



Patient Care Guidelines 2014-2015

This document is intended for use at all ski resorts of The Summit at Snoqualmie.

The intent of these guidelines is to enhance coordination amongst and between public service agencies and medical providers at all levels of certification and licensure at The Summit at Snoqualmie and King County EMS. More detailed information and specific treatment measures are available in the source material referenced below. Topics have been selected based on relevance to the winter environment, time and distance from urban centers, local terrain constraints, adverse weather, and potential need for detailed coordination with EMS agencies and receiving hospitals and staff. The reference documents used are indicated below.

These guidelines intentionally cover a very broad range of skills and formal disciplines. In reading and using them, all practitioners must be aware of their individual level of certification, training, licensure, liability, and in particular their individual scope of practice. All practitioners should provide patient care and interventions at their personally appropriate and context-specific level of licensure, certification, and scope of practice.

All practitioners regardless of training, licensure, experience, or certification, are strongly reminded that the default mode of care is rapid and efficient transport of critically injured and/or sick patients to definitive care. These guidelines are not intended, nor should they be interpreted as such, to change or circumvent this basic and important principle. Interventions should be undertaken only when such action, in the judgment of the practitioner, is required in order to preserve life or limb, facilitate extrication and injury management, or decrease the chance of temporary or permanent disability. However, as with all medical practice, use of these guidelines should not preclude the appropriate application of sound medical judgment...or indeed common sense.

¹ Wilderness Medical Society Practice Guidelines, Fifth Edition, 2006

² Bellevue Fire Dept Medic One Program Paramedic Handbook, 2010

³ King County EMS Criteria Based Dispatching Guidelines, 2010

⁴ Outdoor Emergency Care / National Ski Patrol; ed. McNamara, Johe, & Endly, 5th Edition, 2011

⁵ Seattle and King County EMT Patient Care Protocols, 2013

⁶ Guidelines for CPR and ECC, American Heart Association, 2010

⁷ CPR AED for Professional Rescuers, American Red Cross, 2010

⁸ King County Paramedic Pocket Guide, 2012

⁹ Long Spine Board Immobilization Guidelines: Seattle and King County, 2015

These guidelines are offered to the members of the Summit at Snoqualmie Ski Patrol with thanks and admiration for your dedication and tireless efforts in the emergency medical care of the Snoqualmie Pass community.

With our very best regards,

Geoffrey Ferguson MD

Al Krouse MD

Lt. Paul Davison MICP

Robert Gibson EMT

Note: Sections in italics apply specifically to Summit at Snoqualmie and are not taken directly from one of the above reference sources.

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ALS INDICATORS FOR ALL PATIENTS ⁵

This summary of ALS transport indicators is offered here as a convenient condition-specific guide to information that should be obtained PRIOR to your call to 911. During this call, you should use this detailed information in conjunction with your patient assessment and mechanism of injury / nature of illness to collaboratively agree upon the most appropriate transport modality. More detailed information is included in the subsequent individual sections of this guidelines document.

The following list is offered as a summary guide and is not comprehensive. Nor does it take into account your IOS or the MOI.

Abdominal Pain

- Discomfort or pain or unusual sensations between the navel and jaw if the patient is > or = to 40 y/o and/or has cardiac history
- Severe unremitting abdominal pain

Breathing

- Respirations >30 min
- Failure to respond to repeated inhalers
- Asthma attack with history of previous intubation
- Audible wheezing not improved with inhaler
- Abnormal respiratory patterns
- Respiratory related with patient in the tripod position

Burns

- Burns with possible airway involvement
- Burns with associated injuries: electrical shock, fracture, airway
- 2nd or 3rd degree burns to face/head
- 2nd or 3rd degree burns >20% of body

Cardiac

- Suspected ACS S

CVA

- Progression of stroke symptoms

Diabetic

- Diabetic that is unable to swallow
- Diabetic with rapid respirations
- Diabetic that fails to respond to oral glucose

- Suspected ketoacidosis

Hypothermia

- Temperature <95 degrees oral or tympanic
- Hypothermia with significant co-morbidity (e.g. elderly, illness, circumstances, trauma, alcohol, drugs)

LOC

- GCS < or = 12
- Hypoglycemia with decreased LOC
- Abnormal behavior with unstable vitals
- Abnormal behavior associated with possible drug or alcohol overdose

Pulse / BP

- Hypotension (systolic <90 with appropriate clinical settings)
- Signs of shock: pulse generally >120/ minute, BP <90
- Positive posturals (decrease in systolic BP >20 or increase in pulse >20)
- Sustained tachycardia (generally >120/ minute in appropriate clinical setting)
- Systolic >200 or diastolic >110 with associated symptoms
- Pregnancy with systolic <90 or >140
- Hypotension and severe bradycardia

OB/GYN

- Female with severe unremitting pelvic pain
- Excessive vaginal bleeding

- Possible ectopic pregnancy
- Dispatched to birthing center/midwife
- Pregnancy complications: placenta previa, abruptio placenta, diabetes, multiple birth, breech or limb presentation, prolapsed cord, shoulder dystocia, uncontrolled postpartum hemorrhage
- Imminent birth
- Pregnancy 3rd trimester with abdominal trauma
- Pregnancy with significant MOI.

Other

- Use of epi pen by EMT or healthcare professional
- Suspected meningitis

Sepsis

- Decreased LOC
- Respiratory distress
- Respirations greater or RR > 30 per minute
- Signs and symptoms of shock

Seizure

- Multiple seizures
- Single seizure >5 minutes or >15 minutes postictal with no LOC improvement
- Pregnant female
- Severe headache
- Associated with trauma
- Associated with drugs or alcohol Associated with hypoglycemia

Trauma

- Falls >2 times the body height
- Thrown >10-15 feet

- Penetrating injury to the head, eyes or box
- Pelvic fx, bilateral femur fx, or multisystem fx

- Femur fx with excessive swelling
- Open fx except hands and feet
- Severe pain

- Any underwater rescue
- Paresis and or paresthesia due to trauma

[Quick Links](#)

SICK / NOT SICK ^{5,6}

Note: This section presents highlights from the 2010 King County EMS course "SICK-NOT SICK"

SICK — Someone who appears physiologically unstable as indicated by clinical indicators: inadequate respirations, weak pulse, altered mental status, poor skin signs or an inappropriate body position. Other terms that mean SICK include critical, urgent or unstable.

NOT SICK — Someone who appears physiologically stable as indicated by adequate respirations, pulse, mental status, skin signs and an appropriate body position. Other terms that mean NOT SICK include non-critical, non-urgent or stable. NOT SICK does not mean not ill or injured...only that the condition does not appear life threatening at the current moment.

The SICK/NOT SICK approach to rapid patient assessment has become a mainstay in determining the physiologic status of a patient in Seattle/King County. Whether it is medical or trauma, adult or pediatric, SICK/NOT SICK is the tool of choice for rapid patient assessment and appropriate patient care.

The clinical indicators used in the adult SICK/ NOT SICK approach provide clarity and offer clear and CONCISE indicators for determining a patient's physiologic stability. Often, these indicators are observable from across the room without even touching the patient. Additional considerations that need to be incorporated into your SICK/NOT SICK decision- process include: mechanism of injury (MOI), nature of illness (NOI) and index of suspicion (IOS). These CONSIDERATIONS will help you in determining SICK/NOT SICK and may alone determine into which category the patient is placed.

Adult SICK/NOT SICK Clinical Indicators:

Chief complaint and MOI/NOI/IOS

Respirations

Pulse (circulation)

Mental status

Skin signs (color, moisture, temperature)

Body position/obvious trauma

[Quick Links](#)

Airway and oxygenation ^{4,5,7}

A. Use of airway adjuncts (oropharyngeal airway and bag-valve mask) should be reserved for:

- Unconscious patients requiring airway protection when jaw thrust is ineffective or is not possible or practical
- Airway secretions or debris interfere with adequate ventilation
- Unconscious patients requiring assisted ventilation
- Inadequate respiratory rate or depth

C. Nasopharyngeal airway: this device is not approved for use in King County.

B. Oropharyngeal airway, Suctioning, and Bag-Valve Mask ^{4,5}

OROPHARYNGEAL (OP) AIRWAY

An oropharyngeal airway rests in the patient's oropharynx, lifting the tongue away from the back of the throat preventing it from occluding the airway. The OP airway is used only on unconscious patients and generally those without respirations.

Do not use this device if a patient gags when inserted. Use of an airway on a patient with a gag reflex may cause retching, vomiting, or spasm of the vocal cords.

To size an oropharyngeal airway:

Choose correct size by measuring from the corner of the mouth to the ear lobe or from the chin to the angle of the jaw.

In infants and children, insert the airway tip down or sideways along with a tongue blade. Rotate down when you are halfway in the mouth or approaching the curve on the tongue.

An oropharyngeal (OP) airway is not necessary if ventilation via BVM is easily accomplished.

SUCTIONING

The Yankauer suction tip is preferred for most suctioning. If the holes on the Yankauer get plugged repeatedly, remove the tip and use larger bore tubing.

To suction with a Yankauer tip:

Measure the same as for an oropharyngeal airway—approximately from the corner of the mouth to the ear lobe.

Do not suction while inserting; suction only after the Yankauer (or similar device) is in place and as you withdraw.

Suction for no more than 15 seconds at a time.

In rare cases, copious vomiting that threatens the airway may require a longer period of suctioning.

Oxygenate the patient well before and after suctioning.

BAG-VALVE MASK

Successful ventilation with a BVM requires a good seal between the mask and the patient's face and maintaining an open airway.

Correct ventilation generates only modest chest rise.

To properly place a BVM:

Choose appropriate size for the patient.

Place the apex of the mask on the bridge of the nose (between the eyebrows).

Settle the base of the mask between the lower lip and the prominence of the chin.

TECHNIQUE

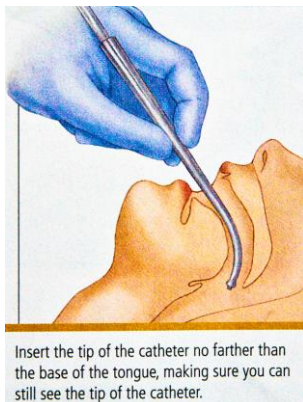
Kneel with a knee on each side of the patient's head.

Hold the mask firmly in position by placing the heel of the hand on top of the mask, extending the fingers and thumb forward forming a "C", and grasping the lower jaw with the middle two or three fingers.

Squeeze the bag to ventilate.

If necessary, a second EMT may be needed to secure seal and assist with bagging.

Each ventilation should take one second and achieve chest rise.



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D. Oxygenation

- Conscious patient without respiratory distress
 - Obtain SpO2 reading, only administer oxygen if below 95%.
 - Begin with 2 liters per minute via nasal cannula as history is obtained.
 - If no contraindications, you may increase to 4 liters per minute.

- Conscious patient with respiratory distress
 - Increase oxygen delivery according to the patient's condition moving from nasal cannula to non-rebreathing mask.
 - Use respiratory rate, effort, exchange, ease of speaking, skin signs, and level of consciousness as a guide.
 - When using a non-rebreathing mask, remember to use a liter flow that is high enough to keep the bag inflated at least 1/3 full with the patient's deepest inspiration.

- Unconscious patient with sufficient respiratory effort
 - Oxygen delivery may range from low-flow with a nasal cannula to high-flow with a non-rebreathing mask.
 - Patient's level of consciousness and vital signs (especially respiratory rate and effort), color, and nature of illness should determine oxygen flow level.
 - Continually evaluate respiratory rate and effort and do not hesitate to assist respirations if necessary.

- Unconscious patient with insufficient or no respiratory effort
 - Ventilate patient or assist ventilations with a BVM and high flow oxygen.
 - If the patient resists the attempts to ventilate, try to time breaths with the patient's by compressing the bag as the patient inhales.

