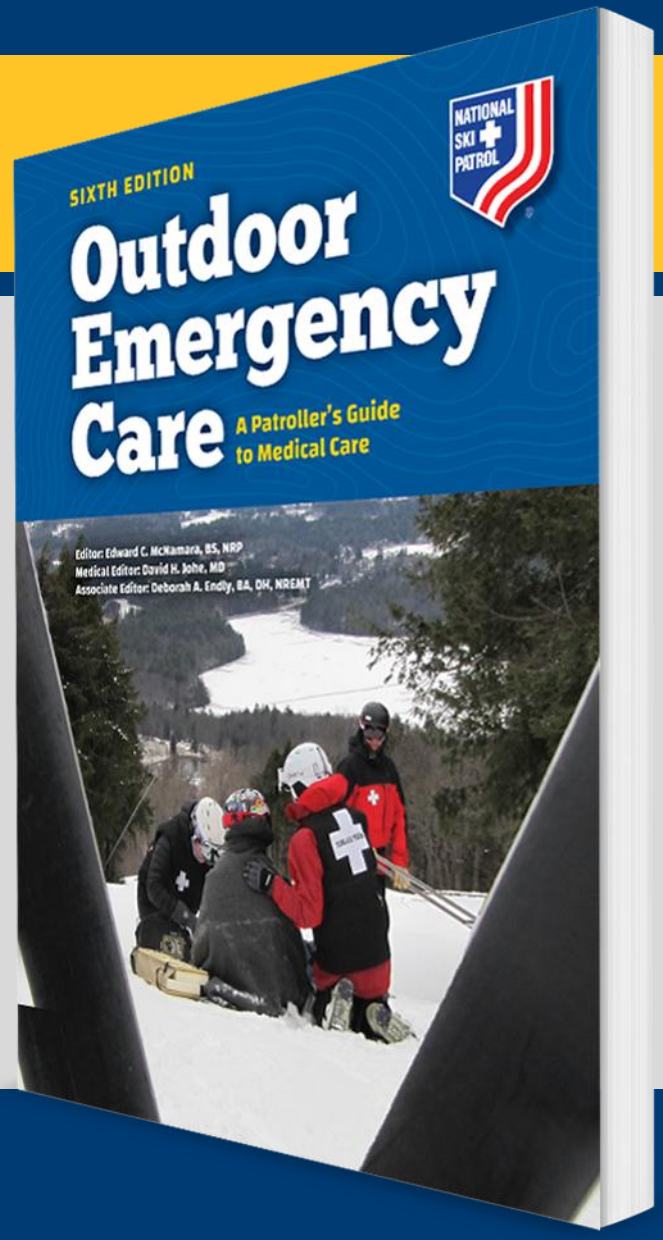
National Ski Patrol

Notable Differences between OEC 5th and 6th Editions



Outdoor Emergency Care 6th Edition

- Smaller text book
  - Common request from both National Ski Area Association (NSAA) and Division Directors
  - Decreased length from 1264 pages to 852 pages
    - Change of formatting
    - Removal of Skill Guides
    - Combination of two chapters (Burns and Soft Tissue)
- Text written to an 8th grade level
  - OEC 5th written to a 10th grade level

Outdoor Emergency Care 6th Edition

- Some of the changes in the 6th Edition are:
  - Concepts discussed in the 5th Edition have been elevated to *OBJECTIVE MATERIAL*.
  - Briefly discussed skills have become official *OEC SKILLS*.
- OEC Technicians (new and current) must be proficient in the newest text's:
  - Objective Material knowledge,
  - the definitions and use of Key Terms
  - OEC Skills
- Thus, although the 5th Edition may have included the information, the 6th now REQUIRES our knowledge and proficiency of this material.

Patient Assessment

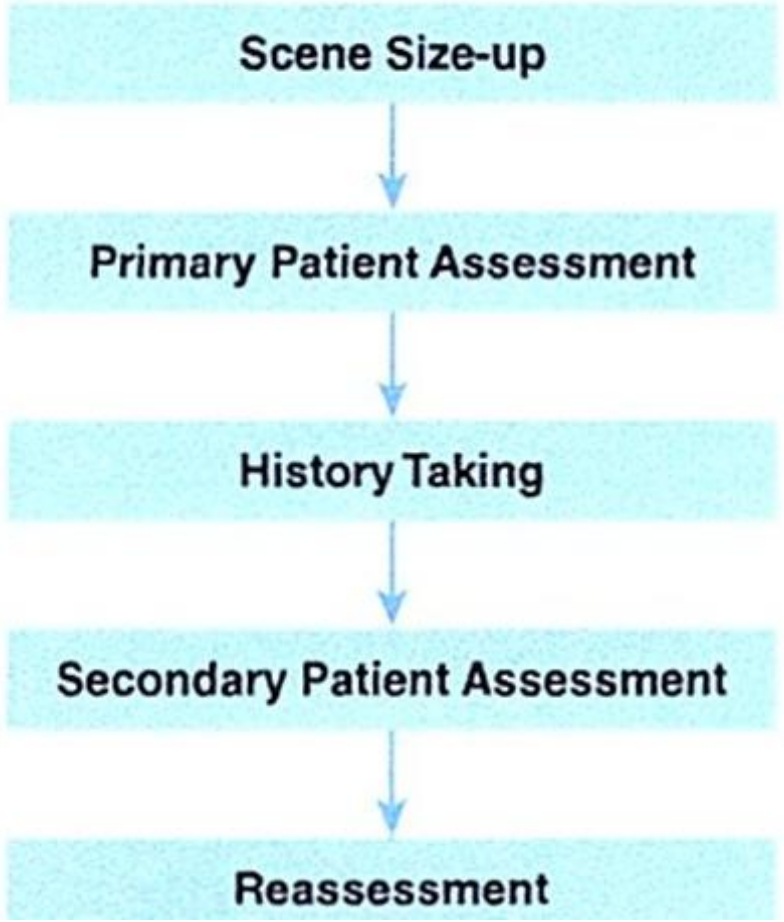
5 Parts of the Patient Assessment

OEC Edition Differences: Chapter 7

- Within the 6th Edition:
  - Patient Assessment is more clearly organized into a clear 5 part process.

Patient Assessment

- The overall patient assessment process consists of five parts.
- Uses a systematic, standardized approach for every patient evaluation
  - Makes sure key medical information is not overlooked



Stop the Bleed

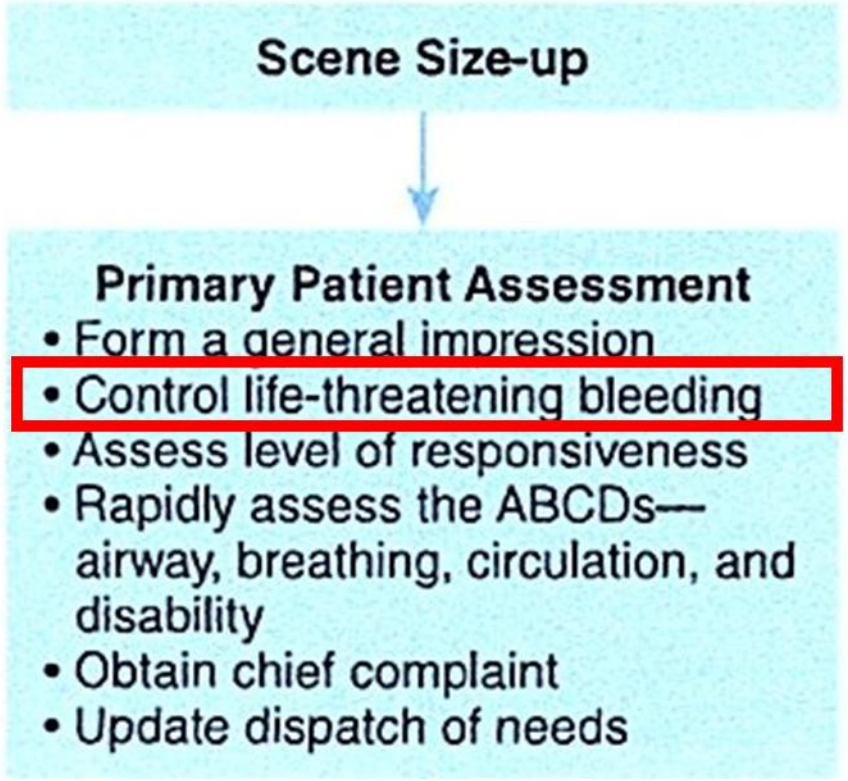
OEC Edition Differences: Chapter 19

- In the 5th Edition, following the ABCDs of Primary Assessment, addressing bleeding came after confirming and/or securing Airway and Breathing.

- In the 6th Edition, the “Stop the Bleed” campaign has changed our Primary Assessment to prioritize life threatening bleeding over Airway and Breathing.

Primary Patient Assessment: Control Life-Threatening Bleeding

- As you approach patient, look for and immediately control life-threatening bleeding.
  - This step should occur BEFORE addressing airway or breathing concerns.
    - Blood loss can be very rapid.
    - Can quickly result in shock or even death
    - Death can occur in less than 5 minutes.
- More appropriate to address bleeding first (Circulation), followed by a sequence of Airway, Breathing, and Disability (CABD)



KEY POINT:
STOP THE BLEED

The OEC technician must immediately decide whether bleeding is minor or life threatening. According to the Stop the Bleed campaign by the American College of **Stop the Bleed** Surgeons, life-threatening bleeding is indicated by any of the following:

- Blood that is spurting out of the wound
- Blood that won't stop coming out of the wound
- Blood that is pooling on the ground
- Clothing that is soaked with blood
- Bandages that are soaked with blood
- Loss of all or part of an arm or leg
- Serious bleeding in a patient who is now confused or unconscious

Primary Patient Assessment: Control Life-Threatening Bleeding

- Bleeding from a large vein/artery:
  - Vein: steady blood flow
  - Artery: spurting flow of blood
- Unconscious patient:
  - Do a sweep for blood.
  - Quickly and lightly run your gloved hands from head to toe.
    - Pause periodically to see if your gloves are bloody.

