## Helmet Removal

- Leave the helmet on if:
- It fits well and prevents movement
- No airway or breathing problems.
- Does not inhibit assessment.
- You can properly immobilize the spine.



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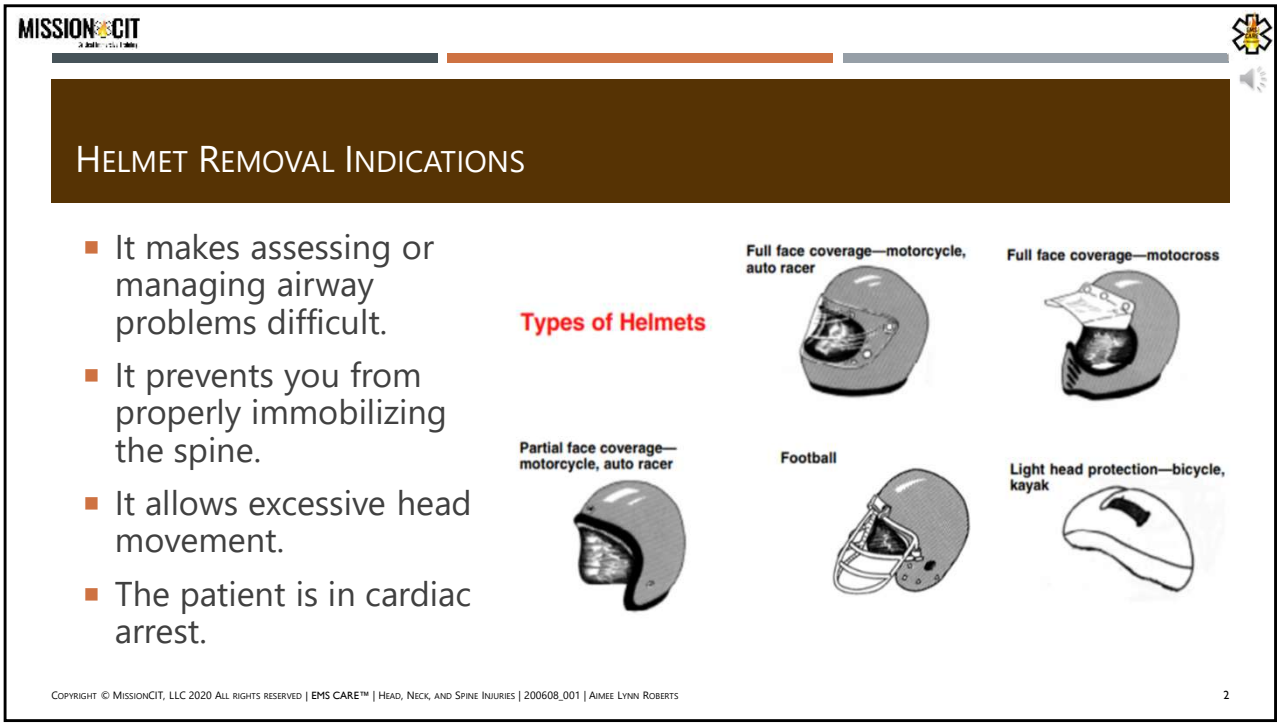
Welcome back. Let's finish up this lesson discussing how to manage an injured patient wearing a helmet. As we know, an injured helmeted victim poses unique challenges for those performing initial stabilization and preparation for transport.

Current recommendations for helmet removal are to leave the helmet in place until the patient arrives at a Trauma care facility.

Consequently, A helmet that fits well and prevents the patient's head from moving, should be left on, if the

following 4 conditions are present:

1. There are no impending airway or breathing problems.
2. It does not interfere with the assessment and treatment of airway or ventilation problems.
3. You can properly immobilize the spine, and
4. If there is any chance that removing the helmet will further injure the patient.