E. Oxygen delivery devices ^{4,5}

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Indications for use:

1. Pulse Oximetry less than 95%
2. Conscious patients with respiratory distress
3. Head injury with any neurological signs or symptoms
4. Suspected or confirmed spinal cord injury
5. Unresponsive patient
6. Shock from any cause
7. Cyanosis
8. Smoke inhalation
9. Carbon monoxide poisoning
10. Ongoing cardiac arrest

Device and flow rate selection:

As a general rule, use enough oxygen to achieve the desired clinical effect. If the patient is exhibiting further signs and symptoms of respiratory distress or has not responded as you would expect, increase the

flow rate and/or move up to a nonrebreather mask. If oxygenation and ventilation are still not effective with a nonrebreather at 15 LPM, then move on to assisted ventilations using a bag-valve mask with high flow oxygen.



Nasal Cannula: flow rates (LPM) and O₂ percentage ⁴

2 LPM = 28%
4 LPM = 36%
6 LPM = 44%



Nonrebreather mask: flow rates (LPM) and O₂ percentage ⁴

10 LPM = 80%
12 LPM = 84%
15 LPM = 90%

* Bag should be inflated to at least 1/3 full with the patient's deepest inspiration. ⁵



“Blow-by”

For an infant or young child with mild to moderate respiratory distress consider the “blow-by” technique. Hold the end of a supply tube or nonrebreather mask approximately two inches away from the patient's face. Another method is supply “blow-by” is with a paper cup. This can be done by pushing a supply tube through the bottom of the cup. Set the flow rate to 4-6 liters per minute. ⁵

F. Intubation

Patients requiring endotracheal intubation must be adequately manually ventilated with bag valve mask and high flow oxygen until suitably equipped and qualified ALS providers can secure the airway and transport safely to a definitive care facility. The preferred technique is to perform 2-person BVM ventilation as described and illustrated above.

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SPECIAL NOTE: COPD (emphysema, bronchitis, asthma) ⁵

The physiology of a person with COPD differs from that of a healthy person in that the primary stimulus to breathe comes from a decrease of oxygen in the blood rather than an increase in carbon dioxide. Providing the COPD patient with high concentrations of oxygen could theoretically depress their respiratory drive.

Therefore, it is advisable to provide COPD patients with lower levels of oxygen initially, as long as they are not in severe respiratory distress. Two liters per minute by nasal cannula is usually sufficient in this situation. If a patient with COPD presents in respiratory distress and does not improve with low levels of oxygen, increase oxygen up to four (4) liters per minute.

A COPD patient whose respiratory drive is diminished due to excessive oxygen may present with increasing lethargy, confusion, and decreasing respiratory rate and effort. If this occurs, be prepared to assist ventilations.

If a COPD patient becomes unresponsive and/or stops breathing, ventilate via BVM with high flow oxygen.

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BLEEDING CONTROL ^{4,5,7}

To stop external bleeding: ^{5,7}

- Apply direct pressure on the open wound with sterile gauze or clean material.
- Apply additional pressure if bleeding continues. A pressure dressing can be used to apply direct pressure. If blood soaks through the dressings, add new dressings— do not remove the old dressings.
- If not contraindicated by the injury, elevate the bleeding extremity above the level of the heart.
- If bleeding is uncontrolled by direct pressure and elevation, apply pressure at the appropriate pressure point. Hold pressure only as long as necessary to control bleeding. Reapply pressure if bleeding recurs. If pressure is held for a long period of time, tissue damage can result.
- A “pressure device” may be used for control of severe, uncontrolled bleeding when all other methods of bleeding control have failed. When necessary, an oversized blood pressure cuff may be used. Inflate it no more than is necessary to stop bleeding.
- Once stopped, you may need to immobilize the extremity and apply cold packs.

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Tourniquet use: ^{4,7}

“The use of tourniquets to control bleeding was once highly controversial but in recent years has gained greater acceptance for use in severe bleeding in an extremity. An approved manufactured tourniquet is now considered an effective method for controlling bleeding and completely stops blood flow distal to the area of application. **These devices are applied only when hemorrhaging from an extremity cannot be controlled by other methods.**” ^{4,7}

Reference 4 discusses three circumstances in which the use of tourniquets may be considered:

- “... a major artery is squirting blood and the application of several pressure dressings fails to stop the bleeding...”
- “... extensive bleeding occurs in an extremity that is significantly disrupted without clean lacerations making clotting and constriction at the site less effective and bleeding unlikely to be controlled.”
- “The use of the tourniquet allow you to stem the bleeding from that extremity while you are dealing with other higher priority life saving issues.”

Cautions: ⁴

- “Never use wire, rope extension cords, or other thin materials to create a tourniquet because these materials can concentrate the pressure in too narrow an area and cause serious local tissue damage.”
- “Write the time the tourniquet was applied on a piece of tape and stick it to the patient’s forehead.”

Summary: Tourniquet guidelines in extremity bleeding

Initial approach:

- *Direct pressure*
- *Compression dressing with continued pressure over bleeding site*

If bleeding is still not controlled, use a tourniquet:

- *About 2 inches above the bleeding site*
- *About 2 inches away from joints*
- *Spread out the force using a 1-2 inch wide band of suitable material*
- *A commercial tourniquet is preferred*
- *Use a windlass for tension*
- *Tighten just enough to control the bleeding*
- *Write the time applied on a piece of tape affixed to the patient’s forehead*

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Acute Coronary Syndrome (ACS) ⁵

Note: The below section is termed “Code ACS” in the King County EMS system.

Acute coronary syndrome (ACS) requires rapid assessment by *OEC techs*, EMTs and paramedics and expedited transport to a cath-ready hospital.

Evaluation for ACS

1. Patient exhibits any of the following signs or symptoms:

- a. Uncomfortable pressure, fullness, squeezing or pain in the center of the chest that lasts more than a few minutes, or goes away and comes back.
- b. Pain that spreads to the shoulders, neck, or arms.
- c. Chest discomfort with lightheadedness, fainting, sweating, nausea, or shortness of breath.

-OR-

2. Patient exhibits any of the **two** following signs or symptoms, when ACS is suspected:

- a. 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 palpitation, or that is in the “wrong” location (such as the upper abdomen).
- b. Unexplained nausea (without vomiting) or lightheadedness (not vertigo) without chest pain.
- c. Shortness of breath and difficulty breathing (without chest pain).
- d. Unexplained anxiety, weakness, or fatigue.

e. Palpitations, cold sweat ,or paleness.

Administer aspirin. Refer to "[Aspirin for Acute Coronary Syndrome](#)" in the following section

Additional procedures:

1. If the patient has his/her own nitroglycerin and meets the criteria* for administration, do not delay assisting with nitroglycerin administration
2. Request paramedics if not already dispatched
3. Record your actions, including the dosage and time of administration
4. Record the time of onset of symptoms. The time of onset should be the time that the symptoms began.
5. Consider one 325 mg (or four 81 mg) aspirin (*not enteric coated*) tablet administration after consultation with medical control and if no contraindications are present. Contraindications include:
 - a. Patient is allergic to aspirin
 - b. If aspirin has already been taken within 60 minutes of this event
 - c. Blood pressure is greater than 180/110 (systolic or diastolic)
 - d. Active or suspected gastrointestinal bleeding

** These conditions must be met before you may assist with nitroglycerin administration. Summit OEC techs are permitted to assist patients with their own nitroglycerin and/or are also permitted to administer aspirin in ACS after contacting medical control.*

- *Complaint similar to normally experienced angina or cardiac pain that they take their Nitroglycerin for.*
- *BP greater than 100 mmHg systolic*
- *No more than three doses total (5 minutes apart) with vital signs between each dose.*
- *Must be patient's prescription*
- *Patient must be sitting or lying down*
- *No Viagra or Levitra within past 24 hours or Cialis within past 48 hours*

Aspirin for Acute Coronary Syndrome (ACS)

EMTs are authorized to administer 325mg Aspirin for patients with ACS. This policy is effective January 1, 2009.

INDICATIONS FOR USE

- 1) Patient exhibits any of the following signs or symptoms:
 - a) Uncomfortable pressure, fullness, squeezing or pain in the center of the chest that lasts more than a few minutes, or goes away and comes back.
 - b) Pain that spreads to the shoulders, neck, or arms.
 - c) Chest discomfort with lightheadedness, fainting, sweating, nausea, or shortness of breath.

- OR -

- 2) Patient exhibits any of the **two** following signs or symptoms, when ACS is suspected:
 - a) 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).
 - b) Unexplained nausea (without vomiting) or lightheadedness (not vertigo) without chest pain.
 - c) Shortness of breath and difficulty breathing (without chest pain).
 - d) Unexplained anxiety, weakness, or fatigue.
 - e) Palpitations, cold sweat, or paleness.

CONTRAINDICATIONS FOR USE

- 1) Patient is allergic to aspirin or ibuprofen (Motrin®, Advil®).
- 2) If they have just taken 325 mg aspirin for this event, do not administer additional aspirin.

PROCEDURE:

- 1) Be sure that the patient is alert and responsive.
- 2) Have the patient swallow one 325 mg aspirin tablet. (DO NOT USE ENTERIC-COATED ASPIRIN)
- 3) If the patient has his/her own nitroglycerin and meets the criteria for administration, do not delay assisting with nitroglycerin administration.
- 4) Request paramedics if not already dispatched.
- 5) Record your actions, including the dosage and the time of administration.

Reviewed April 2011
Mickey Eisenberg, MD
King County Medical Program Director

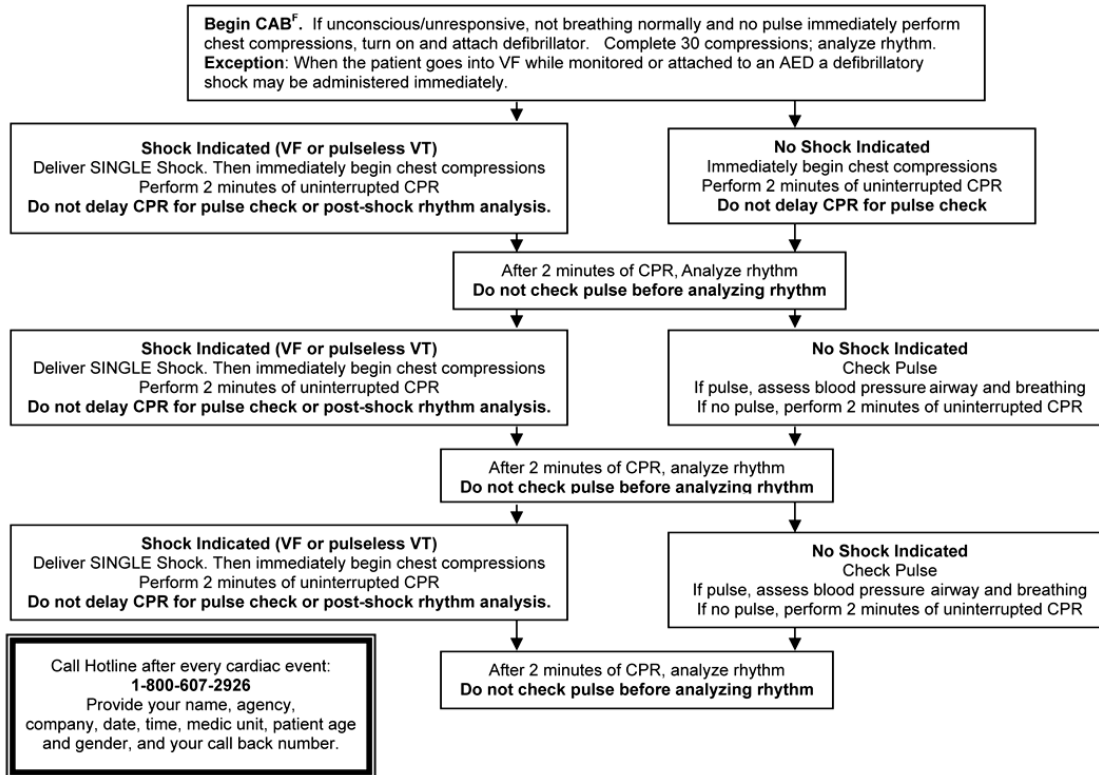
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Cardiac Arrest within the ski area ^{5,6,9}

