

2025



Outdoor Emergency Care

SKILLS REFRESHER

2025
CYCLE C



SKILLS REFRESHER GUIDE

This Supplement outlines what will be covered at a Hands-On Skills Refresher
Use of this supplement is completely optional.

DEDICATION

The OEC Refresher Committee wishes to express our most sincere appreciate and dedicate this years' refresher to retiring National OEC Program Director

BILL DEVARNEY

We cannot express our gratitude enough for all Bill has done to bring the OEC Refresher Committee together and help make each OEC Refresher more successful than the year before.

Bill's guidance has been immeasurable. His knowledge and expertise of OEC, the EMS domain we interact with, and NSP as a whole has been an amazing resource.

He has a keen sense of recognizing and encouraging the strengths of individuals. He has been supportive, especially when we have needed it most. He reminds us to stay on track and not make our work more complicated than necessary, while simultaneously pressing us to put out a superior product.

Bill DeVarney served as the National OEC Program Director for 6 years. He served as Asst. National OEC Program Director for 6 years prior to that and before that he served as the Eastern Division OEC Program Director for 6 years.

Bill has been chairman of the National OEC Refresher Committee since 2013. Among his many accolades, Bill was awarded National Appointment #9170 in March of 2000. He was awarded the Distinguished Service Award in 2010 and was inducted into the National Ski Patrol Hall of Fame in 2019.

Enjoy your retirement, Bill, from the National OEC Program Director role, but don't wander too far from us. We love you and appreciate all you have done to support us.

The National OEC Refresher Committee

REFRESHER SKILLS CHECKLIST 2025

2025 OEC Refresher Cycle C Skills Checklist	Each OEC Technician must perform the following skills	Each OEC Technician must participate as a team member	Instructor Sign Off
Each OEC Technician must perform the following skills:			
Incorporate into all stations:			
Demonstrate how to manage shock.		x	
Incorporate into each station, the use of BSI.	x		
Refresher Group Discussion:			
Case review discussion - triage		x	
Review how to find CISM/patroller wellness resources near you.		x	
OEC Technician must perform in a group:			
Describe and demonstrate how to use the SALT triage system.		x	
Describe and demonstrate how to use the START triage system.		x	
Each OEC Technician must perform the following skills:			
Explain and demonstrate the five parts of patient assessment.			
Scene size-up	x		
Primary assessment	x		
History taking	x		
Secondary patient assessment	x		
Reassessment	x		
Demonstrate how to assess the pupils and eye movement	x		
Demonstrate how to assess the following vital signs:			
Level of responsiveness - AVPU	x		
Pulse (heart rate)	x		
Respirations	x		
Blood Pressure (auscultation and palpation)	x		
Oxygen saturation (demonstrate the use of a pulse oximeter)	x		
Each OEC Technician must perform the following skills:			
Demonstrate the use of a pocket mask.	x		
Demonstrate the use of a BVM as both a one-rescuer and a two-rescuers skill.		x	
Demonstrate the sizing and placement of:			
Oropharyngeal airway	x		
Nasopharyngeal airway	x		
Demonstrate how to place an oxygen cylinder into service.	x		
Each OEC Technician must lead one:			
Describe and demonstrate the proper care of a patient who has abused a substance.		x	
Review and discuss your area's local protocol regarding the use of naloxone.		x	
Each OEC Technician must perform one of the following:			
Describe and demonstrate care for one of the following closed soft-tissue injuries:			
Contusion or		x	
Crush injury (closed)		x	