Management: Severe Life-Threatening Bleed

- “Stop the Bleed” is an educational program created for prehospital providers.
  - Step-by-step approach for controlling life-threatening bleeding
- Primary principles of the program include:
  1. Notifying the EMS system of a patient with severe bleeding
  2. Finding the source of the bleed
  3. Applying pressure to stop the bleeding

Management: Severe Life-Threatening Bleed

- Notify dispatch to call EMS.
- To stop severe bleeding, first cover the wound with a sterile dressing or clean cloth and apply pressure with both gloved hands.
  - Tourniquet, or pack wound with gauze or a clean cloth and apply pressure with both hands.
  - Hemostatic dressings may also be used in treating severe bleeding.

Use of Tourniquets

OEC Edition Differences: Chapter 19

- In the 5th Edition, tourniquets were introduced as "controversial." There was detailed instructions on creating a homemade tourniquet within the text.

- In the 6th Edition, tourniquet use is no longer considered a controversial use. Improvements to commercially available devices limit the loss of limb distal to the tourniquets. "Homemade" tourniquets are no longer discussed within the text.

Management: Tourniquets

- If the bleeding is severe and places patient at great risk for bleeding to death (also knowns as exsanguination), a tourniquet can be lifesaving and needs to be applied.
  - Well accepted practice
  - Use ONLY on extremities

- Two situations that might warrant use of a tourniquet immediately are:
  1. Unable to control severe bleeding with direct pressure
  2. Significant bleeding from an extremity and simultaneously other major problems

Management: Tourniquets

- Always make the tourniquet tight.
  - If completely tight and the bleeding does not stop, leave the first tourniquet on and apply a second tourniquet above (proximal to) the first one.
- Place a tourniquet directly over clothing.
  - Must remove bulky items before placing a tourniquet
  - Tourniquet will hurt, a lot.
  - Do NOT loosen it if patient complains of pain.
  - Never remove a tourniquet in the prehospital setting once it is applied.

Management: Tourniquets

- Use of a tourniquet always is accompanied by the risk of patient losing the limb.
  - No amputations have been caused by leaving tourniquets in place for fewer than 2 hours.
  - Get patient to a trauma center as soon as possible
- Write the time at which the tourniquet was applied.
  - Directly on patient's forehead *or*
  - On a piece of tape applied to patient's forehead.

Courtesy of Peter T. Pons, MD, FACEP.

Packing the Wound

OEC Edition Differences: Chapter 19

- In the 5th Edition, packing wounds is not directly addressed. Hemostatic dressings, although introduced, were considered "newly developed." They were recommended when bleeding could not be controlled by direct pressure alone.

- In the 6th Edition, with the "Stop the Bleed" campaign, packing a wound (with or without a hemostatic dressing) is one of the recommendations when a tourniquet cannot be used due to location.

Management: Packing the Wound

- Fill the wound with gauze, hemostatic dressing, or a clean cloth, and then apply pressure with both hands.
- Technique that is necessary for life-threatening bleeding from locations where a tourniquet cannot be used:
  - Neck
  - Shoulder
  - Torso
  - Abdomen
  - Chest
  - Groin
- Can also be used on large or deep extremity wounds with severe bleeding when tourniquet is not available

Management: Hemostatic Dressing

"Recommend the use of hemostatic gauze where direct pressure alone is ineffective or not practical, and in cases where tourniquet application is not possible due to anatomic limitations." -- *American College of Surgeons, 2014*

- Contains a topical agent that promotes clotting
  - Originally used by the military successfully, then by EMS
  - Consider cost of these dressings and shelf life when developing a local protocol

Management: Hemostatic Dressing

- Hemostatic dressings must be placed directly on the wound to be effective.
- Apply direct pressure first to the wound to stop the bleeding; then apply the hemostatic dressing as the first layer and add more sterile gauze on top.
- Make this into a pressure dressing.

© DR P. MARAZZI/Science Source.

Vital Signs

OEC Edition Differences: Chapter 7

- In the 5th Edition, a complete set of vital signs consisted of "level of responsiveness, pulse rate, respiration rate, blood pressure, and body temperature."

- In the 6th Edition:
  - Oxygen saturation is added to the complete set of vital signs
  - Dorsalis pedis pulse is added to the complete list of pulses

Secondary Patient Assessment: Vitals

- The first set of vital signs, known as “baseline vitals”
  - Assess vital signs in the following order:
    1. Level of responsiveness
    2. Pulse rate
    3. Respiratory rate
    4. Blood pressure
    5. Temperature
  - Additionally, oxygen saturation is now considered a vital sign by many.
    - Taken with a pulse oximeter

Secondary Patient Assessment: VITALS

Table 7-5 Normal Vital Signs

	Adult	Child (1–8 years)	Infant (Birth–1 year)
Pulse (beats/min)	60–100	70–150	90–180
Respirations (breaths/min)	12–20	15–30	20–60 25-60 in Peds Chp
Systolic blood pressure (mm Hg)	90–140	80–110	50–95
Temperature	36.1–38.0°C (97.0–100.4°F)	36.1–38.0°C	36.1–38.0°C
Pulse Oximetry	94 – 99%	> Or = 94%	> Or = 94%
Mental Status	A in the AVPU scale	A in the AVPU scale	A in the AVPU scale

Pulse Locations

Radial pulse

Carotid pulse

Figure 7-30 The carotid pulse is felt in the neck.

Pulse Locations

Brachial pulse

Figure 7-31 The brachial pulse is felt on the inside of the upper arm.

Femoral pulse

Figure 7-32 The femoral pulse is felt in the groin area.

Secondary Patient Assessment: Dorsalis Pedis

Dorsalis pedis pulse

Located in the middle of the top of the foot between the ankle and the toes

Figure 7-33 The dorsalis pedis pulse is felt on the top of the foot.

Assessing Eye Movement

OEC Edition Differences: Chapter 7

- Although discussed in the 5th Edition, the 6th Edition "Assessing Eye Movement" has become an official OEC Skill.

OEC Skill 7-3: Assessing Eye Movement

- **New OEC SKILL 7-3**
- When assessing eye movement, the eyes should move in unison.
  - Such eye movement is called extraocular movement (EOM).
  - If the eyes move correctly, then extraocular movement is intact.
    - Noted as EOMI

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OEC Skill 7-3: Assessing Eye Movement

Assessing Eye Movement

Objective: To demonstrate the proper assessment of pupils.			
Skill	**Max Points**	**Skill Demo**	
Criteria met: Determines the Scene is Safe, Initiates Standard Precautions, Introduces Self & Obtains Permission to treat/help	–	–	
Ask the patient to stare at your nose or center of your forehead.	1		CPI
Hold up your index finger approximately 6 to 8 inches away from the patient's face. Instruct the patient to follow the tip of your finger with his or her eyes without moving his or her head.	1		CPI
Slowly move your index finger from the center to the right, then back to center, then over to the left, and then back to the center. Next, slowly move your finger from the center upward, then downward past center, and then back up to the center. Finally, slowly move your finger toward you a few inches and then toward the patient's nose. Throughout this step, the patient's eyes should follow your finger and move in sync with one another.	1		CPI
Must receive 2 out of 3 points.			

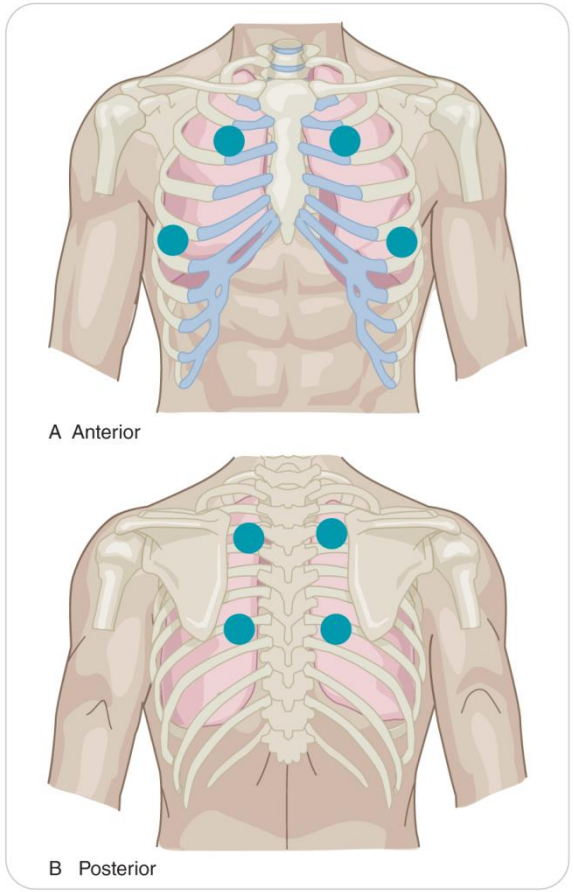
8 Points for Auscultation

OEC Edition Differences: Chapter 13

- In the 5th Edition, the OEC Skill Auscultation of Breath Sounds identifies 6 sites of Auscultation (2 locations on the back).
- In the 6th Edition, the OEC Skill expands to 8 sites of Auscultation (4 locations on the back).

Patient Assessment: Using a Stethoscope

- Using the large diaphragm of the stethoscope, listen at each location for approximately 15 seconds.
  - Avoid unnecessary movement or talking.
  - Do not allow the stethoscope tubing to rub against patient's clothing or to bump into anything.
    - Resulting noise can make your assessment more difficult.
- Listen with a stethoscope over the upper and lower chest in both the front and back of patient.



Oxygen and Pulse Oximetry

Indications for Oxygen Therapy

OEC Edition Differences: Chapter 9

- Although discussed during the 5th Edition, indications for oxygen therapy is considered OBJECTIVE material in the 6th edition.

