Back Country Horsemen of Idaho

Squaw Butte Chapter

Emmett, Idaho

Est: 1992

A Non-Profit Service Organization

Wilderness First Aid

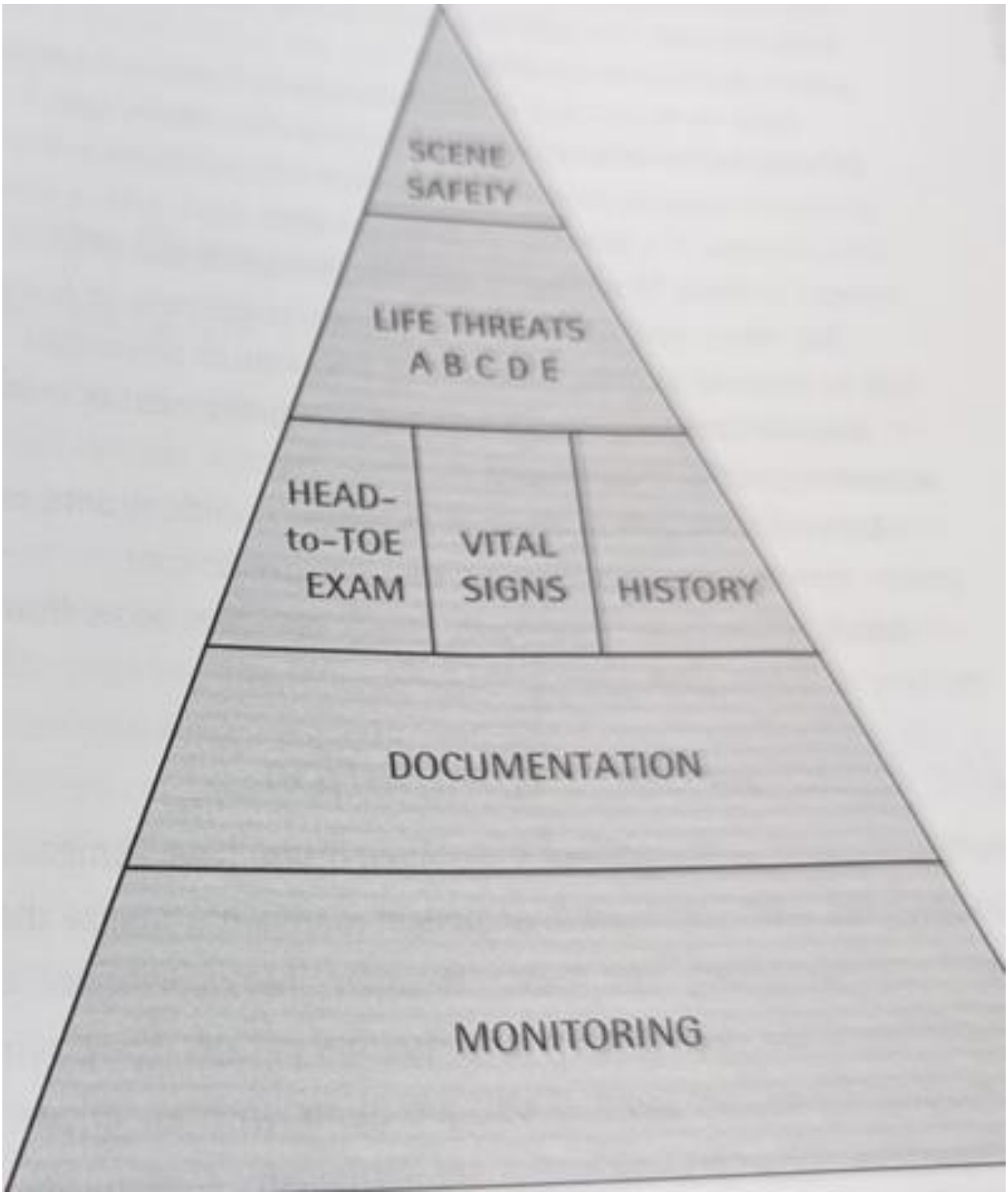
https://goto.hsi.com/hubfs/117004_ASHI_G2015_INSTWFA15_WildernessFirstAid_IG_040218_Preview.pdf

