Turn the patient on to their side.
- B. Deflate the Line 2 pilot balloon first.
- C. Deflate the Line 1 pilot balloon second.
- D. Gently remove the Combi/Easy-tube.
- E. Be prepared, for the patient may vomit; suction as necessary.
- F. Assure the patient's respirations are adequate; assist as necessary giving supplemental oxygen per protocols.

# Pneumatic Anti-Shock Trousers (Mast)

## EMT Skill

MAST may be useful, for BLS and ALS personnel, in the treatment of a very select group of patients in shock. While, in general, a low blood pressure may be tolerated, and may actually prevent further bleeding, there are permissible limits. MAST works through the application of circumferential compression around the abdomen and lower extremities, which results in an increased peripheral resistance in the vascular system in this part of the body. Bleeding may be slowed or stopped in the area covered by MAST and blood pressure supported.

*MAST may also have a secondary use as a pneumatic splint for certain injuries to the pelvis and lower extremities.*

### I. Indications for Use

#### A. **TRAUMA** PATIENTS IN SHOCK

Systolic blood pressure  $\leq$  60 mm/Hg unless penetrating chest trauma is suspected.

#### B. **NON-TRAUMATIC** PATIENTS IN SHOCK

Systolic blood pressure  $\leq$  60 mm/Hg unless chest pain present.

*Note: In suspected abdominal aortic aneurysm MAST may be inflated when systolic blood pressure is  $\leq$  70mm/Hg and may have a positive effect on slowing intra abdominal bleed. However, pressure should not be allowed to rise above 90 mm/Hg.*

#### C. SPLINTING

May be used to splint fractures of pelvis and lower extremities. MAST alone is not the splint of choice for most femur fractures.

### II. Contraindications

#### A. **ABSOLUTE CONTRAINDICATIONS FOR USE**

1. Penetrating chest trauma and/or uncontrolled bleeding above level of MAST, (including blunt chest trauma with suspected internal bleeding).
2. Pulmonary edema.

#### B. **RELATIVE CONTRAINDICATIONS FOR USE**

1. Hypothermia:  $< 90^{\circ}$  F or  $32^{\circ}$  C (Very rare use).
2. Children under 12 years of age weighing less than 80 pounds should be treated with pediatric MAST.
3. Cardiogenic shock.
4. Lower thoracic and lumbar spinal cord injuries.

- C. BURNS: 2nd OR 3rd DEGREE IN AREA UNDER MAST (Very rare use, consider only if delay in IV fluids is encountered).
  - 1. Dress burns and inflate all chambers if supine blood pressure is  $\leq$  60 mm/Hg.
  - 2. Inflate legs only if burns are on abdomen when supine blood pressure is  $\leq$  60mm/Hg.
  
- D. ABDOMINAL SECTION INFLATION CONTRAINDICATED
  - 1. Evisceration of abdomen.
  - 2. Impaled objects in the abdomen.
  - 3. Suspected tension pneumothorax.
  - 4. Pregnancy.
  - 5. Suspected spinal injuries (due to movement of the spine by inflating the abdominal segment). This is a relative contraindication and is more dependent on clinical findings and status of patient.

IF IN DOUBT about the application or use of MAST, contact Responding Medic Unit or Medical Control Physician.

### III. Inflation Procedure

- A. Apply blood pressure cuff and check vital signs.
- B. Remove patient's clothing, if possible.
- C. Either move the patient onto MAST or slip beneath the patient to its proper position.
- D. Encase the lower extremities and abdomen in the device, securing the Velcro straps or zippers as appropriate.
- E. Connect the foot pump to the appropriate compartment(s) access valves.
- F. Using the foot pump, inflate, usually beginning with the legs, and titrate inflation procedure to achieve either;  
*Note: If intra abdominal bleeding is suspected, inflating the legs only could increase bleeding, in these situations inflating all three compartments simultaneously is appropriate.*
  - 1. Return the blood pressure to about 90 systolic.
  - 2. Pneumatic MAST indents with firm pressure.
  - 3. Velcro straps begin to slip off and pop off valve released on MAST.
  - 4. If using as a splint mast need only be inflated until support of fracture site is achieved (lower air pressures within MAST).
- G. Monitor carefully the patient's blood pressure throughout.
- H. Leave inflated until proper fluid replacement will retain blood pressure (emergency department or operating room).