Indications for Oxygen Therapy

- Insufficient oxygen to the body's tissues results in hypoxia.
  - Patients at risk for hypoxia and need oxygen if injured include:
    - Those who have chronic lung disease (usually from smoking)
    - Those whose respiratory rate has been decreased by an overdose of depressant drugs
    - Those who have a failing heart

Indications for Oxygen Therapy

- Oxygen should be administered to:
  - Anyone who is short of breath
  - Patients with:
    - Suspected cardiac or respiratory arrest
    - Cardiac-related chest pain
    - Stroke
    - Significant blood loss
    - Shock
    - Decreased level of responsiveness
    - Significant head injury

Pulse Oximetry as a Vital

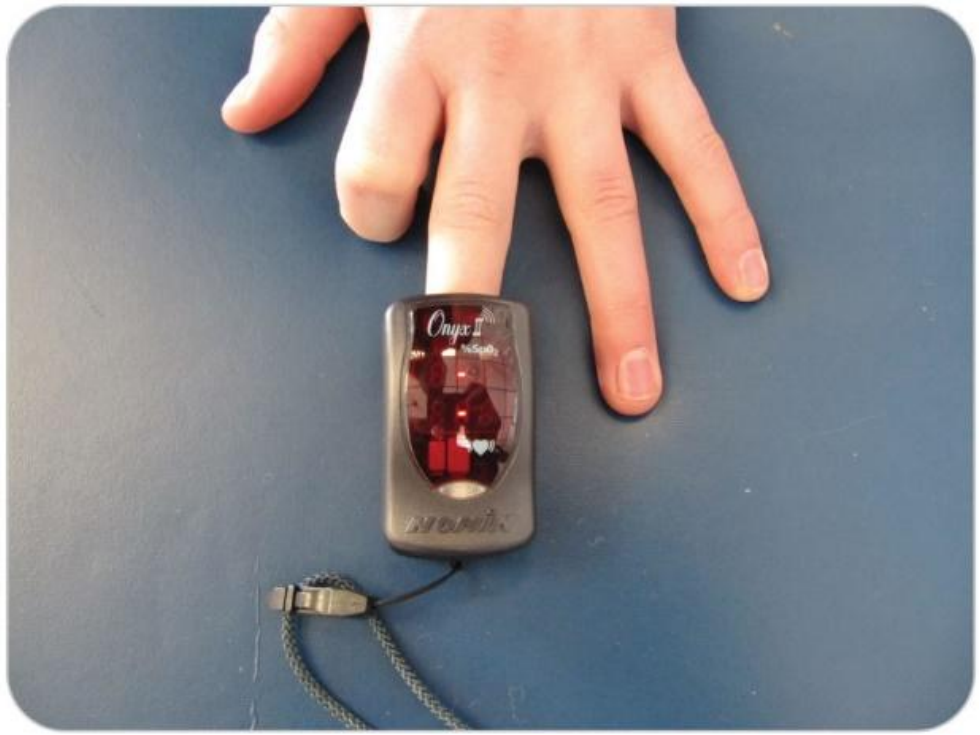
OEC Edition Differences: Chapter 9

- Although discussed during the 5th Edition, Pulse Oximetry has become a prominent skill in the OEC 6th Edition.
  - It is introduced in Chapter 9, however, the skill is in a majority of the chapters in the 6th Edition.

Pulse Oximetry

- A pulse oximeter is a noninvasive device that evaluates oxygenation at the tissue level.
  - By measuring oxygen saturation of hemoglobin in red blood cells

- Probe is clipped onto a finger, toe, or earlobe, measuring the oxygenation of the blood in the capillaries.



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Pulse Oximetry

- The “pulse ox” gives a reading of % O2 saturation, or O2 sat.
  - Normal is 94% to 99%**

  **When a person is breathing room air normally at sea level

- Patients with an oxygen saturation less than 94% generally require treatment.
  - At high altitude may normally be slightly less than 94%.
  - Some people with chronic lung disease may have lower normal levels than this.

Pulse Oximetry

- Like other diagnostic instruments, not foolproof
- Should not be used as the sole method of assessing oxygenation
  - False readings can occur.
- Factors that can cause false readings include:
  - Nail polish
  - Shock
  - Carbon monoxide poisoning
  - A low red blood cell count
  - Device malfunction
  - Cold weather

Pulse Oximetry

- Clinical assessment of the patient generally is more reliable than a pulse oximeter.
- If a patient with a pulse oximetry reading of 94% is cyanotic, breathing fast, and looks ill, trust your own observations and provide oxygen.
  - Treat according to what patient shows you.
  - Pulse oximeter may not be giving a true reading.

Pulse Oximetry for Oxygen Management

OEC Edition Differences: Chapter 13

- In the 5th Edition, the use of a pulse oximeter was introduced. The guideline recommended a concentration of 95% or higher. Anything below 90% “should be aggressively treated with oxygen.”

OEC 5th Edition Differences: Chapter 13

- In the 6th Edition, the recommended concentration is between 94% and 99%. Anything below this range, “should be given oxygen.”
  - Pulse Oximetry is an emphasized “new” vital sign mentioned in practically every chapter.
  - The concept of HYPEROXIA is emphasized. No longer should we “just give oxygen.”
  - The injury and state of the patient in the field may still warrant oxygen, but once in the aide room, use of a pulse oximeter should guide the use of supplemental oxygen.

Hyperoxia

- Giving too much oxygen for certain medical conditions can cause hyperoxia which is HARMFUL.
  - Especially COPD patients
  - Also some stroke, cardiac or traumatic brain injury.
- Excess oxygen produces changes to the blood chemistry and the CNS response.
  - Alter breathing inappropriately
  - Make the patient worse

Figure 13-3 This person is suffering from severe COPD.

Reproduced with permission from: Pollack, AN (ed): Emergency Care and Transportation of the Sick and Injured, ed. 11. Rosemont, IL, American Academy of Orthopaedic Surgeons, 2017, p. 609.

Pulse Oximetry

- If you have a pulse oximeter and local protocol allows its use, assess patient's blood oxygen concentration.
  - Patient's oxygen saturation should be greater than or equal to 94%.
  - At high altitude, the oxygen saturation may normally be slightly less than 94%.

Digitl ® Finger Pulse Oximeter, Smiths Medical, Retrieved from https://m.smiths-medical.com/~/media/M/Smiths-medical_com/Files/Import%20Files/PM195614EN_LR.pdf.

Pulse Oximetry

- After placing a patient on high-flow oxygen (15 LPM), adjust the flow, keeping the patient's oxygen saturation between 94% and 99%.
  - "Start high and titrate low"
  - After each adjustment, wait 1 minute to reassess.
  - Any value below 94% should be given/remain on oxygen.
  - Pulse oximetry is a useful tool for assessing oxygenation trends over time.

- The degree of dyspnea perceived by patient may not correlate with the pulse oximeter readings.
  - Some hyperventilating will have a normal pulse ox; do not require supplemental O2
  - Helps decide when to increase oxygen therapy *or* when to expedite patient's transfer to a higher level of medical care.

Triage

SALT Triage Method

OEC Edition Differences: Chapter 4

- Within the 5th Edition, the START triage method was emphasized.
- In the 6th Edition, the SALT triage method is discussed in detail.
  - START is also discussed, but to a lesser degree.

Triage: SALT

SALT Triage System

- Highly recommended by EMS agencies in the United States
- SALT is an acronym for the four-step process for triaging and tagging patients:
  - Sort
  - Assess
  - Lifesaving interventions
  - Treatment and/or Transport
- Developed as an all-hazards method of triaging all patients
  - Regardless of age or special needs

Triage: SALT

- **Step 1: Sort**
  - All individuals who can walk should move immediately to a designated location.
    - Will be further triaged and treated later
  - Those left should be asked to make some purposeful movement, such as “wave a hand or move a leg.”
    - Indicates they are able to follow a command
  - Those who do not move are considered to have a severe or life-threatening injury.
    - Will triage first because they may need immediate lifesaving treatment

Triage: SALT

- **Step 2: Assess**
  - Assessing each patient
  - Determine who needs immediate lifesaving interventions.
    - Those who were unable to walk or wave

Triage: SALT

Step 3: Perform Lifesaving Interventions

- The lifesaving interventions would include:
  - Control major bleeding by using a tourniquet.
  - Open the airway by using an oropharyngeal airway or by positioning.
    - No advanced airways are used in this stage.
    - If the patient is a child, two rescue breaths may be given.
  - Chest decompression (for pneumothorax) may be conducted if the triage officer is trained in advanced life support and has the equipment on hand.
  - Autoinjector antidotes may be given if the triage officer has them on hand.
    - Take less than a minute to apply
    - Do not require the triage officer to remain with the patient

Triage: SALT

- **Step 4: Provide Treatment and/or Transport**
  - After lifesaving interventions, patients are assigned to a triage category.
  - The SALT triage categories vary slightly from the ID-ME mnemonic.
  - SALT presents five categories:
    - Immediate (red)
    - Expectant (gray)
    - Delayed (yellow)
    - Minimal (green)
    - Dead (black)

Triage: SALT

- **Yellow**
  - Fractures, burns, or dislocations
  - Patients who do not fit in other categories
- **Green**
  - Minor injuries, including lacerations and abrasions
  - Most of these patients will be in the walking wounded area.
- **Black**
  - Dead

Triage: SALT

- **Red**
  - No peripheral pulse
  - Inability to obey commands
  - Respiratory distress
  - Uncontrolled major hemorrhaging
- **Gray**
  - Injuries that are likely to be fatal based on resources currently available
  - Brain matter showing, burns over 90% of body, or other immediate life-threatening injuries that cannot be resolved

Shock: Assessment and Management

Causes of Shock

OEC Edition Differences: Chapter 10

- In the 6th Edition, the pathophysiology of shock is defined as the three basic causes of shock. This is Objective material in the 6th edition.