2025 OEC Refresher Cycle C (Continued)	Each OEC Technician	Participate as a Team	Instructor Sign Off
Each OEC Technician must lead one and participate in all others:			
Describe and demonstrate care for the following open soft-tissue injuries:			
Amputation		x	
Avulsion		x	
Open crush injury		x	
Each OEC Technician must perform the following skills:			
Explain and demonstrate the different methods to control bleeding:			
Direct pressure	x		
Wound packing	x		
Tourniquet application	x		
Demonstrate how to apply a dressing and bandage	x		
Demonstrate how to care for wounds caused by an animal	x		
Each OEC Technician must lead one and participate in all others:			
Describe and demonstrate how to assess the following leg injuries and demonstrate the care for each using the splint listed:		x	
Knee injury, quick splint		x	
Closed boot top (tibia/fibula), rigid board splints		x	
Ankle, soft splint		x	
Describe and demonstrate how to assess and care for an open mid-shaft femur fracture using a sterile dressing, traction device, and a long spine board for transport (non-smr).		x	
Demonstrate how to remove a ski boot, snowboard boot, or hiking boot.		x	
Each OEC Technician must participate in a group:			
Demonstrate how to maintain proper spinal alignment while placing a patient onto a long backboard from a sitting position, using a pediatric patient.		x	
Each OEC Technician must perform the following skills:			
Demonstrate how to assess the chest for trauma using L.A.P. method.	x		
Demonstrate how to apply an occlusive dressing for a sucking chest wound.	x		
Each OEC Technician must perform the following skills:			
Demonstrate how to communicate with a pediatric patient.	x		
Demonstrate how to assess a pediatric patient.	x		
Each OEC Technician must perform the following skills:			
Describe and demonstrate how to manage the following common pediatric illnesses and injuries:			
Foreign body airway obstruction (simulate abdominal thrusts)	x		
Assess and care for a burn of the hand	x		
Each OEC Technician must participate in a group:			
Describe and demonstrate how to assess and treat a patient with a behavioral emergency.		x	

PATIENT ASSESSMENT - OEC6 - Chapter 7

- ⇒ Explain and demonstrate the following five parts of a patient assessment.
 - Scene size-up
 - Primary patient assessment
 - History taking
 - Secondary patient assessment
 - Reassessment
- ⇒ Describe and demonstrate how to assess the following vital signs:
 - Level of responsiveness
 - Pulse
 - Breathing rate
 - Blood Pressure
 - Pulse Oximetry
- ⇒ Demonstrate how to assess the pupils.
- ⇒ Demonstrate how to assess eye movement.

PATIENT ASSESSMENT PROCESS

Scene Size-up

Ensure scene safety
Determine the MOI or NOI
Take standard precautions
Determine the number of patients
Consider additional resources

Primary Patient Assessment

Form a general impression
Control life-threatening bleeding
Assess level of responsiveness
Rapidly assess airway, breathing, circulation, disability
Obtain chief complaint
Update dispatch of needs

History Taking

Investigate the chief complaint using SAMPLE
Assess pain and other complaints using OPQRST

Secondary Patient Assessment

Perform a physical exam
Assess vital signs

Reassessment

Check effectiveness of treatment
Repeat primary patient assessment and reassess vital signs
Treat changes in patient's condition
Prepare to hand off to a higher level of care

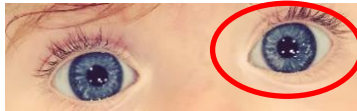
Assessing Pupils:

1



Moving from the lateral side of the patient's face, briefly shine the light into the patient's left pupil. Note the reaction of the left pupil.

Observe

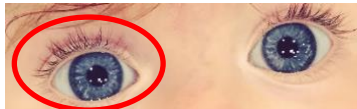


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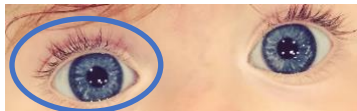


Shine the light into the left pupil a second time, note the reaction of the right pupil.

Observe

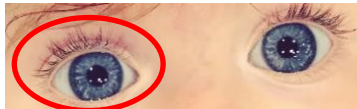


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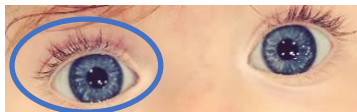


Moving from the lateral side of the patient's face, briefly shine the light into the patient's right pupil. Note the reaction of the right pupil.

Observe

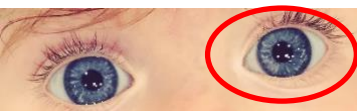


4.



Shine the light a second time into the right pupil, note the reaction of the left pupil.

Observe



Assessing Eye Movement:

Unless there is an eye injury or preexisting condition, the eyes should move in unison. Ask the patient to look at your nose. Hold your index finger 6-8 inches away from the patient's face. Moving your finger up, down and left to right, observe the patient's eyes. Are their eyes in sync and able to follow your finger?

AIRWAY MANAGEMENT - OEC6 - Chapter 9

- ⇒ Demonstrate the use of a pocket mask and Bag Valve Mask (BVM)
- ⇒ Demonstrate the sizing and placement of NPA, and OPA.
- ⇒ Demonstrate how to place an oxygen cylinder into service.
- ⇒ Explain what a pulse oximeter is and demonstrate how it is used, if not done with assessment

During the Covid-19 pandemic the use of pocket masks was greatly discouraged. BLS/CPR courses have now re-instated teaching the use of pocket masks in their courses. Using a BVM (bag valve mask) is the preferred method for delivering rescue breaths.