**IV. Deflation** should generally not be accomplished in the field, except if the patient is in cardiogenic shock and deteriorates after MAST is inflated.

# Spinal Assessment

## EMT/FR Skill

To use this Spinal assessment protocol Whatcom County EMT's and FR need to have been trained with the complete text involved in doing a field spinal assessment. Once the patient condition indicates movement to the (red) immobilize side the spinal assessment protocol stops and normal neurological status checks before and after spine boarding are done.

## I. Mechanism of Injury

- A. Negative mechanism of injury indicates a mechanism that could not possibly damage the spinal column, such as an isolated hand laceration.
- B. Uncertain mechanism of injury relates to mechanisms that could cause an injury to the spinal column but that the index of suspicion is not high, such as GLF's, falls from low heights, and low to medium speed MVA's.
- C. Positive mechanism of injuries relates to mechanisms that cause a high index of suspicion such as, high speed MVA's, falls from twenty (20) feet or more, ejection from MVA, and gun shot wounds of the torso.

*If mechanism is "uncertain" move to patient reliability.*

## II. Patient Reliability

- A. This is the area of the spinal assessment protocol that requires the most careful observation and judgment. The questions to ask yourself are,
  - 1. Is this patient calm, alert, cooperative, sober.
  - 2. Can I communicate with them?

Some common causes for patients to be unreliable are,

- 1. Unconsciousness
- 2. Altered LOC with or without intoxication.
- 3. Acute stress reaction.
- 4. Distracting injuries.
- 5. Language barrier.

Remember many patients will be unreliable initially, then with calming and reassurance over time they may become reliable.

*If patient passes reliability issues, move to palpation assessment.*

### III. Spine Pain or Tenderness

A. This section refers to the palpation of the spinal column (this does not include lateral muscular pain), with pain referring to constant pain, and tenderness referring to pain elicited with palpation. The exam needs to be fingers on skin (or light clothing), not mittens on coats.

*If no spine pain or tenderness move on to motor sensory exam.*

### IV. Motor Sensory Exam

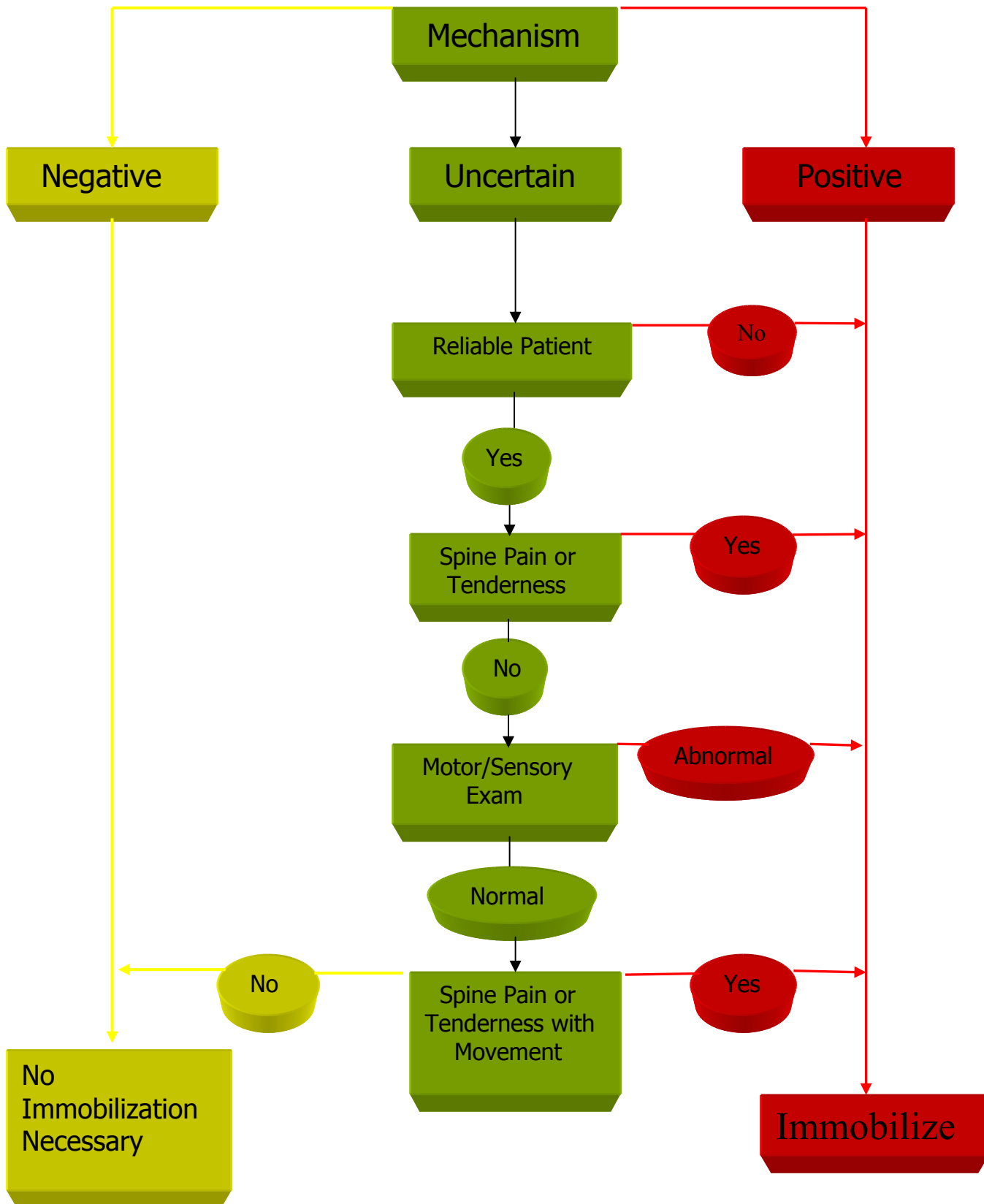
A. The motor sensory exam must show bilaterally equal (and normal) motor and sensory nerve function. Remember the three classic patterns of cord damage and check multiple nerve roots for both light touch and sharp sensation.