Causes of Shock

- All forms of shock develop when two or more of these conditions occur together:
  1. Pump failure
     - If the heart cannot pump correctly (i.e., the heart fails)
     - Cardiac output decreases and blood is not pumped to the body adequately to sustain life.
  2. Failure of blood vessels to respond properly
     - The veins and arteries expand too much, pooling blood in them.
     - Smooth muscle in the arteries and veins do not constrict these tubes.

Causes of Shock

3. Low fluid volume
   - Not enough blood to pump through the system
   - Body fluids can be lost due to:
     - Internal or external bleeding
     - Medical condition that decreases the amount of healthy blood
     - Dehydration from causes such as diarrhea or vomiting, burns, or excessive intake of diuretics (fluid pills)

- Any one of these three conditions results in decreased perfusion, with insufficient oxygen or nutrients reaching vital organ tissue.
- When two or more of these conditions occur together, shock develops rapidly.

Management of Shock

OEC Edition Differences: Chapter 10

- In the 6th Edition, positioning a patient in shock has changed.
  - Trendelenburg's Position and elevating legs is no longer recommended for patients in shock.
  - Determination of position in a sled is based on the injury, NOT shock.

Elimination of Trendelenburg for Shock: Chapter 5

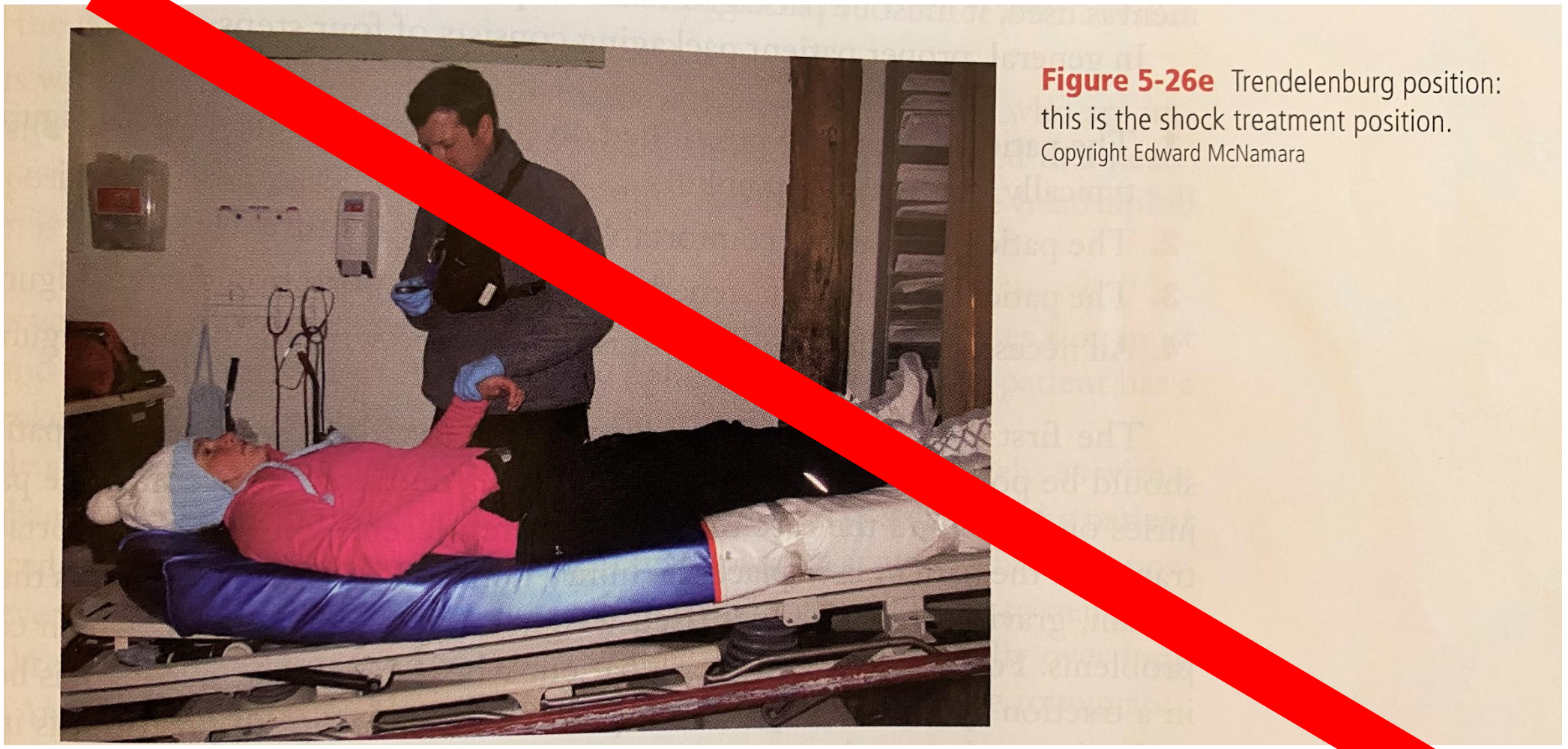

Figure 5-26e Trendelenburg position: this is the shock treatment position.
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Packaging a Patient: Chapter 23

Positioning a Patient in a Toboggan

- Judgment is always needed when placing a patient in a toboggan.
- Shock is no longer a determining factor in the placement of a patient in the toboggan for transport.
- Elevating the legs for shock is no longer recommended.
- The first step is deciding whether the patient's head should be positioned uphill or downhill.
  - Based on:
    - The patient's injuries or illness
    - The care that has been rendered
    - NOT based on shock

Stroke: Assessment and Management

FAST-ED Stroke Scale

OEC Edition Differences: Chapter 11

- In the 5th Edition, a stroke scale known as the Cincinnati Prehospital Stroke Scale was discussed.
- In the 6th Edition, the stroke scale Field Assessment Stroke Triage for Emergency Destination (FAST-ED) Scale is introduced. FAST-ED is the subject of Objective 11-6.

Patient Assessment: FAST-ED for Stroke

- To aid in assessment, use the Field Assessment Stroke Triage for Emergency Destination (FAST-ED) scale.

- **F Face Drooping**
  - Look for paralysis of one side of the face.
    - Drooping of the corner of the mouth
    - Sagging of facial skin

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Patient Assessment: FAST-ED for Stroke

A Arm weakness:

- Have patient raise both extended arms to shoulder level in front of them with eyes closed to see if one drifts down.
  - The arm droop test is easy to perform in the field.
- Check if grip strength is equal in each hand.

A B

© Deborah Endly.

Patient Assessment: FAST-ED for Stroke

S **Speech difficulty**: Are words garbled or cannot express themselves when you ask them to repeat a simple phrase?

T **Time to call**: If you see any of these signs, call 9-1-1 immediately.
If available, record the last know time patient responded normally.

E **Eye deviation**: Check extraocular eye motion.

D **Denial/neglect**: A positive finding is when patient is in denial of the problem.

Management of Stroke

OEC Edition Differences: Chapter 11

- Although discussed in the 5th Edition, describing and demonstrating the management of stoke is an Objective in the 6th Edition.

Management: Stroke

Stroke

- Can greatly improve chances of survival by providing:
  - High-flow oxygen
  - Protecting the airway
  - Rapid transport to a definitive-care facility, preferably a stroke center
- Stroke is a time-sensitive condition because new therapies may reverse the effects if administered soon after symptoms develop.
  - New “clot-busting” medications may reverse an ischemic stroke if given within several hours of onset.

Management: Stroke

- Do not delay transport unless spine trauma is highly suspected.
- If possible, notify the receiving clinic or hospital that a potential stroke patient is coming to their location.
- Document the TLKW (time last known well), as this helps the doctor know if clot-dissolving medication can be given.

Substances and Medications

SLUDGEM / DUMBELS

OEC Edition Differences: Chapter 12

- Although briefly discussed in Chapter 35 of the 5th Edition, identifying the signs and symptoms of organophosphate poisoning or exposure to nerve agents is emphasized in the 6th Edition.
- Defining the mnemonic SLUDGEM or DUMBELS is an objective in the 6th Edition.

Nerve Agent

- To identify organophosphate poisoning or exposure to nerve agents, use the mnemonic SLUDGEM or DUMBELS.

Table 12-2 SLUDGEM and DUMBELS

SLUDGEM	DUMBELS
S—Salivation	**D**—Defecation
L—Lacrimation (tearing)	**U**—Urination
U—Urination	**M**—Miosis (constriction of the pupils)/muscle weakness
D—Defecation	**B**—Bronchorrhea (discharge of mucus from the airways)
G—Gastrointestinal irritation (vomiting)	**E**—Emesis (vomiting)
E—Eye (pupillary) constriction	**L**—Lacrimation (tearing)
M—Miosis/muscle twitching	**S**—Salivation

Narcan

OEC Edition Differences: Chapter 12

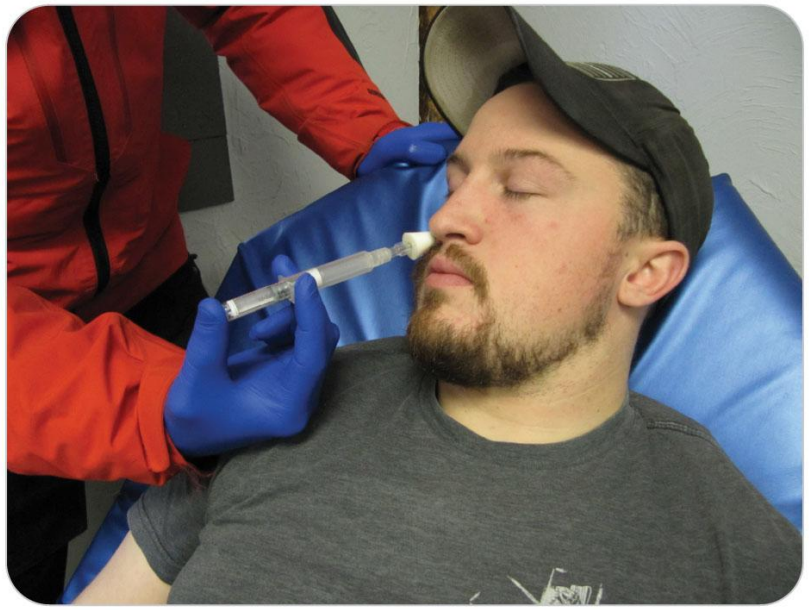
- Although opiates are discussed in Chapter 12 of the 5th Edition, NARCAN was not noted.
  - Although approved for Opioid overdose in 1971, only became more standard for EMS and police to carry as of 2014.
- In the 6th Edition, giving Naloxone (Narcan) is discussed.
  - NOTE: It is not OBJECTIVE material.

