

Position Statement Review

By Robin Lensch ATC, LAT, EMT-I

It is well known that there is a risk of head and neck injuries in contact and collision sports. While this risk is relatively low it is important to be educated about such injury. For certified athletic trainers, however, the prevention, recognition and care of catastrophic cervical spine injuries are crucial aspects of their roll with these athletic teams. The National Athletic Trainers' Association (NATA) released an updated position statement for the management of the cervical spine injured athlete in the 2009 May-June issue of the Journal of Athletic Training. This statement serves as a research based guide for athletic trainers and emergency medicine personnel in the acute care of potentially catastrophic cervical spine injuries. The following is a brief review of information that might be beneficial to share with athletes, coaches and parents about this research.

- A catastrophic cervical spine injury is defined as "A structural distortion of the cervical spinal column associated with actual or potential damage to the spinal cord."²
- There were 603 direct catastrophic injuries in high school football between fall 1982 and spring 2007 documented nationally. Other sports reporting significantly less catastrophic neck injuries included gymnastics, ice hockey, track/field, lacrosse, wrestling and cheerleading.



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Prevention – The efforts made to prevent these injuries

It is crucial that medical personnel and coaching staff understand proper and improper techniques of their sport in order to teach the proper techniques to their players. Especially but not limited to head up tackling and hitting techniques. There is an excellent resource for teams at: <http://www.nata.org/consumer/headsup.htm>

Mechanism – The mechanism of injury leading to catastrophic injury

Most catastrophic neck injuries occur when an athlete is struck or strikes with the top of their head. *There is more information on proper hitting techniques and prevention in Amy Bernard's article on page 2.*

Recognition – Recognition of potentially catastrophic injury

The new position statement outlines some of the main signs and symptoms that would be cause for immobilization and transportation via EMS to an emergency facility. These include – but are not limited to the following: Unconsciousness or altered level of consciousness, bilateral (both right and left side) neurologic findings or complaints, significant midline spinal pain with or without palpation, and obvious spinal column deformity.¹ In addition to these signs and symptoms, the lay person without the proper medical training and experience should always error on the side of caution and call EMS when an athlete complains of neck pain.



Prepare & Care – Preparedness and acute care for these injuries

The following are some of the recommendations for coaching staff and emergency personnel when preparing for potential catastrophic head and neck injuries:

- Coaches and schools should have all equipment serviced and replace according to manufactures guidelines.
- Emergency personnel including athletic trainers and the local EMS should be familiar with the current NATA position statement and the equipment and procedures specific to each sport as it pertains to immobilization of the spine injured athlete.
- All individuals responsible for the care of athletes should be involved in regular (annual) rehearsals of these techniques – including manual stabilization, removal of equipment as necessary and proper techniques for moving and transferring the spine injured athlete.

More information can be acquired on this topic by accessing the NATA.org public resources or contacting your communities certified athletic trainer or medical director.

1. Information complements of: J Athl Train. 2009 May-Jun; 44(3): 306-331.
2. Banerjee R, Palumbo MA, Fadale PD. Catastrophic cervical spine injuries in the collision sport athlete, part1: epidemiology, functional anatomy, and diagnosis. Am J Sports Med. 2004;32(4): 101-111.