KING COUNTY EMERGENCY MEDICAL SERVICES PROTOCOL FOR CARDIAC ARREST IN ADULTS AND CHILDREN > 8 YRS OLD^A EFFECTIVE JANUARY 1, 2011

APPROACH TO CARDIAC ARREST FOR KING COUNTY EMS AGENCIES

In the patient who is unconscious/unresponsive, not breathing normally and in whom no pulse is detected,^B immediately perform chest compressions,^C while turning on and attach defibrillator (AED). Once AED is applied, give verbal report and count compressions. At completion of 30 compressions, clear patient, analyze rhythm, and shock if indicated.^D Resume chest compressions and continue for ~2 minutes before next rhythm analysis.^E Always complete any started cycle of 30 compressions prior to any rhythm analysis and always resume chest compressions immediately after rhythm analysis/shock. Do not create an added pause by ventilating (or checking pulse) immediately before any rhythm analysis.^D

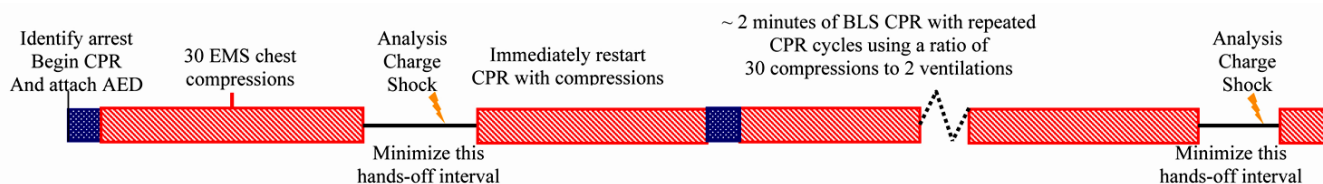


- A. If age is not known, the presence of secondary sexual characteristics (development of axillary hair in males and development of breast tissue in females) define a child who should be treated as an "adult". In children ≤ 8 years (absence of secondary sexual characteristics), perform continuous CPR at a ratio of 15:2 until arrival of paramedics.
- B. If no pulse felt within 10 seconds, begin chest compressions. Count out loud for chest compressions.
- C. Each CPR cycle (including the very first) begins with chest compressions (at 100/min, ≥ 2 inches or 1/3 of chest wall diameter, full recoil). Except in obvious cases of asphyxia (e.g. known drowning victim), opening the airway and ventilation (2 breaths) are not performed until completion of the first 30 chest compressions or after rhythm analysis.
- D. To minimize the hands off (no chest compressions) interval before a rhythm analysis/shock, complete 30 chest compressions, but do not create an added pause by ventilating (or checking pulse) just before rhythm analysis.
- E. 2 minutes in this protocol refers to 2 minutes or slightly longer depending on when 30 compressions before a rhythm analysis are complete. During 2 minute CPR cycles, give 2 breaths (each over 1 sec) after every 30 compressions. Periods of CPR should not be interrupted except in cases of need to manage airway (emesis, etc.)
- F. CAB refers to "Chest compressions followed by Airway followed by Breathing" interventions, and has displaced "ABC" in 2010.

Additional Points:

- This protocol applies to non-intubated patients.
- For manual departments, check pulse only if organized rhythm. Start CPR if no pulse or asystole rhythm.
- Any patient found unconscious, unresponsive with a systolic BP <60 should have CPR initiated. If a pulse is detected during resuscitation but systolic blood pressure < 60, resume CPR.
- If at anytime 3 consecutive "no shocks" are advised and there is no pulse, continue CPR without interruption until medics arrive.
- Cardiac arrest protocols may change. Always follow current agency protocols.

Graphical summary of the CPR/AED sequence:



SPECIAL NOTE: Hypothermic Cardiac Arrest ⁵

If no pulse is detected after one minute, begin CPR and apply AED. If breathing, assume there is cerebral perfusion. Therefore, “NO CPR.” If AED states “Shock Indicated,” follow cardiac arrest protocol (above).

[Quick Links](#)

Basic Life Support in Cardiac Arrest (2010 update) ⁶

Change in CPR Sequence: C-A-B Rather Than A-B-C

2010 (New): A change in the 2010 AHA Guidelines for CPR and ECC is to recommend the initiation of chest compressions before ventilations.

2005 (Old): The sequence of adult CPR began with opening of the airway, checking for normal breathing, and then delivering 2 rescue breaths followed by cycles of 30 chest compressions and 2 breaths.

Why: Although no published human or animal evidence demonstrates that starting CPR with 30 compressions rather than 2 ventilations leads to improved outcome, chest compressions provide the blood flow, and studies of out-of-hospital adult cardiac arrest showed that survival was higher when bystanders provided chest compressions rather than no chest compressions. Animal data demonstrate that delays or interruptions in chest compressions reduce survival, so such delays and interruptions should be minimized throughout the entire resuscitation. Chest compressions can be started almost immediately, whereas positioning the head and achieving a seal for mouth-to-mouth or bag-mask rescue breathing all take time. The delay in initiation of compressions can be reduced if 2 rescuers are present: the first rescuer begins chest compressions, and the second rescuer opens the airway and is prepared to deliver breaths as soon as the first rescuer has completed the first set of 30 chest compressions. Whether 1 or more rescuers are present, initiation of CPR with chest compressions ensures that the victim receives this critical intervention early.

Elimination of “Look, Listen, and Feel for Breathing”

2010 (New): “Look, listen, and feel for breathing” was removed from the sequence for assessment of breathing after opening the airway. **The healthcare provider briefly checks for breathing when checking responsiveness to detect signs of cardiac arrest.** After delivery of 30 compressions, the lone rescuer opens the victim’s airway and delivers 2 breaths.

2005 (Old): “Look, listen, and feel for breathing” was used to assess breathing after the airway was opened.

Why: With the new chest compression–first sequence, CPR is performed if the adult victim is unresponsive and not breathing or not breathing normally (ie, not breathing or only gasping) and begins with compressions (C-A-B sequence). Therefore, breathing is briefly checked as part of a check for cardiac arrest. After the first set of chest compressions, the airway is opened and the rescuer delivers 2 breaths.

[Quick Links](#)

Delayed ALS-access CPR (when advanced care is > 1hr away)

1. Contraindications for beginning CPR⁴
 - The patient is in cardiac arrest caused by trauma
 - The patient is a drowning victim who has been immersed for more than an hour
 - The cardiac arrest was unwitnessed and the time of onset is unknown
 - The patient is hypothermic with an incompressible chest
 - The patient appears to be dead, based on rigor mortis (stiffening) or livor mortis (discoloration of the body parts next to the ground), lethal injuries, or a body core (rectal) temperature below 60 deg F (16 deg C).
 - Giving CPR would be hazardous to rescuers
2. Discontinuation of CPR in the Wilderness¹
 - Successful resuscitation
 - Rescuers are exhausted
 - Rescuers are placed in danger
 - Patient is turned over to ALS or definitive care
 - Patient does not respond (*has not had any response*) to prolonged (approximately 30 minutes) of resuscitative efforts
3. CPR in Hypothermia¹
 - If respirations are absent or ineffective, initiate rescue breathing immediately.
 - If there is evidence of organized cardiac activity by ECG, *Doppler ultrasound* or physical exam, do not institute CPR.
 - If CPR is commenced, it must be continued without interruption until the patient is in the ED.

Discussion:

“A cold, rigid, apparently pulseless and breathless patient is not necessarily a dead patient. If you fail to find respiration, initiate rescue breathing immediately. The patient needs oxygen, and there is no danger to the patient from rescue breathing. A cold patient with no detectable pulse should not necessarily be given chest compressions. Apparent pulselessness may be caused by hypothermia and the resulting tissue rigidity in combination with a very slow heart rate.

Chest compressions may trigger ventricular fibrillation and will not be effective in someone dead from the cold. Rescue breathing, preferably with supplemental oxygen, and immediate gentle evacuation are indicated. Do not use intermittent chest compressions as this technique may induce ventricular fibrillation, further compromising the circulation. If it is decided to initiate chest compressions, this technique must be continued by rescuers without interruption until the victim arrives at the Emergency Department.”¹

2010 King County EMS protocols mandate institution of the Cardiac Arrest Algorithm (see above) in hypothermic cardiac arrest if there is no pulse detectable after palpating for one minute and there is no breathing or other signs of life. The above discussion from the Wilderness Medical Society assumes no

diagnostic equipment such as Doppler ultrasound or ECG is available and qualified personnel are not available. If CPR is initiated in the field, refer to “Discontinuation of CPR in the Wilderness” as above.

[Quick Links](#)

CPR in Avalanche Victims ^{1,10}

Triage avalanche victims without vital signs at the scene according to the criteria of the International Commission for Alpine Rescue (ICAR) Medical Commission: ¹

- a. If there is no pulse and core temperature is 90 deg F or above or burial is less than thirty minutes, continue CPR for *thirty* minutes. If successful with CPR, transfer to a hospital with an intensive care unit. If unsuccessful, stop CPR. *Note: 30 minutes substituted for 20 minutes to match local protocol.*
- b. If the core temperature is below 90 deg F or burial is over thirty minutes, treatment depends upon the presence of an air pocket (any space around the nose or mouth, no matter how small):
 - If an air pocket is present, continue CPR and transfer to a hospital with cardiopulmonary bypass capability
 - If no air pocket is present, stop CPR
 - If an air pocket is possible, but not certain, continue CPR and transfer to a hospital with cardiopulmonary bypass capability or to a closer hospital where potassium can be measured. Patients with serum potassium greater than 10 mmol/L have no chance of survival and are declared dead by asphyxiation.

[Quick Links](#)

Pain Management

*Pain relief is an elemental facet of patient care and wellbeing. Adverse effects of uncontrolled pain include hypertension, cardiac dysrhythmias, anxiety, inadequate ventilation due to painful breathing, and increased difficulty of effective immobilization of the injured parts. Adequate pain control is associated with greater patient and family satisfaction, improved perception of quality of care, and can often significantly facilitate management of musculoskeletal injuries. **However, administration of analgesics of any class must not unreasonably or significantly delay transport to definitive care.***

Traditionally, narcotic analgesics have been administered when required for pre-hospital pain management. This is a time honored and acceptable practice if, in the judgment of the physician, such medication is in the patient’s best interest. However, current King County EMS transport protocols require simultaneous dispatch of ALS and BLS resources to the scene if narcotic analgesics are administered and EMS transport is requested. If in the judgment of the responding medics the patient does not require ALS interventions or monitoring, then the medics are authorized to down-grade the response to BLS transport.

Alternatively, the physician or licensed independent practitioner may accompany the patient in a suitably equipped and staffed BLS unit until transfer of the patient to either a responding ALS unit or the receiving facility. On going patient monitoring and possible additional medications can be administered en route if required.

Ketorolac may be considered as an alternative to narcotic analgesics, but the physician should be aware that subsequent transportation by private vehicle is NOT recommended, and not all transporting agencies or receiving hospitals will be comfortable with this approach. With either Ketorolac or narcotic analgesics, prospective consultation with the receiving hospital physician and direct communication with the transporting agency is strongly recommended.

1% lidocaine without epinephrine will be available in the secure medication safes this season. Its intended use is for intra-articular injection for analgesia in shoulder dislocation reduction and for hematoma block in long bone fracture. Use of lidocaine for pain management associated with long bone fracture and shoulder relocation is considered an acceptable technique for analgesia, providing that such use does not unduly delay transport to definitive care. At physician discretion, oral acetaminophen or ibuprofen may also be dispensed prior to transport, assuming there are no contraindications. Even though these are OTC medications, they will be in the secure locked box. Thorough documentation is of course required.