Pocket Mask:

If you choose to use a pocket mask, be sure the filter is securely in place and you are using the one-way valve. To correctly assemble the pocket mask, follow the manufacturer's directions. Ensure a tight seal over the nose and mouth. Deliver rescue breaths at a rate of 1 breath every 5-6 seconds. Watch for the patient's chest to rise with each breath. If the chest does not rise, reposition and try again.



OEC 6, page 210 figure 9-13



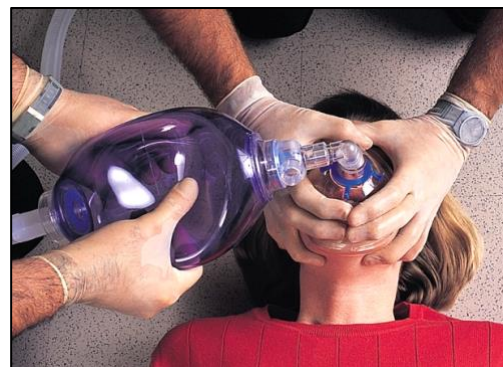
Bag Valve Mask (BVM): The BVM is a ventilation device used to deliver rescue breaths to a patient who is not breathing, or their respirations are inadequate. Based on the patient's size, select the correct size mask and BVM.



If necessary, assemble the bag according to manufacturer's directions.

Single rescuer: Kneel at the patient's head. With one hand, open the airway, place the mask on the patient's face and create a tight seal over the nose and mouth. Compress the bag with the other hand and watch for chest rise. If the chest doesn't rise, reposition and try again.

Two rescuers: Kneel on opposite sides of the patient, or one on the side and one at the top of the head. First rescuer, open the airway, place the mask on the patient's face and create a tight seal over the nose and mouth. The second rescuer compress the bag and watch for chest rise. If the chest doesn't rise, reposition and try again. Both single and two-rescuer, the ventilations should be delivered at a rate of one every 5-6 seconds.



Photos 9-24 and 9-25 page 218

Nasopharyngeal Airway:



1 - SIZE



2 - LUBRICATE



3 - INSERT



4 - CHECK

Oropharyngeal Airway:



1 - SIZE



2 - INSERT



3 - CHECK

Oxygen Use:



Placing an O2 cylinder into service



Pulse Oximetry

TRIAGE/MCI - OEC 6 - Chapter 4

START Triage – RPM's - 30-2-Can Do

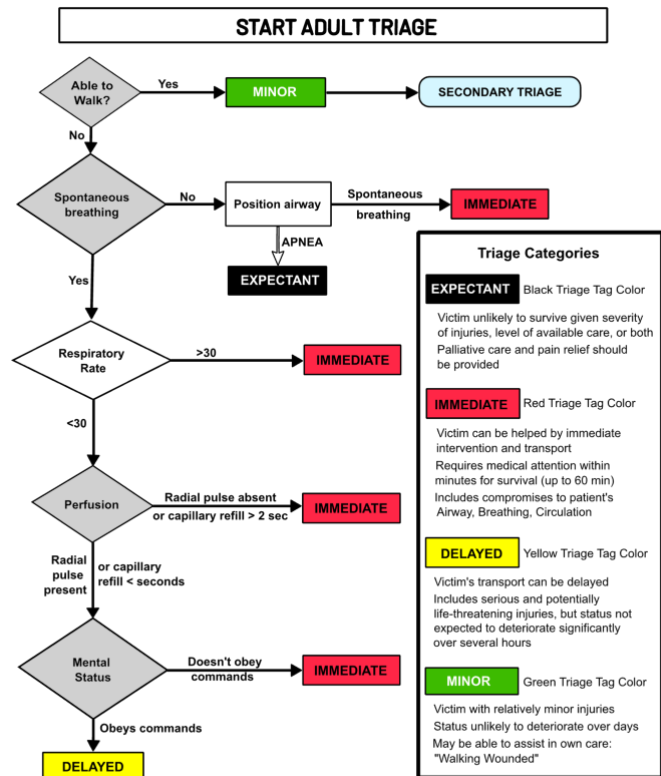
WALKS – **Minimal GREEN** - Separated to designated area – Remember - a 'Walker' could have a significant condition requiring a change in designation.