*If motor sensory exam is normal move on to spine function tests.*

### V. Spine Pain with Movement

A. If all questions and tests to this point indicate a reliable patient with no spine fracture or spinal cord damage, then the final tests are to have the patient move the spine through a full range of motion. If that does not cause pain repeat the same movements against resistance. The patient must be told to stop any movement at the first sign of pain. If the movement does not elicit any spine pain, the patient is free of a spinal column injury and does not require spinal immobilization.

## VI. Spinal Care Algorithm



## WRITTEN REPORTS

### EMT/FR Skill

#### I. Medical Incident Reports (MIR)

A. Following all calls, a medical incident report (MIR) form is to be filled out completely. The EMT/FR in charge of patient care will document their report on one of the following MIR's:

1. State of Washington DOH Medical Incident Report
2. Bellingham Fire/Whatcom Medic One Medical Incident Report or
3. Medical Incident Report approved by the EMS Medical Director

B. Following the **transportation** of any patient all EMS providers will submit a copy of the MIR to the Whatcom County Medical Program Director at the Whatcom Medic One office.

C. The narrative portion of the MIR will be formatted consistent with the S.O.A.P. format.

1. **S = SUBJECTIVE:** This is the information you have received from dispatch, law enforcement, bystanders, family members, and of course, the patient. In other words, this is the information that has been told to you. This will include chief complaint, events that led to event, past history, medications, (with dosages and times taken each day) and allergies.
2. **O = OBJECTIVE:** The objective information you obtain is that information that you and/or your team of responders personally see, hear, feel or smell from performing a patient assessment. This will include such things as patient exam, lung sounds, vital signs, odors on breath, blood loss, blood sugar, pulse ox, orthostats, etc.
3. **A = ASSESSMENT:** After taking a history and doing an exam, what is your best guess as to what is wrong with the patient. Remember that when stating/writing your conclusions/impressions it must be prefaced by the word "**possible**" or "**R/O**", unless the injury or illness is obvious, e.g.: fracture.
4. **P = PLAN:** This will include the actual treatment/intervention that was performed for the patient. Include all methods of treatment, equipment used as well as patient response to the treatment, and the patients disposition (where did you leave them and what kind of condition). Be very specific and detailed with this information. The general rule is, "**IF IT ISN'T WRITTEN DOWN, IT WASN'T DONE.**"

## D. Expanded S.O.A.P. Format

*Many agencies in the county, especially transporting agencies, are using the expanded SOAP format for written reports. This does meet the required criteria for written reports in Whatcom County.*

- 1. SUBJECTIVE:** *What the patient, family or bystanders tell you as well as the scene observations.*

Chief complaint (CC) The age, sex and chief complaint of the patient.