Wilderness First Aid Legal Considerations

- Consent – Before Care is given, if the patient is responsive get consent before attempting to treat.
- Abandonment – Once you have started treatment don't leave until either a higher level of care is available, or the patient ends treatment.
- Confidentiality – Communication between you and the patient is considered confidential.
- Good Samaritan Law – You are covered by an Idaho liability Law for voluntary care.
- Documentation – Document what you do in writing to hand over to advanced care givers and for your own legal protection.

Patient Assessment Immediate

- Size up the Scene – Establish Control
- Survey the Scene for Hazards
- Attempt to Determine the mechanism of injury.
- Protect yourself – Isolate from Body Substances
    - Gloves
    - Protective glasses
    - In some cases, put on a mask.
- What are your general impressions of the scene and patient?
- Attempt to Establish a Relationship.
- Perform an Initial Assessment
    - Assess patient for immediate threats to life.
    - Perform A-B-C-D-E assessment.
      A- Is for Airway
      B- - Is for Breathing
      C- - is for Circulation & bleeding
      D- - is for Disability
      E- - is for exposure/environmental factors
- Address immediate threats to life!


SCENE SAFETY
LIFE THREATS A B C D E
HEAD-to-TOE EXAM
VITAL SIGNS
HISTORY
DOCUMENTATION
MONITORING

Skill Guide 1 – Initial Assessment

Unresponsive

Emergency Action Steps

- Assess Scene. If scene is not safe or becomes unsafe, GET OUT. Mechanism of Injury (MOI)?
- Use Body Substance Isolation (BSI)
- Assess patient. Tap shoulder, shout name. Not moving? No response?
- Attend to life-threats
- Plan for evacuation

Breathing

- Check for normal breathing
- Occasional gasps are not capable of supplying enough oxygen to support life
- If not breathing or not breathing normally, perform CPR
- If breathing normally, maintain airway and continue assessment

Airway

- Tilt head–lift chin to maintain airway.

Circulation

- Scan for serious bleeding; control any found using direct pressure
- Check for radial pulse

Disability

- Suspected spinal injury?
- If so, stabilize head and neck

Environment/ Expose

- Protect from environment
- Expose suspected injuries

Continue to attend to life-threats; plan strategy for evacuation

Skill Guide 1 – Initial Assessment

Responsive

Emergency Action Steps

- Assess Scene. If scene is not safe or becomes unsafe, GET OUT. Mechanism of Injury (MOI)?
- Use Body Substance Isolation (BSI)
- Assess Victim. Identify yourself as trained and ask if it's OK to help.
- Attend to ABCDEs

Airway

- Ensure patient is responsive
- If reduced level of responsiveness (LOR), tilt head–lift chin

Breathing

- Ensure patient is breathing normally
- If reduced LOR, maintain airway and assess circulation

Circulation

- Scan for serious bleeding; control any found using direct pressure
- Check for radial pulse

Disability

- Suspected spinal injury?
- If so, stabilize head and neck

Environment/ Expose

- Protect from environment
- Expose suspected injuries

Continue to attend to life-threats; plan strategy for evacuation

Skill Guide 2 – Physical Exam

Physical Exam

Emergency Action Steps

- If ABCDEs are assured, perform a head to toe physical exam
- Look and feel for deformity, open wounds, tenderness or swelling

Head

- Feel Skull
- Inspect ears, nose, eyes (pupils)
- Inspect teeth and jaw
- Smell for odor on breath

Neck/ Lower Back

- Look for stoma, medical alert tag
- Feel cervical spine
- Feel as much of lumbar spine as possible

Chest

- Feel collarbones
- Press on the sternum
- Press both sides of rib cage while patient takes deep breath
- Inspect chest wall

Abdomen/ Pelvis

- Press four quadrants of abdomen
- Press down on pelvis
- Place a hand on each hip and press in
- Inspect for priaprism, incontinence