RESPIRATIONS – if Absent or Greater than 30 - **Immediate RED**

PULSE - No Radial pulse or Capillary Refill Longer than 2 seconds - **Immediate RED**

MENTAL STATUS – Unable to follow simple command - **Immediate RED**;

Able to follow simple command (but not walking) - **Delayed YELLOW**



SALT Triage – Walk, Wave, or Still – (Refer to Flow Chart Fig. 4-11, Page 79 of OEC 6)

SORT – Walk, Wave, or Still?

ASSESS – Breathing – Yes or No (2 Rescue Breaths for a Child)
Obeys Command (the wave)
Peripheral Pulse,
Respiratory Distress,
Uncontrolled Major Hemorrhage

LIFESAVING INTERVENTIONS – control major hemorrhage, open airway (OPA?),
Consider two rescue breaths if the patient is a child

TREAT AND TRANSPORT – Will be completed at other Skill Stations

NOTE from the Editor: I think back at my own various exposures to MCI events over the course of my experience beginning in the mid 1970's as a young ski patroller at one of the first half dozen major US ski lift accidents. I have worked in both Ski Patrol and EMS since 1973.

I recall that first incident with feelings of shear panic. I was 18 years old and assigned to gathering and delivering equipment to the scene where a dozen skiers were injured and more trapped. My role was clear and within my capability, a quite necessary role. None-the-less, I was left with a feeling of insufficiency and achievement.

Since then, I have attended trainings for large scale MCI's – airplane crashes, shootings, bus accidents, hazmat incidents, etc. All of these exercises were a chaotic event, each a learning experience. Even when the outcome is positive, the event is frenzied. These are the 'Dress Rehearsals'. I have been involved in real life smaller scale MCI's: Multiple vehicle accidents, bus accidents, chemical spills, a nursing home fire, and a small explosion. The result continues to be controlled chaos with productive outcome. The thought of a major event still leaves me with a feeling of trepidation. I have come to expect and be okay with these feelings, even during trainings.

SHOCK - OEC6 - Chapter 10 - page 223

- Control major bleeding, assess and correct any problems with ABCD's.
- Keep patient warm and dry.
- Administer high flow oxygen.
- Once the patient's oxygen saturation is determined, follow proper titration procedures.
- Provide rapid transport.



BEHAVIOR EMERGENCIES AND CRISIS RESPONSE – OEC 6 - Chapter 33

- ⇒ Describe and demonstrate how to assess a patient with a behavioral emergency.
- ⇒ Describe and demonstrate the treatment of a patient with a behavioral emergency.

Approaching and Caring for the Behavioral Emergency Patient. - Table 33-3 -

- Always maintain your safety; always have an escape route.
- Approach patients in a way that they can see you.
- Avoid unnecessary physical contact with patients.
- Try to calm patients.
- Take time to talk to patients and to listen to their responses.
- Never lie to patients.
- Never play along with any auditory or visual hallucinations.
- Consider the medical conditions that might resemble a behavioral emergency.
- Treat any life-threatening problems you encounter.
- Monitor patients for signs of agitation or worsening of their condition



SUBSTANCE ABUSE AND POISONING – OEC 6 - Chapter 12

⇒ Describe and demonstrate the proper care of a patient who has abused a substance.



Naloxone (Narcan) is used to alleviate symptoms of opioid overdose.



If an opioid overdose is suspected, consult your local protocols for the use of naloxone (Narcan)

SOFT-TISSUE INJURIES – OEC 6 - Chapter 19

⇒ Describe and demonstrate care for the following closed soft-tissue injuries:

- Contusion
- Hematoma
- Crush injury
- Compartment syndrome

⇒ Describe and demonstrate care for the following open soft-tissue injuries:

- Abrasion
- Amputation
- Avulsion
- High-pressure injection injury
- Incision
- Laceration
- Mechanical tattooing
- Open crush injury
- Puncture

- ⇒ Explain and demonstrate the different methods to control bleeding, including application of a tourniquet: direct pressure, pack wound and tourniquet.
- ⇒ Describe and demonstrate how to apply a dressing and bandage,
- ⇒ Demonstrate the proper management of wounds caused by animals. (Chapter 27)

Open Soft Tissue Injuries

Abrasions - Cleanse the wound and apply a sterile dressing and bandage.