Selected Transport Issues

All patients on whom ALS treatment has been initiated must be accompanied by the attending practitioner or transported by an appropriate ALS transport agency to an approved medical treatment facility. If the method of patient transportation is not ALS, the involved provider must accompany the patient until handoff to another qualified ALS unit or emergency department staff. “Downgrading” an ALS response to a BLS response is possible, but communication and/or consultation with the receiving hospital and/or transporting agency is strongly recommended in this event. Please note that administering pain medication to a BLS patient will automatically convert that response to ALS. See [Pain Management](#) for more details.

If you want or need to talk to the individual medic unit responding to your patient, first determine which ALS unit is responding. Then refer to [Phone Numbers](#) section for the cell phone number of that rig. If in doubt regarding which EMS units are responding and you need to talk with them, contact 911 and request that the responding unit call the aid room.

[Quick Links](#)

Communication with “Medical Control”

For a major event that is evolving on the hill with clear need for EMS transport, early telephone contact with the 911 dispatcher or the actual responding EMS unit is appropriate and encouraged. Prior to contacting 911 or a responding EMS unit, the caller is strongly advised to aggressively gather the condition-specific information that will be needed to make a collaborative and educated transport decision. See the “Condition-Specific Transport Criteria” sections below for details.

Patrol physicians and OEC techs can contact the Overlake ER doc for consultation. The number is 425-688-5100. Identify yourself and ask for the trauma doc on duty. Providers can also contact the Harborview Trauma doc at 206-744-3074. Whenever possible, contact the specific hospital to which the

*patient will be transported. If a patrol doctor is caring for a patient who is going to be transported to a hospital, it is **strongly** advised that the patrol doctor contact either the ED charge nurse or ED physician at the receiving hospital.*

(Please see [Phone Numbers](#) section for additional phone contact information)

[Quick Links](#)

Guidelines for Helicopter Evacuation

“In King County, Airlift Northwest is the primary medical helicopter service. The use of medical helicopters may be considered when estimated ground transport times are likely to be excessive, due to traffic, *weather, road conditions, or distance*. Use of medical helicopters may be considered for any critical ill or injured patient requiring care at a facility outside of the local area when transport times are likely to be excessive. A medic unit must be dispatched anytime a medical helicopter is being considered. It is suggested that consultation with the responding medic unit take place prior to requesting a medical helicopter. Requests for helicopters are made through dispatch. Normally, there should only be one patient per helicopter. If two patients need to be flown, request a second helicopter.”⁵

Refer to “[ALS Indicators for All Patients](#)” for general guidelines in the selection of patients requiring urgent evacuation. The required procedure to decide if aeromedical transport is indicated is to have a direct conversation with the 911 dispatcher and/or the responding Medic unit via their cell phone (see “[Selected Transport Issues](#)” above).

When considering or requesting ALS transport or helicopter evacuation, the required procedure is to call 911, identify yourself (e.g. “This is <name and role> from the <fill in the blank>Ski Patrol. We have a medical emergency requiring urgent evacuation.”) You will be connected to a dispatcher who will discuss the case with you and dispatch appropriate units. Helicopter evacuation is obviously weather and terrain dependent. The pilot(s) and/or agency (King County Sheriff’s Office, military, Airlift NW) have the final authority to accept, decline, or abort the mission.

Use of a BLS ground unit to transport to a suitable helicopter rendezvous point may be the fastest option. In this case, the Patrol Physician or other qualified attendant should accompany the patient in the BLS unit until the ALS air or ground unit can accept the patient.

Primary and secondary air to ground radio communication frequencies should be established prior to aircraft arrival on scene. A staging area may be required as well. The Snoqualmie Pass Fire department will be the ground contact for Airlift Northwest and will dispatch resources to the landing zone to provide scene safety and assist in the event of a mishap.

[Quick Links](#)

Helicopter hoist evacuation

Helicopter hoist operations may be considered for expedited transport or extrication of a critically injured patient from a remote location or a situation requiring prolonged technical ground-based rescue with associated risk to the patient or rescuers. Airlift NW requires a flat landing zone and does not perform hoist operations, but the King County Sheriff's Office currently operates a hoist-capable and FAA certified rescue helicopter with an EMT air crew available for urgent patient extraction from remote locations or challenging terrain. For the 2012-2013 season, the King County Air Support Unit should be the first choice for air search, hoist-assisted helicopter evacuation, or field insertion of qualified personnel. Contact is via 911. King County SAR units will be dispatched to provide air to ground communication and coordination with EMS units.

Federal (military) hoist-capable helicopter support is currently very limited, but may be available in the event of a mass casualty incident or if local resources have been exhausted or are unavailable. Requests for such support is also via 911.

Ground-to-air communication with the King County Sheriff's helicopter (call sign "Guardian Two") will generally be coordinated via SPART ("Ski Patrol Rescue Team") members or other King County personnel.

[Quick Links](#)

Documentation and Communication

*Documentation of the patient's exam and treatment in the AID rooms must be done on the appropriate report forms supplied by the ski area. At an absolute minimum, verbal report should be given to the transporting BLS or ALS personnel by the attending staff. **Physician-to-physician communication with the receiving facility prior to ALS transport is strongly urged.***

Cold Water (also Snow) Submersion ^{1,3,5}

See also [NARSID](#) (Snow Immersion Suffocation)

A. General

For absent respirations and pulse, initiate CPR immediately and continue for at least 30 minutes.

Discussion: ¹

Near-drowning patients have occasionally been successfully resuscitated after prolonged (greater than 30 minutes) submersion in cold water (41 to 50 deg F), but not without Advanced Life Support intervention. Successful resuscitation and favorable outcome are associated with young age, clean water, cold water, short duration of immersion, and pulse present or returning on scene with rescue breathing.

B. ALS transport criteria:

- Any underwater rescue
- Altered LOC
- Respiratory Distress
- Labored breathing
- Systolic BP less than 90 mmHg
- Core temperature less than 95° F
- Significant co-morbidity (e.g. injury, intoxication)
- Cardiac or respiratory arrest

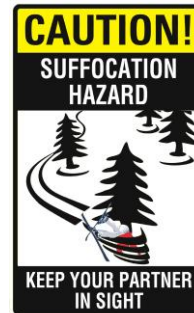
C. BLS transport criteria:

- Water-related accident including aspiration of water
- Other non-critical injuries with normal CNS functions and vital signs

[Quick Links](#)

SIS (*S*now *I*mmersion *S*uffocation)

(Previously termed NARSID)



- *Reports of persons buried in deep snow (tree well or open slope) are considered true emergencies and require immediate patrol response*
- *Rapid deployment of patrollers to the scene is paramount*
- *On scene witnesses should be advised to make themselves visible and be prepared to respond to searchers by voice or whistle*
- *If possible, advise the reporting party to **STAY ON SCENE**, attempt to uncover the patient's head, and maintain an open airway*
- *Associated equipment needs may include oxygen, suction devices, and extrication aids*
- *BLS and ALS care as per [Cold Water Submersion](#)*
- *Patients who require any form of on-scene resuscitation should be transported to definitive care*

Shock secondary to trauma requiring immediate volume replacement ²

A. General

- Employ necessary immediate first aid measure (e.g. control of hemorrhage)
- Establish one and when possible two or more large bore intravenous lines.
- Begin rapid infusion of two or more liters of LR using pressure infusion bags if possible. Titrate SBP to 90 mmHg [or to signs of good perfusion (e.g. normal mentation, skin warm and dry)], but not higher due to risk of worsened bleeding from increased tissue perfusion.
- *With concordant head injury, vigilant maintenance of systolic BP > 90mmHg and adequate oxygenation has been associated with improved long term outcomes (see below). Early consultation with 911 and the responding medic units is strongly suggested. Refer to "Selected Transport Issues" for Medic units direct cell phone numbers.*

B. Transport issues:

If an IV is infusing for volume replacement or medications, the patient must be transported by an ALS unit. If the line can be hep-locked, BLS transport may be sufficient, but direct communication with the transporting agency prior to transport is required.

[Quick Links](#)

Head and Neck injuries: 4,5

Patients with acute head injury and any of the following signs and symptoms should be referred to an appropriate hospital for further assessment of potential brain injury:

- Glasgow Coma Scale <15 at initial assessment
- Glasgow Coma Scale initially 15 and then decreasing over time
- Post-traumatic seizure (generalized or focal)
- Focal neurological signs
- Signs of a skull fracture (clear fluid from nose or ears, blood behind eardrum, palpable skull defect, bruising around eyes or behind ears)
- Any loss of consciousness
- Severe and persistent headache
- Repeated vomiting (two or more occasions)
- Post-traumatic (after the event) amnesia > 5 minutes
- Retrograde amnesia (before the event) > 30 minutes
- High risk mechanism of injury
- Bleeding disorder, whether drug-induced (e.g. Coumadin [warfarin], Plavix [clopidogrel], Pradaxa [dabigatran etexilate mesylate]) or otherwise

Glasgow Coma Scale

Eye Opening Response	<p>4 points: Spontaneous—open with blinking response at baseline</p> <p>3 points: Opens to verbal command, speech, or shout</p> <p>2 points: Opens to pain, not applied to face</p> <p>1 point: None</p>
Verbal Response	<p>5 points: Oriented</p> <p>4 points: Confused conversation, but able to answer questions</p> <p>3 points: Inappropriate responses, words discernible</p> <p>2 points: Incomprehensible speech</p> <p>1 point: None</p>
Motor Response	<p>6 points: Obeys commands for movement</p> <p>5 points: Purposeful movement to painful stimulus</p> <p>4 points: Withdraws from pain</p> <p>3 points: Spastic flexion of arms, wrists, and fingers. Hands held on chest</p> <p>2 points: Rigid extension of arms and legs. Head and neck arched backwards</p> <p>1 point: None</p>
<p>Score the BEST response for each category and add the points. The total is the Glasgow Coma Scale. The possible range is 3-15. Anything less than 15 is abnormal.</p>	

[Quick Links](#)

ALS indicators in Head and Neck injury: ⁵

- Compromised airway
- Abnormal respiratory patterns
- Major MOI
- GCS 12 or less
- Decreased LOC, unstable vital signs
- Paresis and/or paresthesias
- Evidence of injury to brain or spinal cord
- Significant alcohol or drug use

*Note: Vigilant pre-hospital maintenance of systolic BP >90mmHg * and adequate tissue oxygenation has been associated with improved long term outcomes following traumatic brain injury. ***

* A palpable radial pulse is a reasonable approximation of a systolic BP > 90 mmHg

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Orthopedic Injury

A. Dislocations ⁵

The 2010 King County EMS “Bluebook” offers the below regarding joint injury.

“Splint dislocations or other joint injuries in the position found. Exception: Loss of a distal pulse and neurological function and definitive care is delayed. In that case, attempt to straighten into anatomical position until the pulse returns, excessive pain is felt, or resistance is encountered.” ⁵

Shoulder Dislocation

Historically, the shoulder has been our most frequently encountered dislocation. If there is neurovascular compromise and clinically evident anterior dislocation and no creptius, it is reasonable for an experienced and qualified personnel to attempt relocation in an effort to avoid neurovascular sequelae. Additionally, pain relief is often immediate and significant once the shoulder has been relocated and greatly facilitates extrication, splinting, and transport. However, prolonged efforts that delay transport to definitive care should not be undertaken.*

At Summit at Snoqualmie, shoulder relocation may be considered an application of the principle of returning a traumatic deformity to anatomical position. The intent is to relieve pain and reduce the risk of neurological or vascular injury during transport to definitive care at a suitable medical facility. Additionally, in-field shoulder relocation may be considered appropriate if doing so will increase team safety and speed of extrication and evacuation from remote or physically challenging accident scenes.