Commonly Encountered Substances: Opioids

- Opioids
  - Addiction to opioids is a national crisis in the United States.
  - Most who become addicted eventually die.
    - Fewer than 10% of individuals succeed in stopping this addiction (as reported in 2018).
  - Opioids include heroin, fentanyl, morphine, codeine, oxycodone, and methadone.
  - Many people will overdose repeatedly, until death occurs.
    - Naloxone (Narcan), when given rapidly, will reverse the effects of the overdose initially.

Specific Interventions: Opioids

- Opioid poisoning
  - If you think the person has taken an opioid either by mouth or injection, give naloxone if trained to use it and management has approved giving it.
    - Using personal protective equipment
  - Continue to watch for response to the medication.
  - Call for an ALS ambulance.
  - Remember: When you give naloxone, the patient may wake up and react violently to the drug, potentially trying to hurt you.



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Using an Inhaler

OEC Edition Differences: Chapter 13

- In the 5th Edition, the OEC Skill “Assisting with a Metered-Dose Inhaler” is included.
- In the 6th Edition, this OEC Skill emphasizes the “assist” aspect of this skill.

Management: Using an Inhaler

Assisting with a Patient with a Metered-Dose Inhaler

Objective: To demonstrate the process of assisting a patient in the use of a metered-dose inhaler.			
Skill	**Max Points**	**Skill Demo**	
Criteria met: Determines the Scene is Safe, Initiates Standard Precautions, Introduces Self & Obtains Permission to treat/help	–	–	
Check to make sure you have the correct medication for the correct patient. Check the expiration date. Ensure inhaler is at room temperature or warmer.	1		(CPI)
If applicable, remove the oxygen mask. Hand the inhaler to patient. Instruct the patient to hold the MDI upright and place their lips around the MDI tube, maintaining a good lip seal.	1		
Instruct the patient to press the inhaler (assist if necessary) and inhale one puff. Instruct the patient to hold their breath for at least 10 seconds.	1		
Reapply oxygen. After 1 to 2 minutes, have the patient repeat the dose, if order or protocol allows.	1		
Must receive 3 out of 4 points.			

Assisting with Aspirin

OEC Edition Differences: Chapter 15

- In the 5th Edition, the concept of providing Aspirin was discussed.

- In the 6th Edition, assisting a patient with Aspirin is objective material:
  - 15-6 Give the indication and contraindications of aspirin and nitroglycerin therapy.
  - 15-7 Describe and demonstrate assisting a patient in taking nitroglycerin and/or aspirin.

Management: Aspirin

Aspirin

- Assist a person who is having a myocardial infarction (heart attack) chew and swallow Aspirin as soon as symptoms appear.
  - An adult (325 mg) *OR*
  - Four pediatric (81 mg)
- Most myocardial infarctions are caused by a blood clot in a coronary artery.
  - Clot consists of platelets.
  - Aspirin prevents platelets from sticking together.

Management: Aspirin

To assist a patient in taking aspirin, follow these steps:

1. Confirm that patient is not allergic (to aspirin or wintergreen) and fully responsive (can swallow).
2. Confirm there is no obvious GI bleeding.
   - No vomiting of blood or blood in stool
3. Select the proper dosage of aspirin.
   - One adult buffered aspirin (325 mg per tablet) or four chewable baby aspirins (81 mg)
   - Baby aspirin are preferred and easier for a patient to chew and swallow.
4. Check the expiration date of the aspirin.
5. Instruct patient to chew the aspirin before swallowing it.
6. A sip of water may help get the aspirin into the stomach.

Management: Aspirin

- Document the date, time, and dosage administered.
- Reassess patient frequently, including the vital signs.
- Whenever possible, minimize patient's physical exertion.
  - Exertion increases the oxygen demand on the heart.

Assisting with Nitroglycerin

OEC Edition Differences: Chapter 15

- In the 5th Edition, providing nitroglycerin to patients with chest pain was described.

- In the 6th Edition, “Administering Nitroglycerin” is an OEC Skill (15-1) and objective material:
  - 15-6 Give the indication and contraindications of aspirin and nitroglycerin therapy.
  - 15-7 Describe and demonstrate assisting a patient in taking nitroglycerin and/or aspirin.

Management: Nitroglycerin

Nitroglycerin

- Some patients with angina pectoris may carry their own nitroglycerin.
  - A medication used to relieve chest pain
- This drug may be used only by patient for whom it has been prescribed.
- You may need to assist patient in taking this medicine.
  - If permitted by area, state, or provincial protocols
- Should call for transport and ALS

A

B

A: © Sheila Fitzgerald/Shutterstock;
B: © Tony Savino/Shutterstock.

Management: Nitroglycerin

- Nitroglycerin should be given only to a patient who:
  - Has chest pain
  - Is awake
  - Is responsive
- Contraindications:
  - Expired
  - Not prescribed for that patient
  - Systolic blood pressure is less than 100 mm Hg
  - Three doses of nitroglycerin already for this episode of chest pain
  - Used a medication for erectile dysfunction (e.g., Viagra, Levitra, Cialis) within the past 24 hours
  - Chest pain is due to trauma (is not cardiac in origin)

Management: Nitroglycerin

1. Check systolic blood pressure to ensure it is over 100 mmHg,
2. Check to make sure the medication is prescribed for this patient and that it has not expired.
3. Put on your disposable gloves, and then remove one tablet from the bottle and place the tablet in the patient's hand.
4. Instruct the patient to place the medication under his tongue and to allow it to dissolve completely. Tell the patient not to chew or swallow the tablet. If necessary, assist the patient by putting the medication in place once the patient has lifted his tongue.

Management: Nitroglycerin

- If patient is still experiencing chest pain:
  - Assist patient in taking two more doses of nitroglycerin.
    - A total of three doses
    - At 5-minute intervals
- This total of three doses includes any taken immediately before your arrival.
- Recheck patient's blood pressure after each dose.
  - If systolic pressure is less than 100 mm Hg, do not give more nitroglycerin.

Management: Nitroglycerin

- After:
  - Reassure patient of commonly occurring symptoms with Nitroglycerin.
    - May have a burning sensation beneath the tongue
    - May get a headache
- Document in your notes the date, time, and dosage at which the drug was administered.
- Reassess frequently and recheck the vital signs at regular intervals.

Anticoagulants

OEC Edition Differences: Chapter 15

- In the 5th Edition, anticoagulants is discussed briefly in several chapters.

- In the 6th Edition:
  - Anticoagulants are objective material.
    - 15-4 Explain what an anticoagulant (“blood thinner”) is.
  - The importance of anticoagulants are highlighted in several chapters.
    - Chp 15 Cardiovascular Emergencies,
    - Chp 21 Spine, Brain and Nervous System Injuries, and
    - Chp 31 Geriatric Emergencies

Anticoagulants

- Anticoagulants are medications that prevent the blood from clotting.
  - “blood thinning” medications
  - Slow the normal clotting process for patients with certain medical conditions
    - Heart arrhythmia
    - History of a blood clot in the leg, lung, heart, or brain

Anticoagulants

- Blood thinners can increase or prolong trauma-related bleeding.
  - Bleeding is more difficult to control in these patients
  - Any trauma patient on a blood thinner should be carefully examined, no matter how trivial the injury.
  - Patients on blood thinners who have any significant mechanism of injury be transported to a trauma center
    - Large quantities of blood products are available

Anticoagulants

Table 15-1 Common Cardiac Medications

Drug Name (Generic Name)	Mechanism of Action
Plavix (clopidogrel), aspirin	Prevents clumping of platelets, thereby preventing the formation of clots
Nitroglycerin	Causes dilation of both arteries and veins
Tenormin (atenolol), Toprol/Lopressor (metoprolol)	Lowers blood pressure, slows the heartbeat
Prinivil/Zestril (lisinopril)	Lowers blood pressure, treats CHF
Lipitor (atorvastatin), statins	Lowers harmful cholesterol levels
Repatha	Improves lipid chemistry
Lasix (furosemide), HCTZ (hydrochlorothiazide)	Removes excess fluid from the body
Cordarone (amiodarone)	Used to treat certain arrhythmias, makes heartbeat more regular
Coumadin/Jantoven (warfarin)	Oral anticoagulant, used to treat blood clots, and certain arrhythmias
Eliquis (apixaban)	Oral anticoagulant
Pradaxa (dabigatran)	Oral anticoagulant
Savaysa (edoxaban)	Oral anticoagulant
Aspirin	Oral anticoagulant
Xarelto (rivaroxaban)	Oral anticoagulant

Anticoagulants

- If a patient tells you they take a “heart” medication, ask:
  - What?
  - Why they take it?
  - Ask a family member if needed.

Patient Management

Airway Management: Finger Sweep

OEC Edition Differences: Chapter 9

- Although discussed during the 5th Edition, the Finger Sweep is an OEC Skill in the 6th Edition.