Extremities/ Back

- Expose legs/arms as necessary
- Feel length of extremity
- Check feet and hands for circulation, sensation, and movement
- If no spinal injury, roll and inspect back

Continue to attend to life-threats; plan strategy for evacuation

Skill Guide 3 – Vital Signs

Vital Signs

Level of Responsiveness (LOR) — AVPU

- A — Alert, able to answer questions
- V — Responds to verbal stimuli
- P — Responds only to painful stimuli
- U — Unresponsive to any stimuli

Heart Rate

- Responsive — use radial artery; Unresponsive — use carotid artery
- Count pulse for 15 seconds and multiply by 4
- Normal rate is between 50 and 100
- Note regularity and strength of pulse

Capillary Refill

- Press on nail bed then release
- Normal refill is less than 2 seconds

Respiratory Rate

- Count number of breaths in 15 seconds and multiply by 4
- Normal rate is between 12 and 20
- Note regularity and strength of breaths; noisy breathing

Tissue Color, Temperature, Moisture

- Look inside lips or eyelids. Normal color is pink.
- Check temperature with back of hand on forehead; normal is warm.
- Note if skin is moist, wet or dry; normal is dry.

Continue to attend to life-threats; plan strategy for evacuation

Skill Guide 4 – SAMPLE History

SAMPLE History

Signs and Symptoms

- What abnormal signs do you see?
- What is patient feeling?

Allergies

- To medicine?
- To food?
- Environment?

Medications

- What medicines does patient take?
- Why does he/she take the medication?

Pertinent Medical History

- Medical conditions?
- Previous injury or illness?
- Has he/she experienced this before?

Last Oral Intake

- Time of last meal?
- What was eaten?

Events

- What events led up to the emergency?

Continue to attend to life-threats; plan strategy for evacuation

Skill Guide 5 – SOAP Table

Vital Signs

Subjective Information

Content

- Describe patient
- Chief complaints?
- Symptoms?
- Sample history?

Sample Text

25 year old female complaining of left mid thigh pain after falling 20 feet while rock climbing at approximately 1500 hrs today. Patient states she heard a loud pop when she landed on rock ledge and 9/10 pain started immediately. History of Asthma. Takes albuterol as needed. No allergies. Last meal was breakfast at 0800 today.

Objective Information

Content

- Physical exam findings?
- Vital sign readings?

Sample Text

Patient found supine on ground. A &O X 4

Tissue pale, cool and moist

HR = 120, RR = 20 without distress

Capillary refill = 3 seconds

Exam reveals tenderness, swelling and obvious deformity of left leg at mid thigh

Assessment

Content

- What do you think is wrong with patient?

Sample Text

Possible femur fracture of left leg

Plan

Content

- Treatment plan?
- Ongoing assessment plan?
- Stay or go, fast or slow?

Sample Text

Provide spinal immobilization

Splint left leg

Treat for shock

Monitor vital signs/check splint every 20 minutes

Evacuate in litter to trailhead. Hand off to local EMS

Skill Guide 6 – Shock Management

Shock Management

Manage Injuries or Illnesses

- Maintain a clear airway
- Ensure adequate breathing
- Control serious bleeding
- Treat other significant problems

Position

- Have patient sit or preferably lie down
- Allow a patient with breathing difficulty to find a position of comfort.

Maintain Normal Body Temperature

- Place something under and over the patient to prevent heat lost.
- Keep patient comfortable and calm
- Avoid giving the patient fluids or food

Provide Emergency Oxygen

- Provide emergency oxygen if available and you are trained in its use

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 7 – Control of Bleeding

Control of Bleeding

Inspect Wound

- Use Body Substance Isolation (BSI)
- Expose injury to locate bleeding source
- Place absorbent pad over wound
- Apply direct pressure focused on bleeding source

Apply Pressure Bandage

- Securely wrap conforming bandage over pad to maintain enough pressure to control bleeding
- Bandage needs to be loose enough that a finger can be slipped under it

If Bleeding Continues...