Shoulder relocation may be undertaken by qualified personnel if the following criteria are met:*

- *The dislocation is anterior*
- ***There is no crepitus upon physical examination***
- *In the judgment of the physician, early relocation to an anatomically correct position will decrease the risk of neurovascular sequelae*
- *The patient is competent and has been informed of the potential risks and benefits and agrees to attempts at relocation*
- *The attempts will NOT unduly delay transport to definitive care*
- *Documentation includes physical findings, rationale for relocation, informed consent, and the destination medical facility for definitive care*



Traction-countertraction technique:

- *Controlled longitudinal traction with arm about 30 degrees abducted. Requires 2 rescuers or an anchor for countertraction*
- *May be performed on-scene if required (see above)*
- *Sling and swath are applied after reduction*
- *Pre and post reduction distal perfusion, motor and sensation function is clearly documented*
- *Physician-to-physician communication with the destination medical facility is included in the documentation*

* Qualified personnel: Licensed on-duty Summit at Snoqualmie advanced care providers who have appropriate training and experience in shoulder dislocation management. This is not considered an EMT or OEC level skill.

[Quick Links](#)

B. Long bone fracture ⁵

- Attempt to realign (open or closed) long bones that are angulated in the middle 1/3 then splint.
- CMS should be checked before and after every attempt at manipulation or splinting.
- Long-bone fractures, which occur in the proximal or distal 1/3, that may or may not involve a joint, may be realigned if compromise of distal circulation or nerve function is detected and definitive care is delayed.

C. Pelvic Fractures or Multiple Extremity Fractures ⁵

- These patients should be secured to a backboard which will serve as a general body splint for several sites
- Rapid packaging and transport of the unstable patient or patient with multiple fractures takes priority over definitive splinting at the scene.
- Stabilization of pelvic fracture with a compressive sheet may be considered:



Pelvic sheeting technique

- Fold sheet lengthwise into 8” to 14” width
- Place beneath patient; twist then wrap ends around patient, crossing over pelvic area
- Tie sheet with square knot to apply moderated side-to-side and front to back pressure
- Secure the ends to the backboard

D. ALS

Transport criteria ⁵

- Decreased/altered LOC
- Signs of symptoms of shock
- Excessive uncontrolled bleeding
- Pelvic fracture, bilateral femur fracture, or multi-system injury/fractures
- Femur fracture with excessive swelling
- Open fractures except for hands and feet
- High index of suspicion based on mechanism of injury

E. BLS transport criteria ⁵

- Single extremity fracture with stable vital signs
- Single joint injury with stable vital signs

[Quick Links](#)

Special Statement regarding “Posterior Sternoclavicular Joint Dislocation”

Although methods for urgent reduction of this injury in the presence of life threatening respiratory distress are described in OEC 5 ([reference 4](#)), these interventions by BLS providers are not approved at Summit at Snoqualmie. Patients presenting with this injury typically have suffered a high-energy mechanism of injury and should be considered SICK (refer to [Sick / Not Sick](#)). Treat for shock and hypoxia as required and transport urgently to definitive care.

Falls ⁵

(Note: Refer also to trauma sub-heading of “[ALS Indicators for All Patients](#)”)

A. ALS transport Criteria

- Unconscious or not breathing
- Decreased LOC, non-responsive to verbal or touch
- Respiratory distress
- Signs of shock: syncope or near syncope when sitting or standing
- Bilateral femur fracture
- Amputation / entrapment above finger/toes
- Trauma with paralysis
- Uncontrolled arterial bleeding

B. BLS transport criteria

- Falls associated with or preceded by:
 - Chest pain or discomfort
 - Dizziness
 - Headache
- Amputation/entrapment of fingers/toes
- Major laceration with controllable bleeding
- Extremity fracture, single femur fracture without other injuries, hip fracture/dislocation

[Quick Links](#)

Soft Tissue Injury 5 (including abdominal trauma)

A. General precautions ^{4,5}

- Anticipate emesis
- Serial vital signs
- Oxygen and IV fluids as indicated
- Control bleeding
- Maintain normal body temperature
- Large, easily removed foreign bodies and debris can be removed prior to bandaging. Deeply imbedded fragments or projectiles should be left in place and secured by the bandage.

B. ALS transport criteria:

- Significant head injury
- Signs and symptoms of shock
- Soft tissue injuries that might compromise the airway
- Excessive uncontrolled bleeding
- Altered LOC
- High index of suspicion based on mechanism of injury

C. BLS transport criteria

- Conscious and alert
- Stable vital signs
- Soft tissue injuries limited to the superficial layer of the skin
- Single digit amputations
- Soft tissue injuries with bleeding controlled by direct pressure and/or elevation

Special Instructions for OPEN Soft Tissue Injuries and Removal of Foreign Objects:

- Control bleeding with direct pressure on the area or upon pressure points. Use pressure dressings or pressure device (like a BP cuff) for severe, uncontrolled bleeding.
- Large, easily removed debris, such as glass, splinters, or gravel must be removed before bandaging.

[Quick Links](#)

ABDOMINAL COMPLAINTS ⁵

ALS transport criteria

- Signs and symptoms of shock which include:
 - Poor skin signs (pale, sweaty)
 - Sustained tachycardia
 - Hypotension (systolic BP less than 90 mmHg) with an appropriate clinical setting
 - Unstable vital signs
 - Positive postural changes
 - Evidence of ongoing bleeding
 - Severe unremitting pain

BLS transport criteria

- Abdominal complaint with stable cardiac and respiratory functions
- Stable vital signs

BLS Care

- Request paramedics if indicated
- Provide supplemental oxygen and/or ventilatory assistance as necessary
- Position of Comfort (Trendelenburg if hypotensive)
- Prepare to suction patient if vomiting estimate volume and describe character (color and consistency) of vomitus
- Reassure patient
- Monitor vital signs every five minutes

[Quick Links](#)

ALTERED LEVEL OF CONSCIOUSNESS ⁵

ALS transport criteria

- Decreased LOC
- Respiratory distress or airway compromise
- Signs and symptoms of shock which include:
 - Poor skin signs (pale, sweaty)
 - Sustained tachycardia
 - Hypotension (systolic BP less than 90 mmHg) with an appropriate clinical setting
 - Unstable vital signs
- Multiple seizures (status seizures)
- Single seizure greater than five (5) minutes or with greater than 15 minutes post-ictal with no improvement in LOC
- Cyanosis

- Hypoglycemia with decreased LOC
- Seizure in pregnant female Seizure with severe headache
- Seizure associated with trauma
- Drug or alcohol related seizures

BLS transport criteria

- Adequate respirations
- Transient symptoms including seizure with stable vital signs
- First time or typical seizure pattern for the patient with stable vital signs

BLS Care

- Provide supplemental oxygen and/or ventilatory assistance as necessary.
- Protect patient from injury, remove objects from mouth and upper airway, do not restrain patient during seizure, remove hazardous objects nearby patient.
- Position patient in position of comfort if alert and airway is secure; if not, then use recovery position.
- Perform blood glucometry. *Glucometry is not currently in the scope of practice for OEC providers. Contact 911 dispatch and/or ski patrol physician if indicated.*
- Loosen restrictive clothing.
- Retain relevant drug containers and notes for transport with patient.

[Quick Links](#)

ANAPHYLAXIS ⁵

ALS transport criteria

- Respiratory distress (including audible wheezing or stridor)
- Unconscious or not breathing
- Swelling in throat, tongue or difficulty swallowing
- Signs and symptoms of shock which include:
 - Poor skin signs (pale, sweaty)
 - Sustained tachycardia
 - Hypotension (systolic BP less than 90 mmHg) with an appropriate clinical setting
 - Syncope or near syncope when sitting or standing
- Use of EpiPen (*see below*)

BLS transport criteria

- Bite or sting with local reaction or usual reaction to medication or food
- Stable vital signs
- No anaphylaxis

BLS Care

- Epinephrine for anaphylaxis. *
- *Use of an epinephrine requires transport to a definitive care facility.*
- Oxygen as needed.
- Reassure patient.

- Remove stinger by scraping away from puncture site.

*See [Appendix A](#) for OEC use of epinephrine administration for anaphylaxis

ASTHMA ⁵

[Quick Links](#)

ALS transport criteria

- Decreased LOC
- Extreme anxiety and agitation
- Ashen color, cyanosis
- Failure to respond to repeated inhalers
- History of previous intubation
- Respiratory distress-unable to speak normally
- Labored respirations regardless of rate when found with other Criteria
- Audible wheezing not improved with inhalers
- Sustained tachycardia (persistent heart rate of 100-120 or greater per minute depending on clinical setting)
- Sustained tachycardia may suggest hypoxia or impending shock

BLS transport criteria

- Responds to self-administered Metered Dose Inhaler (MDI)
- Normal vital signs

BLS Care

- Assist patient with his or her medications.
- Provide supplemental oxygen and/or ventilatory assistance as necessary.
- Reassure patient and urge calmness.
- Obtain oximetry reading.
- Monitor vital signs every five to ten minute depending on patient's condition.

[Quick Links](#)

BEHAVIORAL ⁵

ALS transport criteria

- Decreased LOC
- Abnormal behavior with unstable vitals
- Abnormal behavior with serious co-morbidity (e.g., drug or alcohol OD)

BLS transport criteria

- Abnormal behavior with stable vital signs

BLS Care

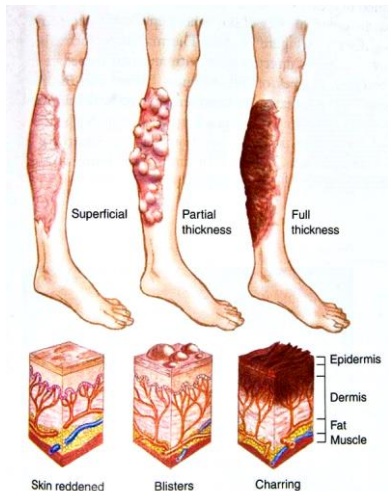
- Secure safety of personnel and patient.
- Provide support, reassurance to patient.
- Provide supplemental oxygen and/or ventilatory assistance as necessary.
- Wound or trauma care if indicated.
- Call police if necessary (e.g. patient refuses transport but EMT's feel patient needs further evaluation).
- Use restraints when warranted
- Monitor patient behavior and physiological changes, do not leave patient alone or unobserved.

Note:

Intoxicated patients or patients with mental or behavioral problems should be evaluated in local hospital emergency departments.

[Quick Links](#)

BURNS 4,5



Burn Classification

Burn degree	Skin appearance	Layers affected
First	Red, no blisters	Epidermis
Second	Blisters, wet	Epidermis, dermis
Third	Charred, white, dry	Epidermis, dermis, soft tissues
Fourth	Blackened	Epidermis, dermis, muscle, and bone

Burns can be caused by heat, electricity and chemicals. Burns of the soft tissue can be life-threatening particularly when they involve the respiratory tract or occur over extensive areas of the skin. Burns of the skin can lead to shock and sepsis which both occur hours after the trauma occurs. Always be alert to possible airway involvement.

Even if a patient has no signs of external burns, there can be inhalation injuries. These can pose a serious problem. Signs of burns involving the respiratory tract include:

- Burns of the face, nose, mouth or chest
- Singed eyebrows, lashes or nasal hair
- Abnormal breath sounds such as stridor, wheezes or rhonchi
- Inadequate chest expansion
- Sooty sputum
- Respiratory distress
- Hoarse voice or persistent cough
- History of confinement in toxic or smoky environment

ALS transport criteria

- Possible airway involvement including singed facial hair, soot in mouth/nose or hoarseness
- Burns with associated injuries: electrical shock, fracture, or respiratory problems
- Second or third degree burns to face/head
- Second or third degree burns covering greater than 20% of the body
- Severe pain (contact MD for pain control)

BLS Care

- *Stop the burning process, remove charred clothing and debris*
- *For chemical burns, remove all contaminated clothing and objects and flush affected area with water*
- *Use appropriate personal protective equipment, especially for chemical burns*
- First degree burn: apply cool, moist tabs
- Second degree burn:
 - Cover with dry dressing (commercial burn sheets are acceptable)
 - DO NOT apply ointment or creams
 - Always be alert to possible airway involvement.