Clearing the Airway: Finger Sweep

Finger Sweep

- Indicated ONLY for patients who are unresponsive when a foreign body is *seen* in the mouth
- Placing a finger into the mouth of a responsive person:
  - Could stimulate the gag reflex, inducing vomiting
  - Could cause the person to bite down, injuring the rescuer's finger
- Do NOT do a "blind finger sweep" by inserting your finger farther than you can see.
  - Might push the object inward, further compromising patient's airway

OEC Skill 9-1: Finger Sweep

Objective: To demonstrate performing the finger sweep.			
Skill	**Max Points**	**Skill Demo**	
Criteria met: Determines the Scene is Safe, Initiates Standard Precautions, Introduces Self & Obtains Permission to treat/help	–	–	
Open the unresponsive patient's mouth using the cross-finger technique.	1		
Insert your gloved index finger into the patient's mouth so the tip of your finger is behind or beneath the foreign object. (Be careful not to push the foreign object farther into the airway.)	1		(CPI)
Curve your finger into a hook and remove the object. (You may need to repeat this technique more than once to completely clear the airway.)	1		(CPI)
Must receive 3 out of 3 points			

RISE

OEC Edition Differences: Chapter 19

- In the 5th Edition, care for complex closed soft-tissue injuries was RICES.
  - R = Rest, I = Ice, C = Compression, E = Elevation, and S = Splint.

- In the 6th Edition, this acronym changed to RISE to accommodate two main changes in philosophy:
  - Reduce the use of ice
  - Eliminate the application of compression

Management: Closed Soft-Tissue Injuries

- In 2019, the founder of RICE (Rest, Ice, Compression, and Elevation) recommended a modification known as RISE.

- Ice is still recommended immediately after the injury.
  - Helps by the numbing effect
  - Ice the injury for 5 minutes at a time with at least 30 minutes off.
  - Always put a cloth between the ice and the skin so you do not freeze the tissue.

Management: Closed Soft-Tissue Injuries

- Compression is no longer recommended.
  - Compression dressings, such as an ACE bandage, may cause an unwanted tourniquet effect on an extremity.
  - Can damage skin and soft tissue while decreasing blood flow that starts the healing process
  - Rather initial splinting is important.

OEC Skill 19-7: Treating Closed Soft-Tissue Injuries

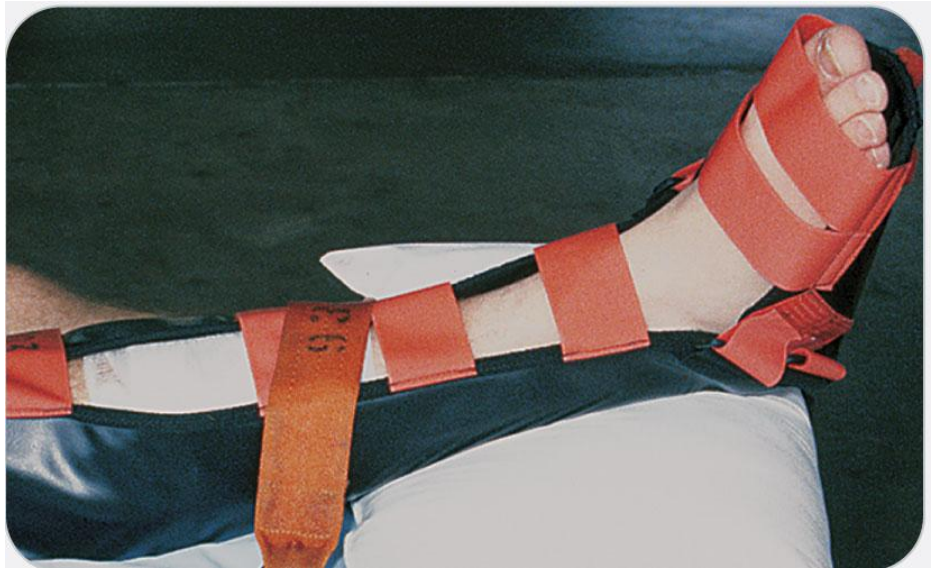
- 1. R—Rest: Cease activity or the use of the affected limb. Inactivity helps to reduce pain.

- 2. I—Ice: Apply cold packs or ice for pain control. Use only for short intervals.

OEC Skill 19-7: Treating Closed Soft-Tissue Injuries

- 3. S—Splint: Immobilize the injured part using either a commercial splint or one fabricated from available materials. Splinting helps decrease pain.

- 4. E—Elevate: Elevate the injured area above heart level to reduce pain.



Traction Splints

OEC Edition Differences: Chapter 20

- In the 5th Edition, the OEC approved traction splints included: Hare, Sager, KTD, and Thomas half ring splints.

- In the 6th Edition, this list was edited to emphasize: Sager, Slishman and Kendrick.
  - Alternatives mentioned are the Hare Splint and the Thomas Splint.

Management: Types of Traction Splints

- Many different types of femoral traction splints are commercially available, including splints made by:
  - Sager
  - Slishman
  - Kendrick

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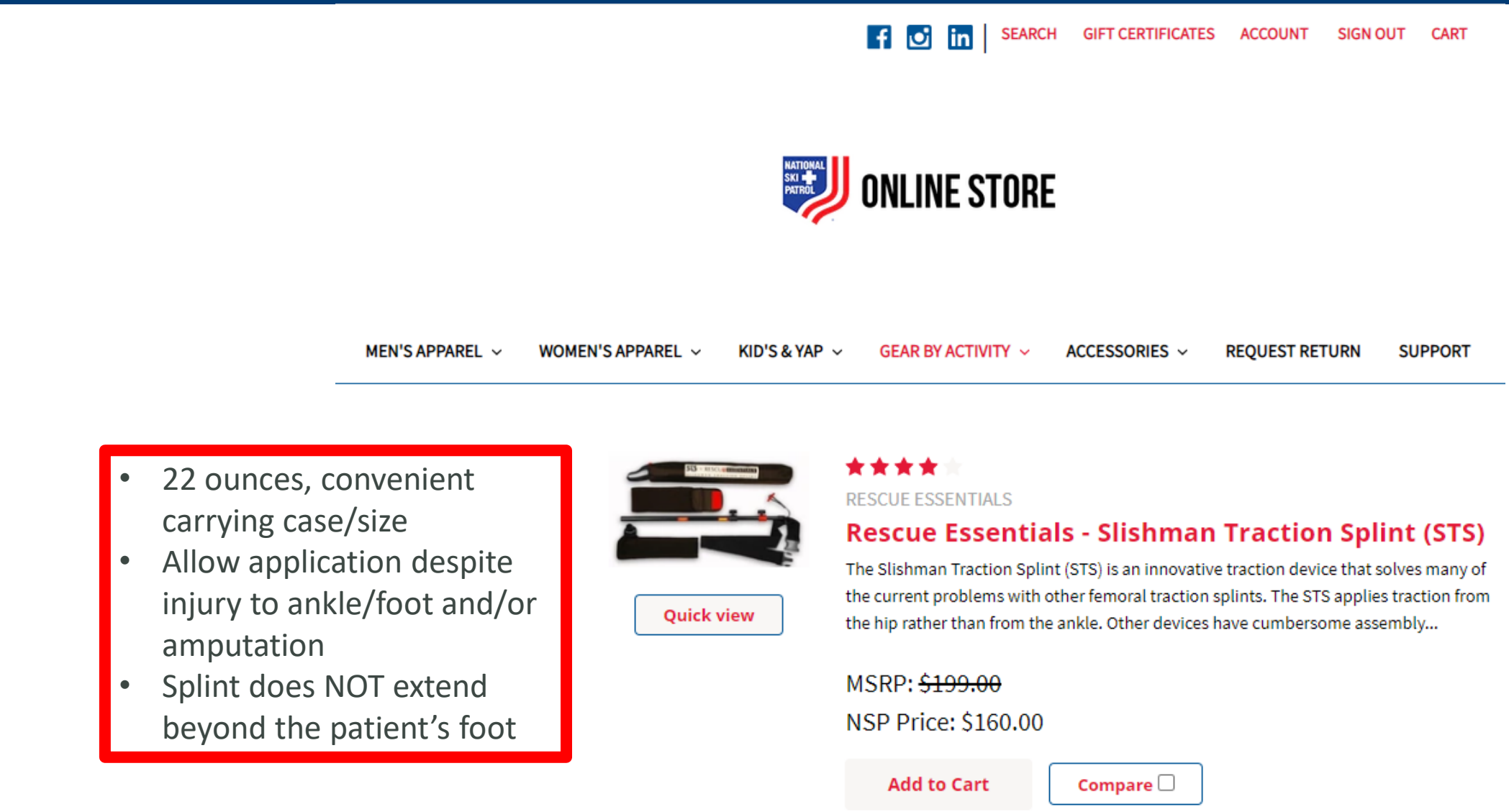
Slishman Traction Splint (STS)

- 22 ounces, convenient carrying case/size
- Allow application despite injury to ankle/foot and/or amputation
- Splint does NOT extend beyond the patient's foot



Pelvic Fracture Considerations: Treatment, Packaging, and Transportation

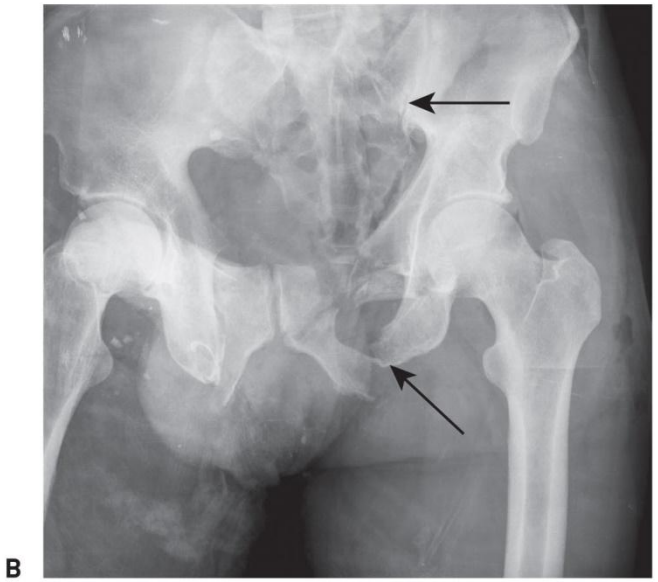
OEC Edition Differences: Chapter 5 and Chp 24