History of Presenting (HPI) *The reason for the chief complaint.*  
(MOI) Mechanism of Injury including damage done to vehicles or objects causing trauma.  
(NOI) Nature of Illness Answers to your OPQRST and **SAMPLE** history questions, Symptoms reported, pertinent negatives all go in this section.

Previous History (PHX) Pertinent past medical history. **SAMPLE** History is listed here including meds, allergies and Phx.
- 2. OBJECTIVE:** *What you see, smell, touch and hear during your exam that pertains directly to the patients' condition.*

Exam: (ASS) What position was the patient in upon your arrival?  
Pt's level of consciousness/ distress level, skin color/temperature and condition, vital signs, pulse ox, Dex

HEENT: Head, Ears, Eyes, Nose and Throat  
CTL: Cervical, Thoracic and Lumbar spine  
Chest: Lung sounds, tidal volume, POP  
Abdomen: POP, Bowel sounds  
Pelvis: POP  
Extremities: POP, Injuries, PMS/CMS in all four extremities
- 3. ASSESSMENT:** *What you think is wrong*  
(IMP) Rule out, or "R/O" what do you think is wrong with the patient.
- 4. PLAN:** *Your plan as to what to do, what you did for the patient and any changes in the patient's condition while in your care.*

Treatment: All the things you did for the patient, (a list of the tests you and/or your team performed) such as vital signs and posturals, and any responses to treatments.

Disposition: (Disp) What happened to the patient, for instance, did a Medic Unit transport the patient? Did you leave the patient at home, was Medical Control notified?

## II. AED and Combi/Easy-Tube Reports

- A. Reporting of AED use will be done either
1. electronically with Medtronic Physio-Control software or
  2. with the written AED Use report.

Either method requires forwarding of reports to the Whatcom County Medical Program Director at the **WCEMS/TC Council office**.

B. Written documentation (on the Whatcom County Combi/Easy-Tube use report) must be made on all cases in which a Combi/Easy-tube attempt was made, whether successful or unsuccessful. The EMT who is in charge of patient care is responsible for the written report. A copy of this report must be forwarded to the Whatcom County Medical Program Director at the **WCEMS/TC Council office**.

*Reports are available through the **WCEMS/TC Council office** and samples are included with this addendum.*

## III. Reporting Timeline

A. Reports are to be received by the Whatcom County Medical Program Director, or WCEMS/TC council office, within 2 business days after the call. These reports will be reviewed and utilized as necessary for continuing education, quality assurance, and statistical information.





## Permissive Protocols

The following protocols (Afrin and Pelvic Sling) are permissive in nature, meaning that an agency may choose to participate or not.

Considerations for implementing this protocols should include;

- Time to ALS intervention
- Agencies ability to uniformly apply protocols
- Costs associated with interventions
- Potential risks and benefits to patients

## **AFRIN (OXYMETAZOLINE)**

### **EMT-B Skill**

#### **Rational:**

Field care of epistaxis (nosebleeds) is now a BLS dispatch. Judicious use of over the counter medication (Afrin) can alleviate the situation in a timely manner with little risk to patient.

#### **I. Indications**

May be used to assist in controlling epistaxis in conjunction with direct nasal pressure.

#### **II. Contraindications**

Known hypersensitivity to the medication.

#### **III. Cautions**

Use with caution in patients with a history of significant cardiovascular disease. This is rarely a problem in short term use.

#### **IV. Dosage and Administration**

- A. Have patient clear Nasal passage (blow nose)
- B. Administer dose into desired nostril (Usual dosage is 2 - 3 sharp squeezes)
- C. Apply direct pressure to bridge of the nose

#### **V. Adverse Effects**

Very rare; sinus tachycardia may occur.

# The Pelvic Sling

## EMT-B skill

### Rational:

Unrestrained movement of fractured pelvic bones following significant trauma can cause internal hemorrhage of 2-3 liters of blood, and death. Similar to c-spine injuries, pelvic fractures require **stabilization before transport**. Any motion between the torso and legs can cause severe shifting of the fractured pelvis, potentially dislodging any clotting already in place.

MAST pants can stabilize a broken pelvis, but over or under inflation of MAST will compromise their effectiveness. There is no way to know when the pressure is right for pelvic stabilization.