Avulsion - A complete or incomplete separation of the soft tissue layers (most often between the subcutaneous layer and the underlying fascia) where the injured tissue is left dangling as a flap. The flap also may no longer be connected to the body. Control bleeding. Cleanse the area to remove any debris. If the flap is still attached, replace the flap in its original position and apply a sterile bandage to reduce blood loss and contamination, and possibly restore blood flow to the avulsed tissue.



Amputation - Control bleeding and bandage as appropriate. Splint if needed. Package and send the amputated part to the hospital with the patient.



Control bleeding. Apply a sterile dressing and apply direct pressure. If direct pressure is inadequate, apply a compression (pressure) dressing.



If bleeding from an extremity is profuse and direct pressure is ineffective, apply a tourniquet. The tourniquet should be applied several inches above the wound, but not over a joint. Refer to OEC skill 19-2. Record the time that the tourniquet is applied.



Wound Caused by an Animal

- Control bleeding.
- Wash the bite with sterile or clean water, or saline solution.
- Cover with a sterile dressing and secure with a bandage.
- Monitor for shock and seek further medical care as necessary.

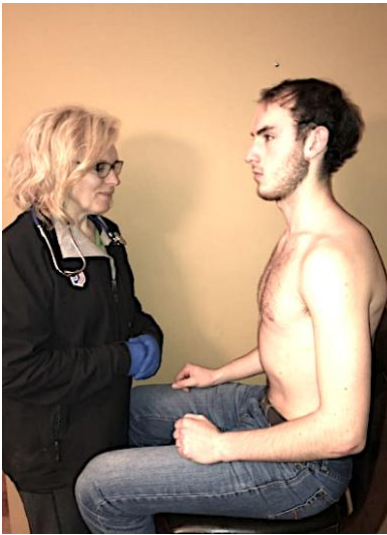
Closed Soft Tissue Injuries

- **Compartment Syndrome** is an injury that results from significant trauma to the tissues of an extremity, usually from compression. Compartment syndrome is a true medical emergency that requires rapid transport to a trauma center to prevent the loss of a limb.
- **Contusions** remember RISE. Rest, Ice, Splint and Elevate (OEC 6 – pg. 419)

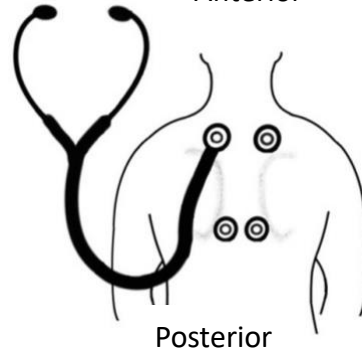
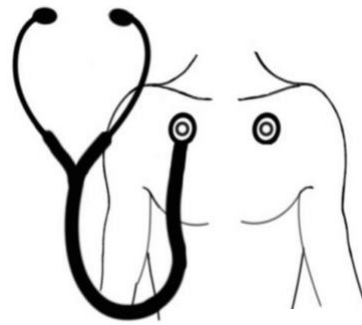
CHEST TRAUMA - OEC 6 - Chapter 23

- ⇒ Describe and demonstrate how to assess the chest for trauma, including using the LAP method.
- ⇒ Demonstrate an Occlusive dressing for a sucking chest wound (chapter 19)

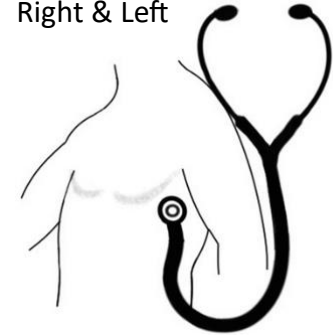
The LAP Method:



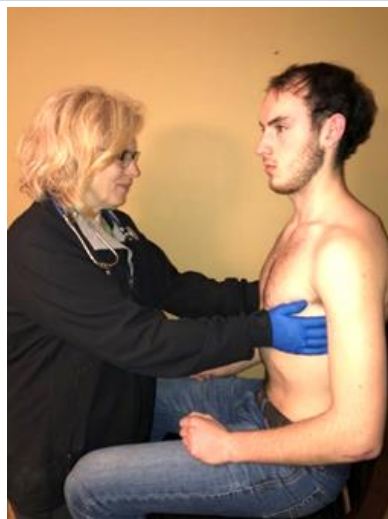
Look for obvious trauma and symmetry.