- Within the 5th Edition, the management of a pelvic fracture recommends:
  - "warrants full spinal immobilization" *p. 806*
  - After application of a pelvic binder or sheet binder, "complete the packaging by strapping the patient to the backboard." *p. 806*
  - "Place the patient in the most comfortable position and transport rapidly to a medical facility for definitive care." *p. 660*
- In the 6th Edition, this concept is more tightly recommended:
  - "People with pelvic fractures should NOT be logrolled unless absolutely necessary." *p. 94*
  - "Commercial binders are better than a "homemade" sheet binder." *p. 591*

Lifting or Sliding the Patient: Pelvic Fracture

Special Case: Pelvic Fractures

- Do NOT log roll unless absolutely necessary.
- Using a BEAN lift is the preferred method.
- Pelvic fractures are unstable, and the blood clotted around each fracture site can become disturbed by logrolling.
  - Increased internal bleeding and possibly shock



Management: Pelvis Fractures

- First apply a pelvic binder for a fractured pelvis, which will slow down the internal bleeding.
  - Move any patient with a possible pelvic fracture as little as possible.
  - More movement means more internal bleeding.
- Commercial binders are better than a “homemade” sheet binder, but if only a sheet is available, use a sheet.
  - Studies published in 2019 show the commercial SAM pelvic binder may be superior.

Lifting or Sliding the Patient: Pelvic Fracture

- After the application of a pelvic binder, gently use the BEAN lift.
  - If not enough manpower for a lift, considered including sliding the patient onto the board lengthwise.
- Be highly suspicious of spinal column injury:
  - Spinal Motion Restriction with a cervical collar is suggested.
    - Very painful, possibly distracting injury.
  - Protect the spine by keeping it straight as you minimally lift, and be gentle with the pelvis.
- All patients with pelvic injuries should be transported to a hospital.
  - Highly vascular nature of the pelvis
  - Potential life-threatening bleeding

Changes to the SMR Algorithm

OEC Edition Differences: Chapter 21

- In the 5th Edition Supplement, one of the Mechanism of Injuries that would indicate a potential spinal injury was "*a fall greater than 2.5 – 3 times a patient's height*."

- In the 6th Edition, this "Mechanism of Injury" was eliminated and replaced with "*any fall greater than a height of 3 feet, elderly adult fall from standing or anyone falling down 5 or more stairs*."

Spinal Motion Restriction Algorithm

Determine Mechanism of Injury

- Falling from a aerial ski lift
- Any burial (eg, avalanche or tree well)
- Any fall greater than a height of 3 feet, elderly adult fall from standing or anyone falling down 5 or more stairs
- A pedestrian or bicyclist struck by a motor vehicle
- A motor vehicle collision that includes:
  - Death of one or more occupants
  - The patient was unrestrained (no seat belt or airbag to restrain) and/or was ejected from the vehicle
  - The vehicle was a bicycle, a motorcycle, a snowmobile, or an all-terrain vehicle (ATV), especially if no helmet was worn
- A skier/snowboarder/cyclist who has collided with another skier/snowboarder/cyclist or a fixed object such as a tree or lift tower
- High voltage electrical shock or lightning strike

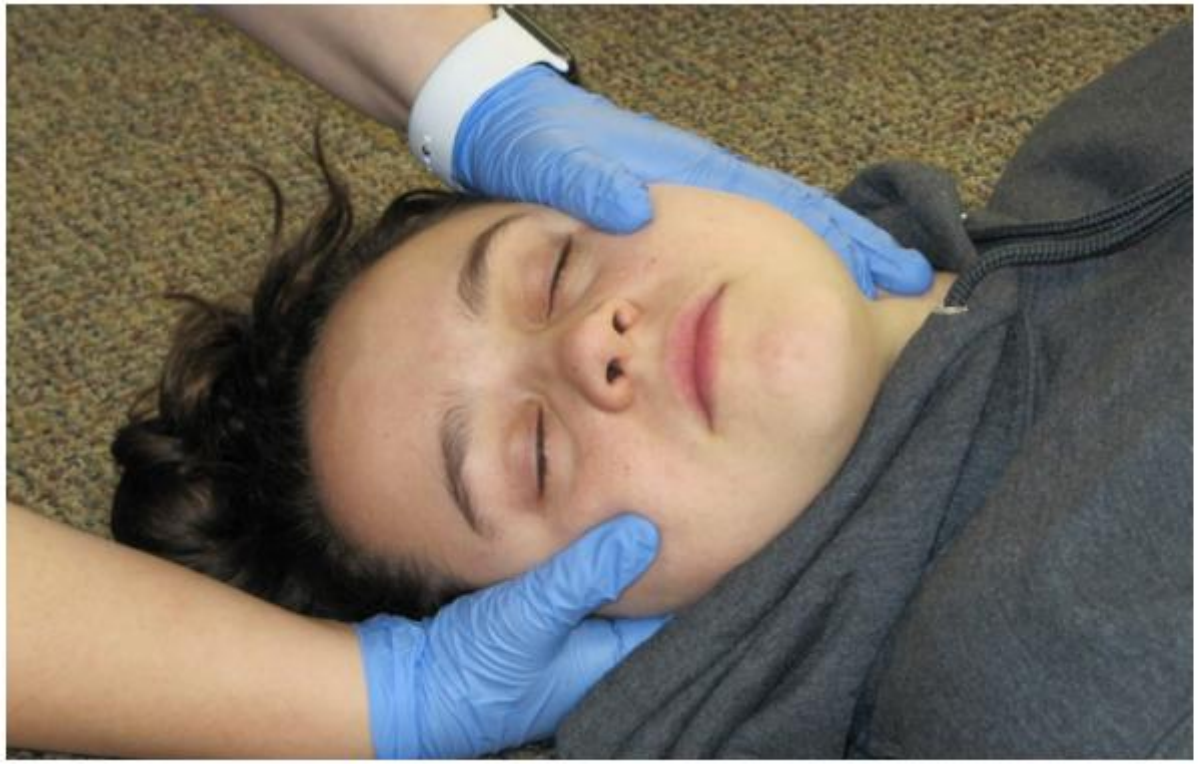
Performing Neutral Head Alignment

OEC Edition Differences: Chapter 21

- In the 5th Edition, “Manual Spine Stabilization” was a Skill, but the actual process to move the head into neutral alignment is not part of this skill.

- In the 6th Edition, “Performing Neutral Head Alignment” replaces the above skill.

OEC Skill 21-1: Performing Neutral Head Alignment



1) Place hands on either side of head, with palms adjacent to the ears and the fingers supporting the jaw and back of head.

2) Gently move head so eyes are looking forward and patient's nose and chin are aligned with the sternum. *Never force the head into alignment.*

Full-Body Vacuum Mattress

OEC Edition Differences: Chapter 21

- In the 6th Edition, placing a patient on a Full-Body Vacuum Mattress is an OEC SKILL.

OEC Skill 21-5: Placing a Patient on a Full-Body Vacuum Mattress

Spinal Motion Restriction (SMR) and Pregnancy

OEC Edition Differences: Chapter 17

- In the 6th Edition, more specific guidance regarding the position to transport pregnant women.
  - If spinal motion restriction is NOT required, transport the patient on her left side.

Management: Spinal Motion Restriction and Pregnancy

- Avoid placing any straps directly over her abdomen.
- After securing her to the backboard, tilt the backboard approximately 4 to 6 inches to the patient's left by placing a patrol pack or a folded blanket under the right side of the backboard.
- Abdominal pain may be associated with nausea or vomiting, so anticipate this.
  - Suction as needed to clear the patient's airway.
- If shock is suspected, transport a woman in her third trimester with her head in an UPHILL position.

© Craig Brown.

Management of Dental Injury

OEC Edition Differences: Chapter 22

- In the 6th Edition, describing the management of dental injuries is objective material.
  - The material is not substantially different from the 5th Edition.

Management: Mouth Injuries

- The focus of care is ensuring a patent airway.
  - Tongue lacerations are controlled with direct pressure.
  - Remove any broken teeth that may be present.
  - If a tooth is displaced but still in its socket and is at risk of falling out, causing airway obstruction, leave it in place and monitor the airway, if possible.

Management: Avulsed Tooth

- Pick up any tooth that has been completely knocked out of its socket (an avulsed tooth) by its crown (part that is exposed normally).
  - Avoid touching the root (the part that was below the gum).
  - Do not wash or scrub an avulsed tooth.
  - Rinse the tooth gently
    - If sterile saline or tepid tap water is available

Management: Avulsed Tooth

- If patient is alert and has no airway problems:
  1. Place the tooth back in the socket correctly *or*
  2. Have patient keep the tooth against the inside of the cheek.

- Remind patient to not swallow the tooth.

Management: Avulsed Tooth

- If a patient cannot safely keep an avulsed tooth in the socket or against the cheek:
  - Ideally, place in Hanks' solution
    - If not available, use either milk or sterile saline
  - Doing so will allow reimplantation for up to 6 hours.

Miscellaneous Topics

Communications and Documentations:

Handoff Reports

OEC Edition Differences: Chapter 8

- Although discussed during the 5th Edition, Handoff Reports are highlighted in the 6th Edition and considered Objective material.

Handoff Report Information

KEY POINT

Handoff Report Information

- The patient's name, if known
- The patient's age (approximate if the exact age is unknown)
- The patient's chief complaint
- The patient's injuries or illnesses
- Assessment with pertinent positives and negatives
- All treatment given
- The patient's response to that treatment
- Serial sets of vital signs, including the most current set
- Immediate patient care requirements

Childbirth, Obstetric Emergencies and Sexual Assault: **Sexual Assault**

OEC Edition Differences: Chapter 17

- In the 5th Edition, sexual assault is not a concept taught.
- In the 6th Edition, knowing how to handle a possible sexual assault is considered objective material.