The Pelvic Sling was designed to apply the ideal amount of force to bring the pelvic ring back into alignment. Like the MAST, the Pelvic Sling uses circumferential pressure to squeeze the pelvis uniformly. The Sling's major advantage is that its buckle has a definite stop with a positive click at exactly the optimal calculated pressure.

**Like a C-collar**, the Pelvic Sling should be applied to *any* patient with high speed or other significant trauma suspicious for pelvic injury. 55% of all pelvic fractures are classified as stable therefore, even if instability of the pelvis is not obvious on exam, **mechanism of injury alone may indicate use of the Sling**.

### I. Indications for Use

A. Patients with a history of high energy, multi-system trauma i.e.: motor vehicle accidents, pedestrian accidents, crush injuries, falls.

### II. Contraindications for Use

Patients under 80 pounds

### III. Procedure

- Review use instructions on the package.
- Clothing should be removed before placing the Sling. *(It is designed to stay in place until the patient goes to surgery).*

- Three sizes are available to fit patients

Large >200 pounds

Standard 110 – 200 pounds

Small <120 pounds

*The standard size can be field modified to fit smaller patients, just cut off the plastic slide pad and use the Velcro underneath.*

### Cautions

- The Sling wraps the hips and buttocks, not the waist. Be sure you place the top of the sling no higher than the anterior superior spine of the femur. Try to make sure the buckle is centered over the alignment of the pubic symphysis.**

- The Sling is a single-use, disposable item.

### IV. Removal

- Once the Sling is in place don't remove it.

## Patient Care Procedures

In an effort to standardize operations in special circumstances, the following section offers guidance on accepted and approved methods of procedure in the following areas.

Air Ambulance Operations

Crime Scene Activities

Transporting of Handcuffed Patients

Probably D.O.A. Patients

# Air Ambulance Guideline

## General Information:

Airlift Northwest is the air ambulance company serving Whatcom County and has helicopters based at St. Joseph Hospital (Bellingham), Arlington, as well as Seattle. When requesting a helicopter the closest, available ship will be sent.

*It is advisable to request information on which ship is being dispatched and an estimated time of arrival (ETA).*

## Helicopter Capabilities:

The RN/RN crew is an ALS response team with prehospital skills including:

- Airway Management/Endotracheal Intubation

- IV starts/maintenance and medication administration

- Cardiac Monitoring

- Management of unstable patients including: Trauma, CPR, OB, Peds, Cardiac, Respiratory, Head Injury (see Category I list).

**The pilot will make final determination about weather, takes-offs and landings, and IFR/VFR (instrument/visual) capabilities; day or night 24/7**

## Dispatch protocol for Use of Helicopters within Whatcom County:

The dispatch of a helicopter will be considered with any "Category I" patient for whom ALS care is greater than 30 minutes away.

*In addition Airlift should be considered in multiple ALS Crew Response (MCI) situations even when within the 30 minute space. Some of the potential "close uses" would include MCI situations exhausting available ground ALS units, severe burn patients that might benefit from direct "Burn Center" transport, or other severe trauma patients that may benefit from direct transport to a "Level 1 Trauma Care center."*

## Category I patients include:

- Multi-system trauma patient with blood pressure less than 90

- Head Injury with decreased level of consciousness

- Trauma with airway compromise, failing VS, or significant mechanism of injury

- Uncontrolled bleeding

- Spinal Cord injury with neurological impairment

- Amputation with potential for re-implantation

- Acute Chest Pain with possible MI

- Resuscitated Cardiac/Respiratory Arrest

- Decreased Level of consciousness or new onset CVA symptoms

- Moderate to severe hypothermia or near drowning

- Patients >60 with acute abdominal pain and blood pressure <90

- Complications of Pregnancy

- Unstable vital signs

- Burns 20%, 10% for age <10 and age >50

- Pediatric Trauma Score 8 or less

- Pediatric Respiratory Emergencies

## **Procedure:**

The normal procedure for dispatching Airlift should be to;  
Consult with responding ALS ground ambulance about patient condition and need to fly,  
Contact Prospect (or have medic unit) and request Airlift to be dispatched. In unusual situations  
Airlift Northwest can be dispatched by calling 1-800-426-2430 (Airlift dispatch) and requesting  
dispatch directly.