Right & Left



Auscultate for Breath sounds_- note there are 8 locations that you should be listening to.



Palpate for tenderness and/or deformity

Sucking Chest Wound - Care using an Occlusive Dressing

Treat immediately by covering the wound with your gloved hand, then cover the wound with an occlusive dressing. Remember tape only three sides. There are commercially prepared occlusive dressing available such as Bolin and Asherman chest seals. If using one of those, follow the manufacturer's instructions for application.



MUSCULOSKELETAL INJURIES – OEC 6 - Chapter 20

⇒ Describe and demonstrate how to assess and care for the following injuries:

- Femur mid-shaft and distal
- Knee
- Tibia and fibula
- Ankle
- Foot and toe

⇒ List and demonstrate the use of the following types of splints:

- Quick splint
- Soft splint
- Rigid splint (e.g., airplane, quick, wooden, SAM)
- Traction splint (the one you use at your resort/area; e.g., Kendrick, Hare, Slighman, Sager)
- Define and demonstrate the proper care for an open (compound) fracture.

Important Reminder: Check CMS before and after All splinting.

Traction Splinting:

It is best to use a traction splint for any open or closed fracture of the middle third of the femur. If jagged bone ends sticking out of an open femur fracture cause additional pain as traction is applied, place a sterile bandage over any exposed bone, apply tension (not traction).

Rapidly transport the patient. If the bone end retracts into the skin, leave it inside the body. During your skills refresher event, you will demonstrate applying the traction splint(s) that your area uses.



KEY POINT

Traction Splint Application

Use the following principles concerning the initial application of all traction splints, regardless of manufacturer: Have all resources available, fully prepare the splint for application, use proper axial alignment, provide continuous traction once traction is applied, avoid unnecessary movement of the injured leg, and secure the patient and splint to a long spine board for transportation.

Rigid Board Splints:

If a quick splint is not available, an injury can be splinted with two padded board splints. Refer to skill guide 20 -11 for complete step by step directions.



Boot Removal:

⇒ Demonstrate how to remove a ski boot, hiking boot, or snowboard boot when the patient has an injury to that leg. (OEC skill 20-12)



Rescuer 1: Stabilize the boot that is to be removed.



Rescuer 2: Unbuckle or unlace the boot completely. Spread the boot shell, pulling the tongue forward as far as it can go, or open a rear entry boot's back as far as it can go.



Rescuer 1: Stabilize the leg/ankle either by placing one hand on the front of the ankle and one hand on the back of the ankle, or by holding both sides of the ankle. Hold this position firmly as the boot is removed.



Rescuer 2: Gently remove the boot by sliding its heel away from the foot, followed by the toe. Assess distal CMS. Prepare and apply a splint. Reassess distal CMS.

Soft Splint:

Foot and toe injuries can also be splinted with a soft splint, or a well-padded rigid splint. Be sure to leave the toes slightly exposed so distal CMS can be assessed.



Quick Splint:

A ski patroller's mainstay of care for lower extremity injuries.

Knee injuries with a flexed knee, may require support under the knee. Support the knee in position with padding. Another option would be to use an airplane splint or padded boards.



CHAPTER 21 SPINE, BRAIN, AND NERVOUS SYSTEM INJURIES

Demonstrate how to maintain proper spinal alignment while placing a patient onto a long backboard from a sitting position.

For a patient who is sitting: If exam is reliable, and the patient can move on their own, stabilize the head by applying a cervical collar before moving. Allow the patient to lay on the stretcher, toboggan, or vac mat. If exam is NOT reliable; manually stabilize head, apply collar and carefully move to supine position and at that point move to LSB.

⇒



Spinal Motion Restriction (SMR)

OEC 6 – Figure 21-14 pg. 523

Determine Mechanism of Injury

- Falling from an 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

Reliability of Assessment

- Is the patient alert and oriented?
- Responding normally to verbal commands?
- Can they respond appropriately when asked about sensory stimulus?
- Can you rule out all signs of intoxication with alcohol or drugs or any altered mental status?
- Can they respond appropriately to questions and your exam?
- Can the patient focus on your questions rather than a distracting injury? (ie, severe pain from a fracture)
- Can a younger pediatric patient answer your questions appropriately?