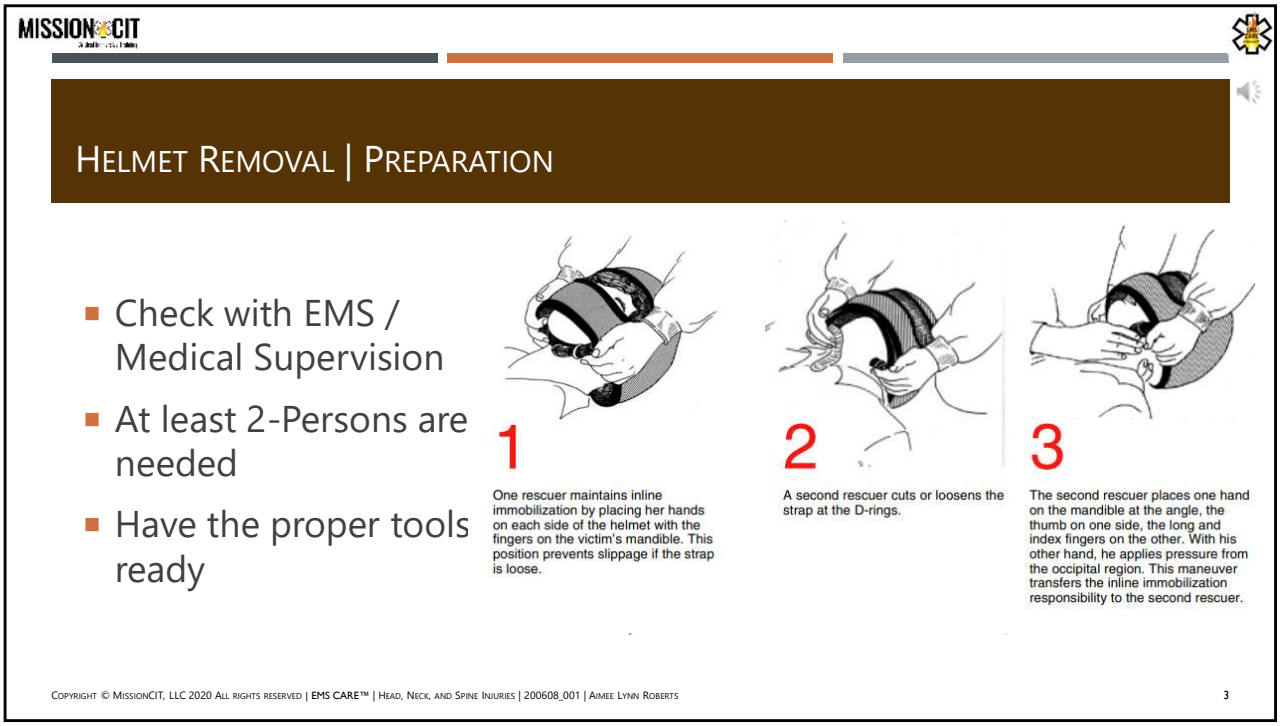

So, indications to remove a helmet include these 4 conditions:

1. A Suspected cervical spine injury.
2. A Suspected head injury.
3. You are unable to securely immobilize the neck prior to transport. And
4. If the patient is in cardiac arrest.

In addition, you may consider removing a helmet if the patient is wearing a full-face motorcycle helmet. Specifically, if it makes assessing or managing airway problems difficult, and removal of a face guard to

improve airway access is not possible.  Or, if it allows excessive head movement and can increase forward flexion of the neck when the patient is placed on a backboard.

Note that the major contraindications to helmet removal are paresthesia or neck pain during the removal procedure. Paresthesia suggests worsening stretch or pressure on nerve endings as they exit the spinal column.




So, when preparing to remove a helmet:

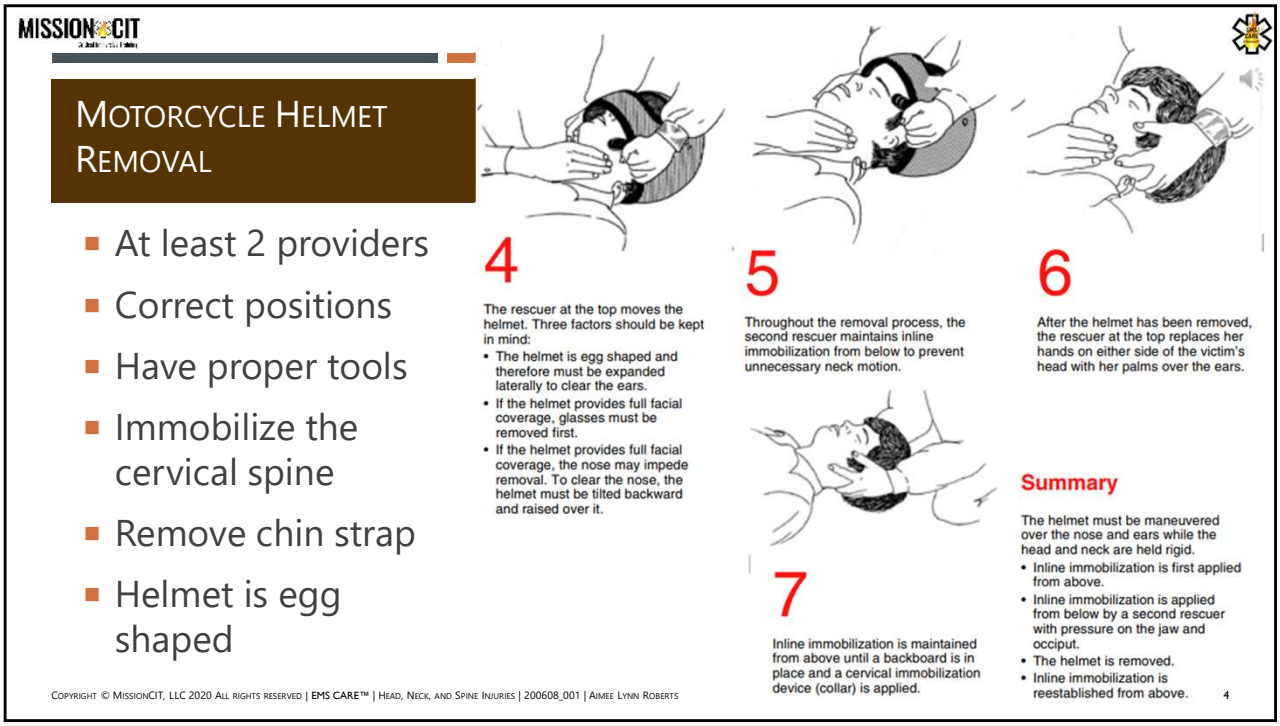
- Double check the decision with EMS or medical control.
- Have at least two EMTs available, 3 to 4 persons are best, and
- Have the necessary tools ready. At a minimum, a screwdriver – cordless preferred, and a pair of scissors.

Note that:

- When indicated and according to local protocols,

the patient should be placed supine on a long cervical immobilization board or ambulance stretcher.

- The technique for helmet removal depends on the actual type of helmet worn by the patient. And,
- Although time may be of the essence, fast helmet extraction tools may also increase the amount of cervical spine motion.




The diagram which began on the prior slide, shows the steps for removing a motorcycle helmet. Let's go through the 7 steps.

1. The first provider should be positioned at the head of the patient and immobilize the cervical spine. Perform by placing both hands on each side of the helmet and placing the fingers bilaterally on the patient's mandibles.
2. The second provider should then cut or remove the chin strap.
3. Once the chin strap has been cut, the second

provider should take over the job of inline stabilization. Perform by placing one hand on the patient's occiput and another hand on the patient's chin.

4. The rescuer at the top moves the helmet. Note that the helmet is egg-shaped, requiring expansion by the ears. Additionally, you may have to tilt the helmet backward if the nose impedes removal.
5. The second rescuer always maintains inline immobilization.
6. Once the helmet has been removed, the rescuer at the top takes over inline immobilization.

Per protocol, a backboard or ambulance stretcher and cervical collar are then applied to immobilize for transport.




Remember, be sure to have at least 2 providers and proper tools available before you start. And here are the 7 steps for removal of a football helmet with 3 providers:

1. The first provider should be positioned at the head of the patient and immobilize the cervical spine. Perform by placing both hands on each side of the helmet and placing the fingers bilaterally on the patient's mandibles.
2. The second provider should then cut or remove the chin strap.

3. Once the chin strap has been cut, the second provider should take over the job of inline stabilization.  Perform by placing one hand on the patient's occiput and another hand on the patient's chin.
4. The first provider should then use a screwdriver (manual or cordless) to remove the screws securing the facemask to the helmet. This allows the facemask to be lifted up and out of the way, which opens access to the airway.
5. Once the first provider has finished removing all 4 screws, the first and third providers should simultaneously remove the helmet, being sure to pull the ear holes away from the patient's head. And,
6. During this maneuver, the second provider prevents the neck from hyperextending or falling. If needed, insert padding behind the occiput to prevent neck extension.
7. Per protocol, a backboard or ambulance stretcher and cervical collar are then applied to immobilize for transport.

Finally, remember that small children may require additional padding to maintain the in-line neutral position.

So that’s the end of this lesson and this topic on Head and Spine injuries.  A chapter review follows before you take a quiz. You will need to answer at least 75% of the questions correctly to get credit.

Good Studying