Management: Gynecologic Sexual Assault

- In most states, OEC technicians are mandated by law to report suspected sexual assault to law enforcement officials.
- Sexual assault is a serious problem.
  - Contact the proper authorities immediately.
  - Reassure the patient, provide privacy and ensure confidentiality.
    - Be careful, compassionate, and respectful in your interaction with the patient.
    - Attempt to minimize the number of people around the patient.
    - When possible, use a female patroller for the interview and assessment.
  - If there is bleeding, control it.
    - Except for controlling bleeding, an exam of a sexual assault victim is best left to higher-level medical personnel.
  - Transport to a definitive-care facility for evaluation and care is a priority.

Behavioral Emergencies and Crisis Response:

Mood Disorders vs. Psychosis

OEC Edition Differences: Chapter 33

- In the 6th Edition, Mood, Adjustment, or Affective Disorder replaced the outdated terminology of neurosis.
  - Neurosis was used in the 5th Edition.

Causes of Behavioral Emergencies: Behavioral

- A mood, adjustment, or affective disorder is characterized by abnormal behavior in a person who remains firmly in touch with reality.
  - Anxiety
  - Depression
  - Paranoia
  - Agitation
  - Bipolar disorder

Causes of Behavioral Emergencies: Behavioral

- Sharply contrasts with psychosis, or a psychotic disorder, which is characterized by abnormal behavior and altered perceptions of reality
  - Often have visual or auditory hallucinations
  - Can lead the person to engage in dangerous, suicidal, or homicidal behaviors
  - Generally considered more dangerous due to their increased tendency to exhibit violent behavior

Special Operations and Ambulance Operations: **Active Shooter**

OEC Edition Differences: Chapter 34

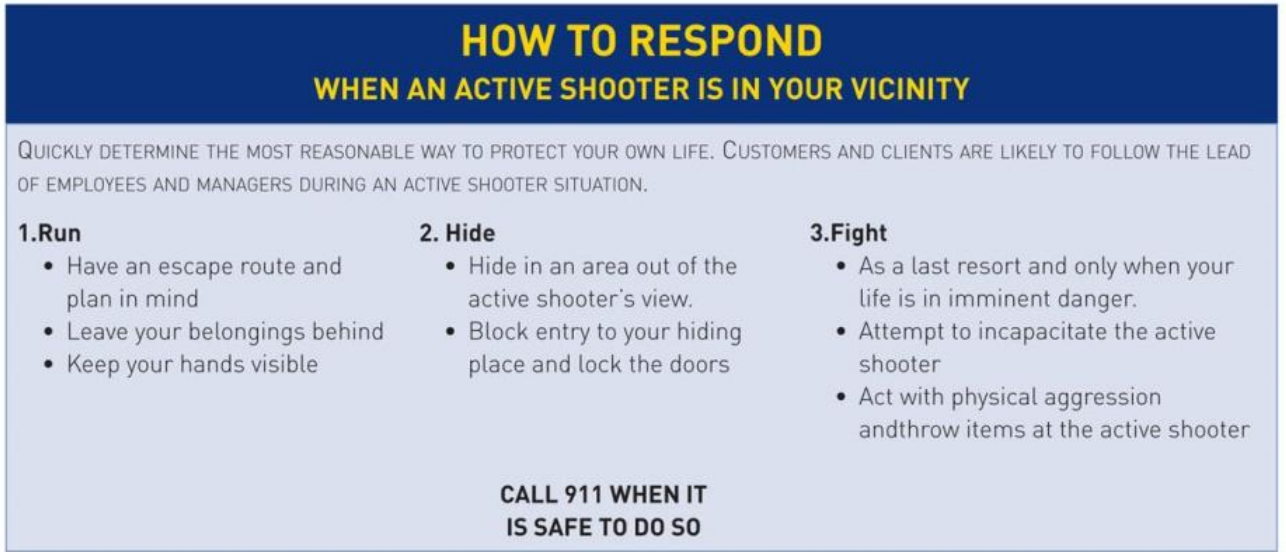
- In the 6th Edition, Active Shooter information is discussed under the topic of Terrorism. This topic was not included in the 5th Edition. It is an objective.

Terrorism

- Individuals today with extreme religious beliefs, severe mental illness, a grudge, or other antisocial behavior can inflict tragedy in public locations.
  - Most are not associated with terrorist groups directly but have antisocial personalities and decide to “become infamous” by killing people.
    - “Lone wolf” terrorists

Terrorism: Scene Safety

- First make the scene safe for as many people as possible and yourself.
- Notifying law enforcement is an early necessity.
- Do not approach an active violence scene until law enforcement says it is safe.
  - Your first inclination is to rush in and help the injured.
  - Becoming a victim yourself is never good.



HOW TO RESPOND

WHEN AN ACTIVE SHOOTER IS IN YOUR VICINITY

QUICKLY DETERMINE THE MOST REASONABLE WAY TO PROTECT YOUR OWN LIFE. CUSTOMERS AND CLIENTS ARE LIKELY TO FOLLOW THE LEAD OF EMPLOYEES AND MANAGERS DURING AN ACTIVE SHOOTER SITUATION.

1.Run

- Have an escape route and plan in mind
- Leave your belongings behind
- Keep your hands visible

2. Hide

- Hide in an area out of the active shooter's view.
- Block entry to your hiding place and lock the doors

3.Fight

- As a last resort and only when your life is in imminent danger.
- Attempt to incapacitate the active shooter
- Act with physical aggression andthrow items at the active shooter

CALL 911 WHEN IT IS SAFE TO DO SO

Reproduced from How to Respond When an Active Shooter Is in Your Vicinity, Department of Homeland Security, Retrieved from https://www.cisa.gov/sites/default/files/publications/active-shooter-poster-2017-508.pdf.

Terrorism: Scene Safety

- Run, Hide, Fight program during active shooter situations
  - Advocated by the Federal Bureau of Investigation and US Department of Homeland Security
- Run. Evacuate if possible.
- Hide. Hide silently in the safest place possible.
- Fight. Take action to disrupt or incapacitate the shooter.

*Modified from the Ready.gov website.

- Immediately after an incident:
  - Wait for local law enforcement officers to assist you out of the building, if inside.
  - When law enforcement arrives, you must display empty hands with open palms.

Terrorism: Additional Information

- Understand that gunfire may sound artificial.
  - Assume that any popping sound is gunfire.
  - If there are two or more persons in the same place when a violent incident begins, you should spread out in the room to avoid offering the aggressor an easy target.
- Be mindful that violent attacks can involve any type of weapon, not just a gun.
  - Knives, blunt objects, physical force, or explosives can be just as deadly as a gun.
- The suggested actions here are applicable in any violent encounter:
  - Plan ahead
  - Visualize possible escape routes, including physically accessible routes for staff with disabilities and others with limited mobility.

Terrorism: Management

- Once the scene is safe and the perpetrator(s) are in custody, treat the scene as a triage exercise.
- There has not been a terrorist attack at a ski area as of 2020.
- Management, security, the medical advisor, and the patrol may want to consider putting a plan of action in place in case one does occur, much like many school systems have done.

Special Operations and Ambulance Operations: **REECO System**

OEC Edition Differences: Chapter 34

- In the 6th Edition, describing the RECCO system is objective material.
  - The RECCO system is discussed in the 5th Edition, but is NOT an objective.

Search and Rescue: Avalanche Rescue

- Avalanche rescue operations within the United States are conducted using the ICS.
- Technology greatly enhances operational effectiveness.
  - Wireless communications, which enable rescuers to quickly learn of incidents
  - Helicopters, which enable rescuers to reach the scene within minutes
  - Avalanche transceivers and the *RECCO system* have also improved rescue efforts by dramatically reducing search time.
    - Recco is a highly effective avalanche rescue system that enables rescues to quickly locate an avalanche victim using harmonic radar.
  - Use of rescue dog teams has also shortened search times.

OEC Skills

Chapter 5 Moving, Lifts, and Transporting Patients:

Deleted and Added Skills

OEC Edition Differences: Chapter 5

- Within the 5th Edition, Chapter 5 had 2 skills
- In the 6th Edition, there are 12 skills.
  - Same 2 OEC Skills from 5th Edition
    - *Performing the Direct Ground Lift*
    - *Performing the BEAN/Bridge Lift*
  - 9 newly defined as “OEC Skills”
  - 1 moved from Chapter 21 to Chapter 5
    - *Logrolling a Supine Patient onto a Backboard*

New OEC Skills Chapter 5

OEC Skill 5-1:	Performing the Power Grip
OEC Skill 5-2:	Performing the Power Lift
OEC Skill 5-3:	Performing the Extremity Lift
OEC Skill 5-6:	Performing the Draw-Sheet, Plastic Slider, or Flat Transfer Lift
OEC Skill 5-7:	Logrolling a Supine Patient onto a Backboard
OEC Skill 5-8:	Performing the Human Crutch
OEC Skill 5-9:	Performing the Two-Person Assist
OEC Skill 5-10:	Performing the Chair Carry
OEC Skill 5-11:	Performing the Fore-and-Aft Carry
OEC Skill 5-12:	Using a Scoop Stretcher

Chapter 20 Musculoskeletal Injuries: **Deleted Skills**

OEC Edition Differences: Chapter 20

- In the 6th Edition:
  - There is an elimination of the following skills:
    - Figure Eight Skill for clavicle fractures
    - Reducing a Posterior Sternoclavicular (S/C) Injury

Chapter 21 Spine, Brain and Nervous System:

Deleted Skills

OEC Edition Differences: Chapter 21

- In the 6th Edition:
  - There is an elimination of the following skill:
    - Immobilizing a Seated Patient (use of a short board or a vest-type immobilization device, such as a KED)