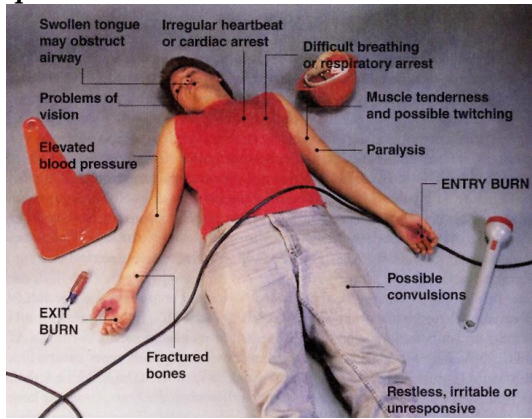
Transport guidelines: See above for King County ALS transport criteria for burns. The American Burn Association recommends urgent transport to one of the nation's 125 burn centers for the any of the following:*

4

*Harborview Medical Center. See [Phone Numbers](#) for contact information.

- Burns to a child under 10 years old or an adult over 65 years old
- Burns involving more than one body part
- Burns involving the head, neck, hands, feet, genitals, or major joints
- Inhalation injury *or* airway burns
- Burns associated with difficulty breathing or hoarseness
- Chemical or electrical burns (including lightning injury)
- Partial-thickness (second-degree) burn greater than 10% total body surface area
- Any full-thickness (third or fourth degree burn) burn
- Burns associated with trauma
- Burns with a serious underlying medical disorder (e.g., diabetes, heart disease)
- Burns in a patient who has special social, emotional, or physical needs
- Exposure to radioactive materials

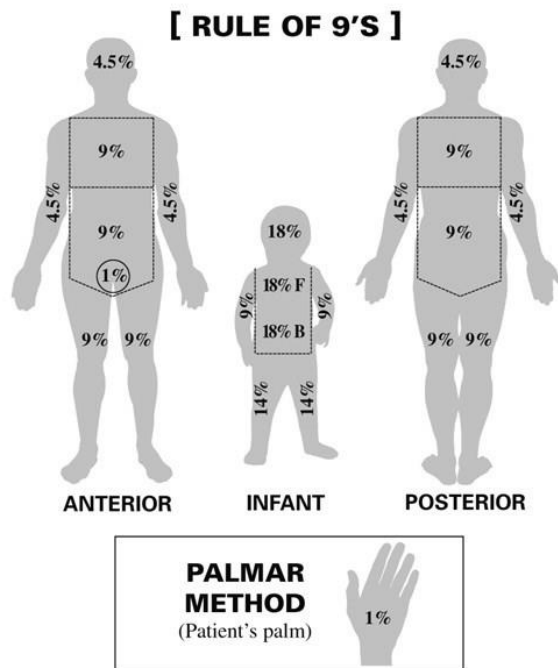
Special Note: Electrical burns



- **Scene safety is paramount! Qualified personnel MUST confirm lack of energized wires and/or equipment within the incident scene prior to rescuers entering the scene.**
- *Suspect muscle and internal organ injury and cardiac affects including abnormal heart rhythm and blood pressure alterations*
- *Anticipate the need for assisted ventilations and supplemental oxygen*
- *Have an AED immediately available*

Rule of Nines:

[Quick Links](#)



CHEST DISCOMFORT ⁵

ALS transport criteria

- Chest pain or discomfort of suspected myocardial infarction (particularly if there are associated symptoms such as shortness of breath, nausea/vomiting, or diaphoreses)
- Altered LOC
- Use of nitroglycerin
- Unstable vital signs
- Signs and symptoms of shock
- Discomfort, pain, or unusual sensations between the navel and the jaw if the patient is 40 or over and/or has a history of heart problems

BLS transport criteria

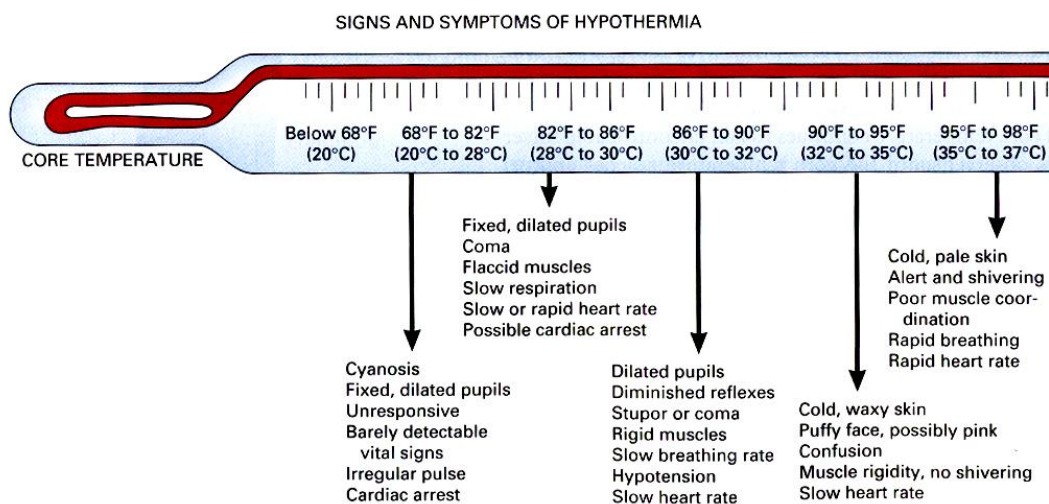
- Apparent non-cardiac or minor traumatic chest pain if patient is less than 40 and has no cardiac history and stable vital signs and no associated symptoms
- Stable/normal vital signs

BLS care

- Request ALS/MD if indicated
- Provide supplemental oxygen and/or ventilatory assistance as necessary
- Assist patient with nitroglycerin and/or aspirin if indicated
- Position of comfort
- Reassure patient
- Monitor vital signs every 5 minutes
- Monitor ECG if authorized, record rhythm strip

[Quick Links](#)

COLD-RELATED 4,5



Special Note: Cold-related signs and symptoms in rescuers

- *Be aware that the same conditions that caused the patient's problem will identically affect the rescue team members.*
- *Maintain vigilant awareness of shivering, decreased coordination, slowed responses, and confusion in yourself and your team members. If possible, rotate people out or assign them less critical tasks if they become symptomatic.*
- *Be particularly wary of repeated instances of delayed or unusual decisions or actions in yourself or others.*
- *Wear weather-appropriate dry clothing.*
- *Be adequately hydrated and fed before and during the mission.*
- *Do not tolerate numbness in your team member's hands or feet or your own. We come from the factory with 20 digits. It's best to keep all of them.*

ALS transport criteria

- Decreased/altered LOC
- Temperature less than 95 deg F (35 deg C) oral or tympanic
- Cessation of shivers in a cold patient
- Significant co-morbidities (e.g. elderly, illness, trauma, alcohol, drugs)
- Cardiac arrest
- Hypotension (systolic BP < 90 mmHG)

BLS transport criteria

- Cold exposure, temperature > 95 deg F, normal vital signs and no abnormal LOC
- Frostbite with temperature > 95 deg F, normal vital signs, and no abnormal LOC

BLS care (uncomplicated hypothermia)

- Remove patient from the cold environment and protect from further heat loss
- Provide supplemental oxygen and/or ventilatory assistance as necessary
- Provide high flow oxygen via facemask or bag-valve-mask
- Remove wet clothing
- Position of comfort. If decreased LOC, place in recovery position
- Warm the patient
- Warm the aid unit
- Monitor patient's vital signs, use ECG monitor if authorized, perform serial temperature measurements.

BLS care (Hypothermic cardiac arrest or profound Bradycardia)

- If breathing, assume there is cerebral perfusion and DO NOT perform CPR
- If pulse is present, withhold CPR regardless of heart rate or BP
- If no pulse after one minute and no breathing, begin CPR and apply AED. If AED states "Shock indicated," follow cardiac arrest protocol

BLS care (Frostbite)

- Protect cold-injured part from further injury
- Remove any constricting or wet clothing or shoes and replace with a dry bulky dressing
- Splint the injury and do not let the patient walk or use affected extremity
- Remove constricting jewelry
- Do not rub or massage injured tissue
- Transport to an emergency room

NOTE:

Do not rewarm frozen tissue unless transport time will exceed two hours and it is certain that the thawed tissue will not refreeze. Obtain medical direction prior to rewarming. Rewarming should be done with 100-105 deg F water.

Do not use dry heat; it heats unevenly and may burn frozen tissue. Stop rewarming when the tissue turns red-purple and becomes pliable.

[Quick Links](#)

DIABETES ⁵

ALS transport criteria

- Altered LOC
- Absent or depressed gag reflex, as indicated by inability to swallow
- Patient unable to protect airway
- Unstable vital signs

- Rapid respiration
- Signs and symptoms of shock
- Failure to respond to oral glucose
- Suspected diabetic ketoacidosis
- Seizures

BLS transport criteria

- Normal or mild reduction in LOC
- Gag reflex intact as indicated by swallowing
- Patient can protect airway
- Normal vital signs
- Symptoms of hypoglycemia relieved by oral glucose*
- Hyperglycemia with normal vital signs

**If signs and symptoms of hypoglycemia are totally resolved after oral glucose, transport by privately owned vehicle is acceptable, with appropriate cautions to the patient's companions that if symptoms return, further treatment is required.*

BLS care

- Request MD/paramedics as indicated
- Perform blood glucometry if authorized*.
- *Glucometry is not currently in the scope of practice for OEC technicians or non-Summit-registered EMT's. Contact the Patrol Supervisor, or Medical Control, if urgent glucometry is required.*
- Provide supplemental oxygen and/or ventilatory assistance as necessary
- If hypoglycemic and patient is able to swallow, position upright and give oral glucose
- If hypoglycemic and patient is unable to swallow, position on side, give oxygen, ventilation, as needed and await ALS/MD care
- Maintain normal body temperature
- Monitor vital signs in response to sugar
- If hyperglycemic without symptoms and blood sugar greater than 200 mg/dl, BLS transport to emergency room
- If in doubt whether symptoms are due to hypoglycemia and swallowing ability is intact, position upright and give oral glucose

* See [Appendix A](#) regarding Glucometry performance by OEC techs

[Quick Links](#)

EYE INJURIES ⁵

ALS transport criteria

- Major mechanism of injury
- Penetrating injuries to the eye

BLS transport criteria

- Minor mechanism of injury
- Eyelid laceration with intact vision
- Ultraviolet burns

BLS care:



- Request ALS/MD as needed
- Stabilize an impaled object in place and bandage both eyes
- Flush chemical burns to the eyes for 15 minutes with normal saline or water if saline is not available
- Ultraviolet burns to the eyes: treat with cool compresses over closed eyes

[Quick Links](#)

HEAT-RELATED ⁵

ALS transport criteria

- Decreased/altered LOC
- Hot dry skin in the presence of elevated temperature
- Sustained tachycardia (>100-120 beats per minute)
- Hypotension
- Positive postural changes

BLS transport criteria

- Heat related cramps
- Minor to moderate heat related complaint with stable vital signs

BLS care

- Request ALS/MD as indicated
- Remove patient from the hot environment and place in a cool environment
- Reassure and cool patient
- Provide supplemental oxygen and/or ventilatory assistance as necessary
- Loosen or remove clothing
- Apply cool packs to neck, groin, and armpits for the heat-stroke patient
- Keep skin wet by applying cool water with sponge or wet towels
- Fan aggressively
- Place patient Trendelenburg position
- If patient is responsive and not nauseated, have patient drink water
- If patient is vomiting, place in recovery position
- Monitor vital signs and temperature