- Do not remove initial pad
- Add additional pads and resume direct pressure
- If direct pressure is not successful, consider the use of a tourniquet as a last resort

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 8 – Burn Care

Burn Care

Expose and Cool the Burn

- Use Body Substance Isolation (BSI)
- Stop burning and remove clothing around burn; if stuck, leave in place
- Cool burn with water; large partial or full thickness burns should only be cooled enough to put out fire

Cover the Burn

- Cover burn with dry, sterile or clean dressing
- If evacuation is delayed, change dressings frequently
- Do not apply ointments, butter, antiseptic or lotion

Treat for Shock

- Fluid loss from burn will cause shock
- Consider an occlusive dressing to reduce fluid loss
- If burn involves face, closely monitor airway
- Serious burns should be evacuated as soon as possible

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 9 — Assessing and Splinting Fractures

Assessing and Splinting Fractures

Prioritize Initial Care

- Ensure ABCDEs
- Control serious bleeding
- Treat for shock
- Consider MOI; immobilize head and neck if spinal injury suspected

Expose and Assess Injury

- Swelling?
- Deformity; false motion; shortened limb; rotation; tenting?
- Pain/Tenderness?
- Loss of function?
- Grating?
- Exposed bone ends?

Splint

- When in doubt, splint!
- Apply manual traction to stabilize the bone ends.
- Use manufactured splint or improvised.
- Immobilize joint above and below fracture site.
- Pad splint to apply equal pressure along limb.
- May be necessary to straighten fracture to splint.

Monitor

- Check circulation, sensation and movement (CSM) before and after applying splint.
- Be sure that the splint does not become too tight due to swelling.
- Ice may be used to help control swelling.

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 10 – Unstable Ankle

Unstable Ankle

If a patient must walk on an unstable ankle, tape can do some of the work of the damaged ligaments by restricting the range of ankle motion and providing support.

Alternate Strips

Start on opposite side of injury and alternate vertical and horizontal strips around back and bottom of ankle. Pull firmly from the uninjured side. Do not wrap tape around entire ankle

Wrap Completely

Continue alternated strips up the ankle until several inches above the ankle joint.

Anchor Wrap

Finish off with strips down the edges of the wrap and a diagonal strip around heel, above toes and on top of foot.

Skill Guide 11 – Assessing and Treating Head Injuries

Assessing and Treating Head Injuries

Prioritize Initial Care

- Ensure ABCDEs
- Control serious bleeding
- Treat for shock
- Consider MOI; immobilize head and neck if spinal injury suspected

Check the Head

- Open wound; bleeding; swelling
- Deformity such as a soft area
- Bleeding or clear fluid (cerebral spinal fluid) from ears or nose
- Bruising behind the ears or under eyes

Check other Signs/ Symptoms

- Diminished level of responsiveness (LOR)
- Unequal pupils
- Nausea/vomiting
- Headaches; combative behavior; seizure
- Abnormal breathing

Treatment

- Maintain head and neck immobilization
- Wound care
- Position head above heart if possible
- Monitor airway and breathing
- Initiate a rapid evacuate — go fast

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 12 – Assessing Spinal Injuries

Description

Prioritize Initial Care

- Ensure ABCDEs
- Control serious bleeding
- Treat for shock
- Consider MOI; immobilize head and neck if spinal injury suspected

If unresponsive, assume spinal injury and maintain immobilization of head and neck. If responsive, assess for spinal injury.

Assess Neck

- Patient complaint of neck pain?
- Swelling; deformity
- Tenderness

Assess Sensation and Function

- Feel touch on arms and legs?
- Move fingers and toes on command?
- Breathing normally?

Still Suspect Spinal Injury?

- Maintain head and neck immobilization
- Maintain normal body temperature
- Monitor airway and breathing
- Initiate a rapid evacuate — go fast

No Signs or Symptoms?

- Complete a focused spine assessment:
  - A & O X 3; sober; no major injuries
  - Sensation and function to all limbs
  - Good grip strength and ability to lift legs
  - No pain/tenderness when palpating spine
  - After above checks, able to turn head without neck stiffness or pain.
- A patient who meets the above may have manual immobilization discontinued.