Requestor will be asked to provide one or two of the following:

- Landing Zone Coordinates,
- GPS Coordinates,
- Map Coordinates,
- Totem map page and approximate location on page,
- Washington Road & Recreation Atlas,

Also:

- Radio Frequency (Fire 1,2,3, etc.)
- Ground Contact (Unit Radio Identification)
- Brief Patient Report
- Destination Facility (Airlifts)

## Crime Scene Activities

### EMT/FR Skill

**I. The basic objective** of crime scene protection is to preserve physical evidence that may be used to develop investigative leads and to prosecute defendants in court. Physical evidence must be protected from accidental or intentional alteration from the time it is first discovered to its ultimate disposition at the conclusion of an investigation.

A. Often, emergency medical service personnel are the first to arrive at potential crime scenes. EMS personnel may be unaware that the incident which necessitated the request for medical aid is a result of a criminal act.

1. While emergency aid may be imperative, medical personnel should exercise extreme caution in approaching scenes suspected or known to involve any violent act.
2. Sniper incidents have often resulted in multiple injuries among those trying to rescue the victim.
3. Responding emergency personnel must consider their own safety as well as the methods they will use in aiding victims.

B. Personnel should consider evidence preservation and crime scene protection while enroute to such an emergency. While saving life is paramount, personnel should do all they possibly can to prevent the loss of related evidence.

**II. Errors of commission and errors of omission.** Most errors in either category are unintentional, but they still complicate the investigation. A brand of cigarettes determined from butts found at the scene may be important, but if they were left by an officer, F/R, or EMT they are merely a waste of time, money and effort to analyze. Being aware of the problems commonly found at scenes and the needs of the investigating officers should help to prevent some of these difficulties. Descriptions of the two primary types of mistakes, which damage crime scenes are;

A. Errors of commission: occur when citizens, witnesses, officers, or emergency personnel smear fingerprints, step on evidence, add their own fingerprints, rearrange the scene, drop cigarette ashes and butts at the scene, etc. Any time anyone destroys existing evidence or adds "evidence" (cigarette butts), a serious mistake has damaged the crime scene.

B. Errors of omission: occur when personnel fail to notice the scent of perfume or cigar smoke, fail to listen to persons standing near the scene discussing the crime, or fail to take efforts to protect existing evidence which may otherwise be destroyed.

### III. Crime Scene Do's and Dont's:

#### A. Do:

1. Ensure that items of evidence (spent cartridges, weapons, clothes, etc.) are not stolen or destroyed, moved or inadvertently stepped on.
2. Designate a garbage spot for all non-essential or non-evidentiary items.
3. Contain the crime scene area and restrict/stop pedestrian/vehicle traffic, (limit the number of EMS personnel to what is needed).
4. Note position of clothes on the body before disturbing for medical aid and check for any foreign substances that may be on the body.
5. If you move the body, be aware that pertinent evidence is often found underneath a body. Mark its location.
6. Call for assistance as needed to control onlookers and bystanders.
7. Seek guidance from the on-scene police officer.
8. Inform the officer in charge about any material (coat, sheet, blanket, etc.) used to cover/protect the victim from the elements. Officer may want those items as evidence.
9. Check with the officer in charge of the crime scene if you had close contact with the victim/deceased (your clothes may contain fibers and trace evidence).

#### D. Don't:

1. Do not move the body unless necessary to give aid, then note and/or mark the body's position.
2. Do not move evidence unless necessary. Point the evidence out to the officer where it is found, or mark (chalk, tape, etc.) the location where the evidence/items that required moving were. Obviously a gun on a crowded sidewalk probably should be secured, but use common sense. If the item is not going to be dangerous, stepped on, lost, or stolen where it is, leave it there for the officer.
3. Do not use bathroom facilities or sinks.
4. Avoid using the telephone and items in and around the crime scene.
5. If clothing must be cut, do not cut through bullet holes or knife cuts. These are critical pieces of evidence.
6. If patient is deceased or dies during your resuscitation, do not remove Combi/Easy-tube or any other invasive equipment. Mark all sites that caregivers broke the victim's skin, (epi-pen, glucose checks, etc.).
7. Hangings or other crimes involving ropes:
  - ❖ If a rope must be cut, do not cut it at the knot.
  - ❖ If the possibility of life exists, cut the rope at least 18 inches above the knot and in the bight. The knot is important evidence.
  - ❖ If the rope is over a limb or a beam, do not pull it down. Cut the victim down, if necessary, but do not pull the remaining rope down.