If you answer no to any of these:

Use Spinal Motion Restriction (long backboard with cervical collar or large vacuum mattress)

Exam Findings

- Deformity or step-off of spinal alignment
- Midline tenderness over the spine, not flank or rib tenderness
- Loss of sensation (numbness) or motor function distal to possible injury
- Flexor or extensor posturing to painful stimuli
- Skull irregularities or evidence of trauma
- Cerebral spinal fluid leak from nose or ears
- Sacral or posterior pelvic pain when side to side compression is performed

If the exam reveals any of these:

Pediatric Considerations:

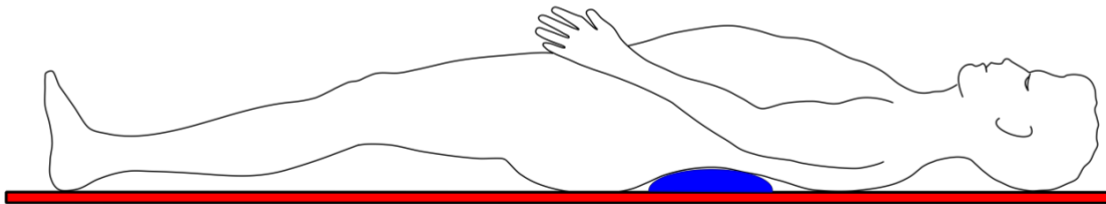
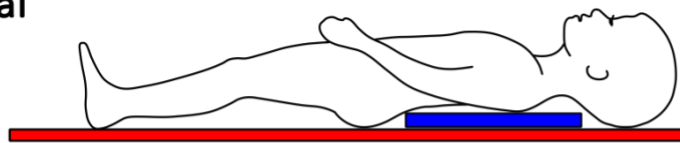
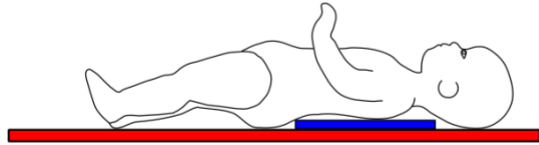
Pediatric patient can present with several unique challenges: If SMR is needed, apply a pediatric c-collar and immobilize the child to a spine board. If a pediatric c-collar is not available, stabilize the head and neck with other means. Often infants, toddlers, and children can be effectively immobilized using a vest-style immobilization device. Padding may be needed to keep the spine straight and airway open. When you need to pad under the shoulders of a pediatric patient, one size does not fit all. The amount of padding needed under the shoulders will vary according to the size of the child.



Spinal Motion Restriction Pediatric Considerations

KEY POINT

Because a child's head is larger in relation to its body than is the case for adults, pad beneath a child's shoulders to lift the thorax and allow the head and neck to assume a neutral position.



LJC 2005



What might you have that is readily available for suitable padding when SMR is needed for your pediatric patient? Consider blankets, sheets, neck gaiters, towels, or other soft items that can be folded to the desired thickness so it lifts the thorax and allows the head and neck to assume a neutral position.

ACKNOWLEDGEMENTS

2025 Cycle A OEC Refresher Committee Statement

The mission of the OEC Refresher Committee is to provide assistance to all Outdoor Emergency Care technicians so that they may effectively review Outdoor Emergency Care content and skills each year and render competent emergency care to the public they serve. The objectives of the program are to:

- Provide a source of continuing education of all OEC technicians.
- Provide a method for verifying OEC technician competency in OEC knowledge and skills.
- Review the content of the OEC curriculum over a three-year period.
- Meet local patrol and area training needs in emergency care.

Email the Refresher Committee at oe crefreshercommittee@nsp.org

2025 OEC Refresher Committee

Bill DeVarney
National OEC Program Director
wdevarney@gmail.com

Linda Clifford
Bousquet Ski Patrol
Lindclif3@gmail.com

Jason Erdmann
Tyrol Basin Ski Patrol
jmerdmann@gmail.com

Kathy Glynn (Chair)
Three Rivers-Hyland Ski Patrol
Angelw499@aol.com

George Angelo
Utah Olympic Park Ski Patrol
Gangelopc@gmail.com

Tim Thayer
Afton Alps Ski Patrol
timthayer@comcast.net



Medical Review

Chuck Allen D.O. NSP Medical Advisor

OEC and NSP Education Staff

Chuck Allen, D.O., NSP Medical Advisor

William DeVarney, National OEC Program Director

Deb Endly, National Board Member

Maddie Miller, Education Director

Morgan Johnson, E-Learning Course Developer