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 13 – Single Rescuer Log-Roll

Single Rescuer Log-Roll

Prepare Patient

If you need to roll a patient, place his arms by his sides to prepare him for log-rolling.

Cross Ankles

Crossing the far ankle over the near ankle makes a large patient easier to roll.

Prepare to Roll

Kneeling on the side away from the patient's face, grip the elbow with one hand (wedging it into the body). Support the head with your other hand.

Roll Patient

Using the patient's elbow as a handle, log-roll him towards you.

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 14 – Multiple Rescuer Log-Roll

Multiple Rescuer Log-Roll

If three or more rescuers are available, use a multiple rescuer log-roll using the same basic principles as the single rescuer log-roll.

Immobilize Head and Neck

- Rescuer at head assumes leadership
- Bring head into neutral position using and maintaining slight traction

Prepare Patient

- Second rescuer at shoulders places patient's arms against sides and holds in place
- Third rescuer grasps patient's hips

Roll Patient

- When ready, rescuer at head calls for roll
- Body is rolled as a single unit without twisting
- Head and neck are kept in-line with body during roll

Maintain Spinal Immobilization

- Once patient is rolled into position, spinal immobilization needs to be maintained until spinal injury is ruled out or a cervical collar and backboard (actual or improvised) are in place.

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 15 – Straightening the Pretzel

Straightening the Pretzel

Get Into Position

- Rescuer at head assumes leadership and grasps head in manner that can be maintained as patient rotates
- Second rescuer controls shoulders and chest; third controls pelvis; and fourth will move patient's limbs.

Align Body

- Straighten and align arms and legs with body
- Working together, bring planes of shoulders and chest parallel with plane of pelvis

Log-Roll Patient

- Working together, log-roll patient on to side and check alignment
- Finish log-roll, positioning patient on back

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 16 – BEAM Move

BEAM Move

When a spine injured patient is not secured and has to be moved, use Body Elevation and Movement (BEAM).

Get Into Position

- Rescuer above head assumes leadership and maintains immobilization of head and neck
- BEAM requires several additional rescuers positioned on both sides of the patient

Prepare to Lift Patient

- Rescuers on sides gently push hands under patient

Lift Patient

- On lead rescuer's command, lift patient as a single unit without bending or twisting
- Carry and move patient using shuffle steps to minimize movement of patient's spine

Lower Patient

On lead rescuer's command, lower patient as a single unit without bending or twisting

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 18 – Assessing Chest and Abdominal Injuries

Assessing Chest and Abdominal Injuries

Prioritize Initial Care

- Ensure ABCDEs
- Control serious bleeding
- Treat for shock
- Consider MOI; immobilize head and neck if spinal injury suspected

Physically Assess the Chest

- Expose chest if possible
- Look for deformity; redness/bruising; open wounds
- Check for symmetrical movement during breathing
- Check for tenderness by gently squeezing ribcage while patient inhales

Assess Other Signs/ Symptoms

- Abnormal breathing that is shallow, rapid, labored or restricted
- Coughing up blood
- Cyanosis
- Distended neck veins

Physically Assess the Abdomen

- Expose abdomen if possible
- Look for deformity; redness/bruising; open wounds
- Palpate each quadrant for tenderness or rigidity
- Palpate back over each kidney
- Check pelvis with a firm squeeze

Assess Other Signs/ Symptoms

- Blood in urine or stool
- Progressive shock signs and symptoms after blow to abdomen

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 19 – Assessing and Treating Hypothermia

Assessing and Treating Hypothermia

Mild/ Moderate Hypothermia

Signs/Symptoms

- Shivering
- Slurred speech, mumbling (umbles)
- Uncoordinated movement (fumbles)
- Confusion, apathy, sluggish thinking (grumbles)
- Altered gait (stumbles)
- Moderate hypothermia recognized by uncontrolled shivering and worsening umbles

Treatment

- Move out of cold and wind to warmer environment if possible
- Remove wet clothing and replace with dry
- Cover head and neck
- Give warm fluids and carbohydrates if patient can manage airway