## Transporting Handcuffed Patients

With the advent of BLS transport in the county it is more likely that law enforcement will be asking us to transport a patient who has been restrained but is still in need of an evaluation.

**Decision to transport should be based on patient care needs.**

**Decision to transport with handcuffs should be based on patient care needs, security requirements and risk assessment.** This decision should be reached through consultation with law enforcement (Would another means of restraint allow for better treatment and still address safety issues?)

**Once the decision to transport with handcuffs has been made an officer needs to provide escort.** Officer should be in the ambulance with the patient. If that is not possible they may provide escort by following directly behind the ambulance. Do not leave the scene with the patient until officer is also ready to follow.

## Probable Dead on Arrival (D.O.A.)

EMT/FR Skill

*This protocol should be used in conjunction with the Washington State Department of Health Basic Life Support Field Protocols for "EMT-B," or the "First Responder Trained Personnel," **as well as the Washington State Department of Health "EMS- No CPR Guidelines" and the Washington State Department of Health/Washington State Medical Association, "Physician Orders for Life-Sustaining Treatment (POLST)"**.*

**Purpose:** To provide Basic Life Support providers with guidelines to aid in identifying the D.O.A. patient, as well as possible scene management concerns.

**Application:** D.O.A. patients are divided into two general categories:

- A. Obvious death, i.e. non-recent death and/or severe injuries obviously incompatible with life such as,
  1. Patient is cold and stiff while in a warm environment.
  2. Decomposition.
  3. Rigor Mortis (*A stiffening of the body after death*).
  4. Lividity (*A discoloration in the dependent portion of a deceased's body, described as dark bluish or blackish in color*).
  5. Decapitation or severe head trauma with large parts of the skull and brain missing.
  6. Incineration.
  7. Evisceration of the heart, brain, or liver.
  8. Underwater submersion for 2 or more hours (consider extending 2 hour time if water temperature near freezing).
- B. Expected deaths (*refer to WA. State EMS No-CPR & POLST guidelines*).
  1. Terminal illness.
  2. Do not resuscitate orders (*DNR or POLST Orders*).

**Procedure:** When dispatched to a possible D.O.A. personnel should respond to the scene and:

- A. Confirm that the patient is pulseless, apneic, has no signs of life, and meets at least one of the above criteria.

**If patient has any signs of life or does not meet the above criteria initiate appropriate resuscitative or care measures and an Advance Life Support response.**

- B. Provide supportive care for family, and/or bystanders as needed to possibly include, but not limited to support officer response.

- C. Make appropriate contacts to facilitate deceased patient disposition, i.e.,
  1. Non Hospice patient outside of a health care facility;

*In Whatcom county the Law Enforcement agency with jurisdiction at the scene works as the coroners agent and is the appropriate agency to make contact with and release the scene and deceased patient to;*

2. Patient under hospice care;

*Hospice is an organization dedicated to relieving pain and suffering of the terminally ill patient. Generally EMS is not activated when a patient under the care of hospice dies. If you do find yourself at the scene of a deceased patient that was under hospice care, hospice should be contacted and will usually respond to the scene to assist. The phone number is 733-5877 and first contact should be with the nurse on call. If no contact is made within 20 mins then recall and ask for the administrator on call. If both of these fail to get a response then the above law enforcement agency may be contacted to assist.*

3. Patient in a health care facility, including "adult home health care facilities;"

*Deaths of terminally ill patients at a health care facility are generally considered an attended death and usually do not require a law enforcement response. However the facilities ability to handle these situations varies greatly. Sometimes contact with the on call, or chief administrator, can facilitate an acceptable solution. If no acceptable plan can be arrived at, or patient was not terminally ill, or the death seems suspicious in any way then the above mentioned law enforcement agency should be contacted.*

**Other considerations:** For EMS responders the scene of a death can have feelings of failure, inadequacy, and guilt associated with them. The switch from aggressive patient care to that of a sometimes-reluctant "Grief Counselor" can be difficult to make. Failure to recognize the need to "change gears" or recognize the emotions associated with death and dying can have long lasting psychological effects on families of the deceased as well as the responders.

Consider:

- A. Once a patient is deemed dead, you gain a new set of patients: "the grieving family."
- B. What is the right way to grieve? (Don't be judgmental about how different cultures and families express grief).
- C. CISM may be important for the responders.