RESPIRATORY ⁵

ALS transport criteria

- Decreased LOC
- Extreme anxiety and agitation
- Tripod position
- Respiratory distress--unable to speak normally
- Respirations > 30 per minute
- Ashen color, cyanosis
- Failure to respond to usual treatments
- Labored respirations regardless of rate when found with other symptoms
- Audible wheezing, rales when found with other symptoms
- Use of EpiPen injector
- Sustained tachycardia

BLS transport criteria

- Respiratory complaints due to common causes such as cold, flu, bronchitis
- Respiratory complaints of a chronic but stable nature
- Respiratory complaints with normal vital signs and adequate oxygenation with treatment
- Patent airway

BLS Care

- Provide supplemental oxygen and/or ventilatory assistance as necessary
- Obtain oxymetry reading [Oximetry is not currently in the scope of practice for OEC providers. Contact 911 dispatch and/or ski patrol physician if indicated]
- Reassure patient and urge calmness.
- Assist patient with his or her medications
- Administer EpiPen if indicated for anaphylaxis. *Use of EpiPen is not currently in the scope of practice for OEC providers. If epinephrine is indicated, immediately contact a qualified EMT and/or ski patrol physician, and 911 dispatch.*
- Any patient who receives an EpiPen (pre or post EMS arrival) should be transported (mode of transport depends on clinical findings and symptoms) and evaluated in a hospital. ALS response is indicated.⁵
- Monitor vital signs every 5-10 minutes depending on patient's condition

[Quick Links](#)

SEIZURES ⁵

ALS transport criteria

- Multiple/serial seizures
- Not breathing after seizure stops
- Single seizure greater than 5 minutes or with greater than 15 minutes postictal with no improvement in LOC
- Seizure due to hypoglycemia
- Seizure due to hypoxia

- Seizure following head trauma
- Drug or alcohol related seizures
- Pregnant > 20 weeks

BLS transport criteria

- History of seizure and seizure is similar to prior episodes and patient is awake

BLS Care

- After patient awakens, perform exam to determine if any injuries occurred or if any neurologic abnormalities exist
- During seizure, position patient on side
- During and after seizure, provide oxygen
- Perform glucometry if authorized
- Obtain oxymetry [if authorized] reading after seizure

[Quick Links](#)

SPINAL IMMOBILIZATION ⁹

These guidelines apply to application of a Long Spine Board to patients with trauma or suspected injury within the Summit at Snoqualmie ski areas (East, Central, West, and Alpentel). They are intended for use by OEC and EMT providers on duty at Summit at Snoqualmie. As is the case with any other condition or injury, permission to treat patients less than 18 years of age should be obtained from parent, guardian, or a duly authorized adult chaperone. Pediatric patients often present unique challenges to spinal injury management. Case-by-case decision making and/or discussion with medical control (on duty Ski Patrol physician or destination Emergency Department physician) may be considered.

January 1, 2015

Long Spine Board Immobilization Guidelines: Seattle and King County

These guidelines are to be used for patients with trauma or suspected injury

Long spine boards (LSB) have both risk and benefits. Elderly patients do not tolerate the board well and patients with respiratory diseases may fare poorly on a board. Therefore LSBs should be used when indicated. The best use of the LSB may be for extricating an unconscious (or difficult to move) patient, or providing a firm surface for cardiac compressions. However, other devices may be appropriate for patient extrication and movement. If the patient would normally be stabilized on a LSB but has a previously existing condition that makes securing the patient to the backboard impractical (such as kyphosis) the EMT should use their best judgment to secure the patient to the stretcher with the goal of minimizing movement of the spine.

Clinical Indications for LSB:

1. Immobilize patients with a LSB and cervical collar for any of the following conditions:
 - Blunt trauma and altered level of consciousness
 - Thoracic or lumbar spinal pain or tenderness
 - Neurologic complaint (e.g. numbness or motor weakness) following trauma
 - Anatomic deformity of the spine following trauma
 - High energy mechanism of injury AND:
 - Alcohol intoxication or drug induced impairment
 - Inability to communicate
 - Distracting injury
 - GSW to head or neck (in general stab wounds do not require LSB)
2. Patients complaining of isolated cervical pain or tenderness following trauma who have a GCS of 15 can be managed by application of a cervical collar and securing the patient firmly to the stretcher. This may include patients who are found ambulatory at the scene following the accident.
3. Immobilization on a LSB and cervical collar is not necessary when all of the following conditions are met:

- Normal level of conscious (GCS-15)
- No thoracic or lumbar spine tenderness or anatomic abnormality
- No neurologic findings or complaints
- No intoxication or drug induced impairment

4. These guidelines do not preclude use of LSB for extrication or moving the patient.

STROKE ⁵

Selected patients with CVA (cerebral vascular accident—stroke) can benefit from rapid thrombolytic therapy designed to dissolve the clot causing the CVA. For thrombolytic therapy to be effective, it generally should be given within 4.5 hours of the onset of the stroke. Since the hospital requires one hour for evaluation and CT this means that symptoms onset to arrival at hospital should generally be <3.5 hours. Most hospitals in King County are now designated as stroke centers and are equipped and staffed to rapidly make the diagnosis and treat acute CVA.

ALS transport criteria

- Unconsciousness
- Decreased LOC
- Sever hypertension (BP> 200 systolic or 110 diastolic)
- Hypotension and bradycardia
- Seizures
- Severe headache with one of the following
 - Slurred speech
 - Blurred/double vision
 - Weakness/paralysis
 - Vomitting
- Uncontrolled airway and respiratory problems
- Progression of stroke symptoms

BLS transport criteria

- Vital signs and condition stable
- Stroke history
- Stroke signs
- Airway secure

BLS Care

- Call for ALS/MD as indicated
- Determine time of symptom onset
(Time of symptom onset is critical to therapy decision making. Start timing from the last time the patient was observed to be at normal or baseline neurologic status.)
- Patient in upright position if possible
- Open and maintain airway
- Deliver oxygen and ventilatory assistance if necessary
- Maintain normal body temperature
- Protect paralyzed limbs
- Monitor vital signs
- Perform glucometry* if trained and authorized. Glucose should be over 60. Severe hypoglycemia can present like a stroke.
- Follow Code CVA Protocol (below)

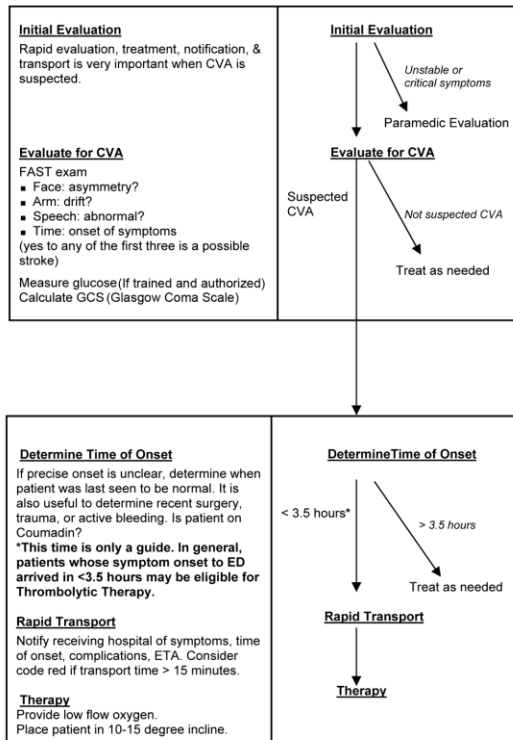
FAST Exam: ⁵

The **FAST** exam is used in the field to detect stroke. An abnormal finding strongly indicates a stroke.

Face	<p>Ask the patient to show teeth or smile</p> <p>Normal: Both sides of the face move equally.</p> <p>Abnormal: One side of the face does not move as well as the</p>
Arm	<p>Ask the patient to close eyes and extend both arms straight out, palms up, for 10 seconds</p> <p>Normal: Both arms move the same, or both arms do not move at all.</p> <p>Abnormal: One arm drifts down compared to the other.</p>
Speech	<p>Ask the patient to say "The sky is blue in Seattle"</p> <p>Normal: The patient says correct words with no slurring of words</p> <p>Abnormal: The patient slurs words, says the wrong words, or is unable to speak</p>
Time	<p>Determine the time of onset of symptoms or when the patient was last known normal.</p>

* See Appendix A for [OEC Scope of Practice](#) regarding Glucometry

Code CVA Protocol: ⁵



Multi-Casualty Incident (MCI) and Triage

The principles and process of MCI management should be invoked whenever the number of patients exceeds the available resources. Each incident will be different, and the resources gathered to deal with the situation will of course be highly variable.

The Incident Command System (ICS) offers a scalable approach to organizing the responding resources to deal with a Multi-Casualty Incident. Each incident will be different, and the actual organization chart used will reflect that variability. Below is an example of a very basic ICS organization that could be used as a starting point for an MCI incident in the ski areas. This is followed by a "Triage Quick Guide," which represents a field-expedient and easily remembered approach to Triage based on the "RPM" method (Respirations, Pulse, Mentation).

Initial actions for a Mass Casualty Incident: ⁸

General:

- Determine cause, number of pts, location, special considerations (hazmat, multiple burns, etc)
- Secure a "Medical" radio channel

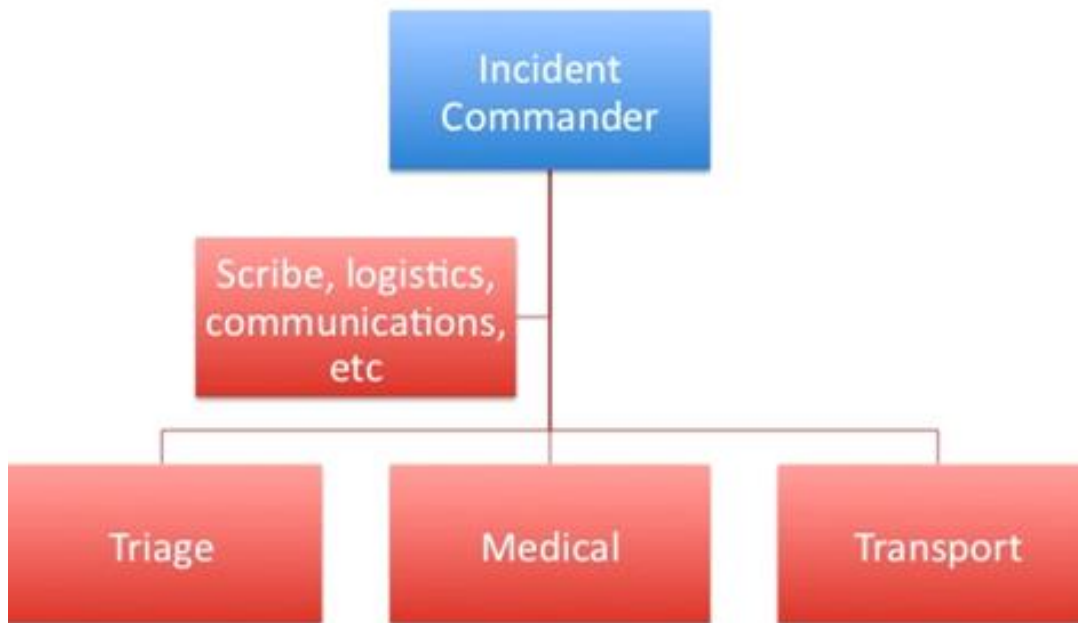
Medical:

- Identify and set up a treatment area close to the transportation corridor
- Delineate red, yellow, and green areas as indicated
- Control the flow of pts to the transport area

Transport:

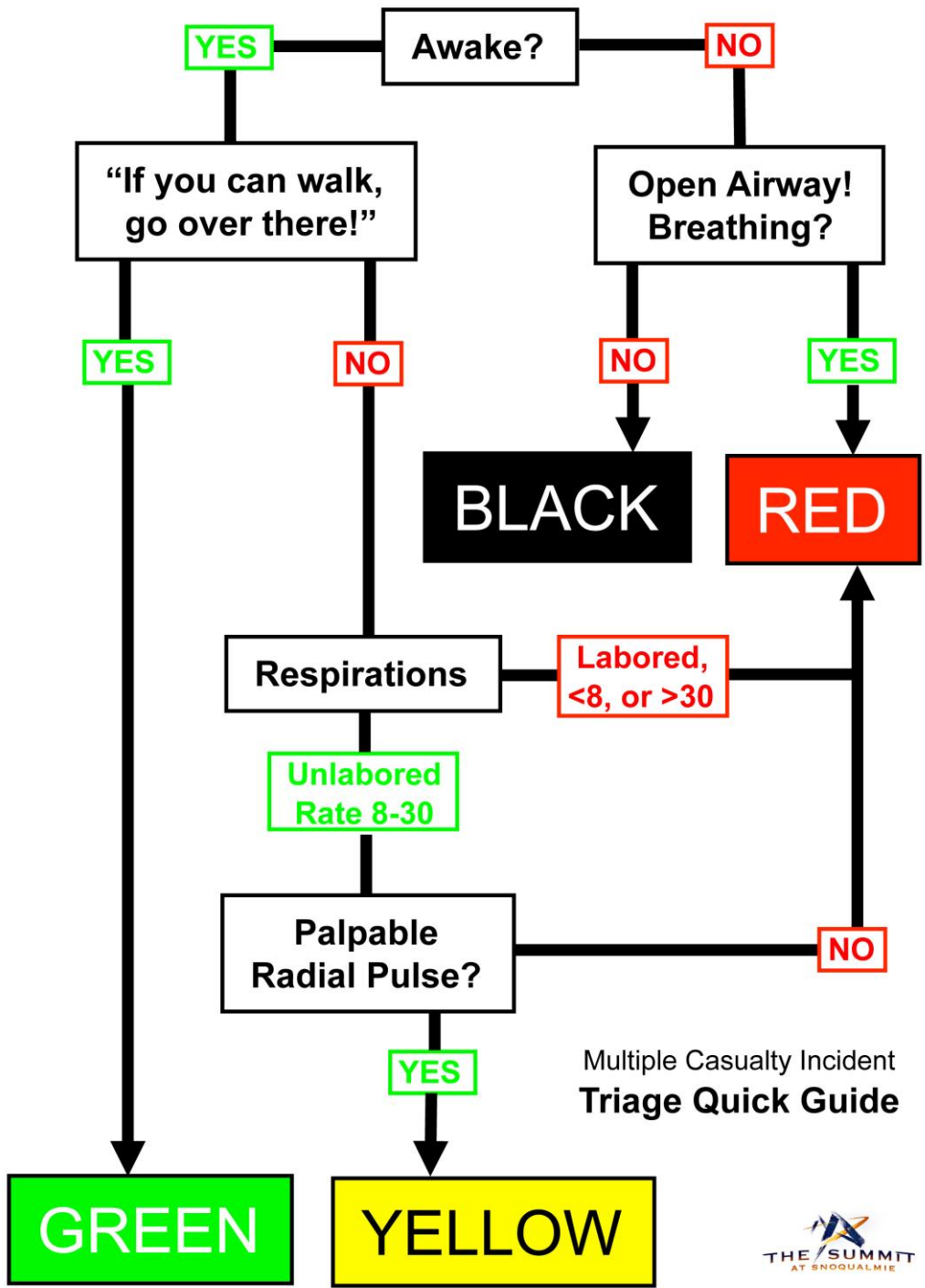
- Establish transportation corridor
- Establish ambulance staging
- Obtain tracking sheets and gands
- Establish communication with responding agencies and receiving hospitals

Basic Incident Command System (example only):



[Quick Links](#)

Triage Quick Guide



Multiple Casualty Incident
Triage Quick Guide



[Quick Links](#)

Abbreviations

[\(Acronyms in next section\)](#)

AVPU	Alert, Verbal, Pain, Unresponsive
CHF	Congestive Heart Failure
CMS	Circulation, Motor, Sensory
CNS	Central Nervous System
COPD	Chronic Obstructed Pulmonary Disease
DNAR	Do Not Attempt Resuscitation
ETT	Endotracheal Tube
FBAO	Foreign Body Airway Obstruction
IOS	Index Of Suspicion
LOC	Level Of Consciousness
MDI	Metered-Dose Inhaler
MGS	Medical Group Supervisor
MOI	Mechanism Of Injury
NOI	Nature Of Illness
NRM	Nonrebreathing Mask
NTG	Nitroglycerin
OPA	Oropharyngeal Airway
OPQRST	Onset, Provocation, Quality, Radiation, Severity, Time
POLST	Physician Orders for Life Sustaining Treatment
SAMPLE	Signs/Symptoms, Allergies, Medication, Past history, Last oral intake (meal), Events leading up to complaint

[Quick Links](#)

Acronyms ⁴

CHEATED

C—Chief complaint: The patient's primary problem.

H—History: SAMPLE history of the present illness and past medical history.

E—Examination: Physical exam.

A—Assessment: General impression of patient.

T—Treatment: All aspects of treatment rendered, including that provided by bystanders.

E—Evaluation: Changes in the patient's condition over time; the patient's response to treatment.

D—Disposition: Information indicating whether the patient refused treatment, was treated and released, or was taken to a higher level of care such as a hospital.

FACTUAL-OEC

F—Facts: Include only information that is true and can be documented.

- A—Accurate: Describe what you saw, heard, and did accurately.
- C—Complete: Include all relevant information regarding the incident and the patient.
- T—Terms: Use only accepted medical terms and abbreviations.
- U—Unbiased: Information should be objective; avoid personal opinions.
- A—Avoid slang: Do not use informal words or words that have multiple meanings.
- L—Legible/legal: All written reports should be written in clear, easy-to-read language, with black or blue ink.
- O—Organized: The report should present information in a logical manner
- E—Error free: Ensure that all words are spelled correctly and that proper grammar is used.
- C—Checked: Proofread the document before submitting it.

AEIOU – TIPS

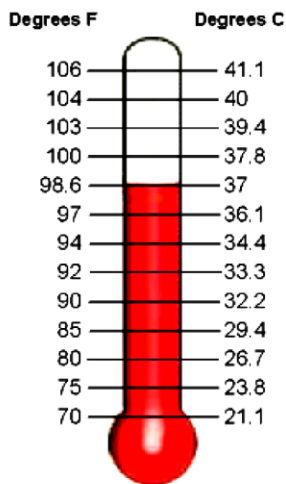
- A—Alcohol and acidosis.
- E—Epilepsy, environment, and electrolytes.
- I—Insulin.
- O—Oxygen (hypoxia) and over- dose.
- U—Uremia (kidney failure).
- T—Trauma and tumors.
- I—Infection (CNS, sepsis).
- P—Poisoning and psychiatric conditions.
- S—Seizures, stroke, and syncope.

SAILER

- S—Sex of the patient.
- A—Age of the patient.
- I—Incident/chief complaint.
- L—Location of the incident/patient.
- E—Equipment needed (e.g., splints, backboards, toboggans).
- R—Resources needed (e.g., extra help, security personnel, management personnel, activation of EMS: BLS or ALS)

[Quick Links](#)

Normal vital signs by age and temperature conversions



Age	Respirations (breaths/minute)	Pulse (beats/minute)	Systolic Blood Pressure (mm Hg)
Newborn: 0 to 1 month	40 to 60	120 to 160	50 to 70
Infant: 1 month to 1 year	30 to 60	100 to 160	70 to 95
Toddler: 1 to 3 years	24 to 40	90 to 150	80 to 100
Preschool: 3 to 6 years	22 to 34	80 to 140	80 to 100
School age: 6 to 12 years	18 to 30	70 to 120	80 to 110
Adolescent: 12 to 18 yrs	12 to 16	60 to 100	90 to 140
Over 18 years	12 to 20	60 to 100	90 to 140

Phone Numbers

Regional Emergency Departments

Auburn Regional Medical Center	253-872-5688
Children's Hospital	206-987-2222
Evergreen Hospital	425-899-1730
Group Health - Central	206-326-3223
Group Health - Eastside	425-502-4120
Northwest	206-368-1981
Overlake Hospital	425-688-5100
St. Francis	253-368-1981
Snoqualmie Valley Hospital	425-831-3323
Swedish Issaquah	425-394-0610

EMS Unit Cell Phones

(Always use appropriate discretion when calling responding EMS units)

Aid 291 Cell (Snoqualmie Pass Fire & Rescue)	206-396-6291
Aid 292 Cell (Snoqualmie Pass Fire & Rescue)	206-396-4522
Engine 291 Cell (Snoqualmie Pass Fire & Rescue)	206-396-4589
Kittitas Co. Medic 991 cell	509-607-4584
Kittitas Co. Medic 992 cell	509-607-4345
Bellevue Medic 1 Cellphone (Overlake)	425-864-2700
Bellevue Medic 2 Cellphone (Eastgate)	425-864-2735
Bellevue Medic 3 Cellphone (Northbend)	425-864-2748
Bellevue Medic 14 Cellphone (Issaquah)	425-864-2761
Bellevue MSO 5 Cellphone	425-864-2868

Other Resources

Eastside Fire and Rescue Dispatch	425-577-5656
King Co. Sheriff Search & Rescue Dispatch	206-296-3311
King Co. Sheriff Search & Rescue Office	206-296-3853
King County Medical Examiner	206-731-3232
Language Bank American Red Cross	206-323-2345
Norcom Communications Center	425-577-5656
Kitcom Communications Center	509-925-8534
National Poison Center	800-709-0911
Ski Patrol Rescue Team Cell	206-289-0457
Snoqualmie Pass Avalanche Control Office	509-577-1909
Snoqualmie Pass Cache (Not staffed)	425-434-6123
Snoqualmie Pass Fire and Rescue	425-434-6333
USFS North Bend Ranger Station	425-888-8751
USFS Visitor Center Snoqualmie Pass	425-434-6111

[Quick Links](#)

Summit at Snoqualmie Internal Numbers

(From an external phone, dial 425-434-7669 then enter 4 digit extension)

BARK (Backcountry Alpine Rescue K-9's)	5551 or 5555
Risk Manager (Rob Gibson)	6752
General Manager (Dan Brewster)	6751
Alpental Aid Room	5552
Alpental Dispatch 1 ("Top of 2")	5555
Alpental Patrol Base ("Top of 1")	5554
Alpental Patrol Office	5551
Central Aid Room	4552
Central Pro Patrol	6731
East Aid Room	3552
East Patrol	3551
Nordic Center	4699
West Aid Room	6552
West Pro Patrol	6782

Private Ambulance Companies

American Medical Response	206-623-1111 800-542-7701
Rural Metro	425-672-1111 800-989-9993
Tri Med	206-243-5622 888-487-4633

Appendix A

OEC use of aspirin, nitroglycerin and epinephrine

Neither the WAC (Washington Administrative Code) nor the RCW (Revised Code of Washington) currently specify the exact Scope of Practice of OEC techs in Washington State. At Summit at Snoqualmie, timely adjunctive management of anaphylaxis with epinephrine and acute coronary syndrome with aspirin and nitroglycerin will be facilitated by early contact with the EMS system and/or an on-duty Summit Patrol Physician when available.

Summit OEC techs are allowed to assist patients with administering their own physician-prescribed EpiPens and nitroglycerin. Summit OEC techs are also allowed to administer aspirin in ACS. Refer to [Aspirin for Acute Coronary Syndrome](#) for details.

[Quick Links](#)