Severe Hypothermia

Signs/Symptoms

- Muscle rigidity
- Decreased LOR including coma
- Slowing pulse and respirations

Treatment

- Handle gently
- If breathing is absent, provide rescue breaths for 3 minutes before moving
- If pulse is absent, start CPR if it can be maintained until EMS hand-off
- Gently move out of cold environment if possible
- Remove wet clothing and provide several dry insulating layers around patient
- Initiate a gentle but rapid evacuate — go fast

Continue to attend to ABCDEs; plan strategy for evacuation

Guidelines for Prevention of Heat Illness

- Stay well hydrated. A hydration routine should be based on discipline and not on thirst. Consume 400-600 ml of water about 2 hours prior to periods of exercise. During exercise consume 150-350 ml of water for every 15-20 minutes of exercise. If exercise lasts for more than 1 hour, the addition of 4-8% carbohydrates and electrolytes (such as a sports drink) is recommended. Fluid replacement after exercise is also vitally important. Urine output should be clear and relatively copious, an indication of adequate hydration. It is practically impossible to drink too much water as long as you eat regularly, preferably low-salt snacks. Avoid alcohol and caffeinated drinks.
- Wear baggy, loosely-woven clothing that allows evaporation of sweat. Keep your head covered and your face shaded.
- Keep yourself fit, and allow time for acclimatization when you are new to a hot environment. Go slow the first few days and avoid exercising during the hottest times of day.
- Beware drugs that increase your risk of heat illness, including alcohol and antihistamines.
- Rest often in the shade.

Evacuation Guidelines

Evacuate — go slow — any patient that does not fully recover from heat exhaustion or mild hyponatremia. Evacuate rapidly — go fast — any patient who has an altered mental status due to heat or hyponatremia.

Conclusion

Even if you are acclimatized to heat, you need to know how much fluid you are losing to the heat and that you must replace it. You should be able to assess heat hazard, and protect yourself against it. You should also know the risk factors and predisposing conditions for heat illness, recognize the early signs and symptoms, and know what to do about them. With knowledge, preparation, fluid replacement, and prompt emergency care, heat casualties in warm weather activities can be avoided.

Skill Guide 20 – Using an Epinephrine Auto-Injector

To use an EpiPen® epinephrine auto-injector:

Verify signs/symptoms of severe allergic reaction

- Breathing difficulty
- Swelling of the face, lips and/or tongue
- Rapid, weak pulse
- Decreased LOR

Prepare the Device

- Remove device from storage tube
- Grasp device with black tip pointing away from you
- Remove gray safety cap

Deliver Injection

- Hold black tip near outer thigh
- firmly swing and jab device at right angle into thigh until it clicks
- The EpiPen® is designed to work through clothing

Hold in Place

- Hold device firmly against thigh for about 10 seconds
- If done correctly, the window on EpiPen® will show red

Pull Device Away

- Pull device straight away from thigh and massage injection area for at least 10 seconds
- Monitor patient for improvement

Dispose of Properly

- Carefully place used EpiPen® somewhere safe, such as pushing needle into ground where an accidental needle stick will not occur
- Inform EMS providers for help in proper disposal of device

Continue to attend to ABCDEs; plan strategy for evacuation

Skill Guide 21 – Assessing Medical Emergencies

Description

Emergency Action Steps

- Assess Scene. If scene is not safe or becomes unsafe, GET OUT. Mechanism of Injury (MOI)?
- Use Body Substance Isolation (BSI)
- Assess patient. Tap shoulder, shout name. Not moving? No response?
- Attend to ABCDEs

Assess Chief Complaint

- Ask patient to describe problem they are experiencing
- Ask bystanders to describe problem if patient is unable to

Assess Vital Signs

- LOR — AVPU
- Heart rate, regularity, and strength
- Capillary refill
- Respiratory rate, regularity, and strength
- Tissue color, temperature and moisture

Get SAMPLE History

- Signs and symptoms
- Allergies
- Medications
- Pertinent medical history
- Last oral intake
- Events leading up to problem

Continue to attend to ABCDEs; plan strategy for evacuation

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