Injury Overview

- The overall injury rate in NCAA field hockey is 6.3 per 1,000 athlete exposures (games and practices combined). These data only include Division I and Division III colleges and universities.
- There were more than 10,000 injuries and 1.7 million athlete exposures from 2004 to 2009.
- Field hockey players are nearly twice as likely to be injured in a game (9.8 injuries per 1,000 athlete exposures) than in practice (5.1 injuries per 1,000 athlete exposures).
- Preseason has the highest overall injury rate (9.1 per 1,000 athlete exposures), while the postseason has the lowest (3.7 per 1,000 athlete exposures) as compared to the in-season injury rate of 5.5 injuries per 1,000 athlete exposures.
- Muscle strains (23.5 percent), followed by contusions (16.3 percent), sprains (13.5 percent), fractures (7.0 percent) and concussions (6.3 percent), are the most common types of injuries.
- Quadriceps (thigh) strains (6.8 percent), lateral ankle sprains (6.6 percent), concussions (6.3 percent) and hamstring strains (5.3 percent) are the most common specific types of injuries.
- The head and face rank third among the most commonly injured body parts (11.2 percent), after the knee (16.0 percent) and thigh (14.0 percent).
- The most common activity at the time of injury during competition is general play (45.6 percent), followed by defending (22.5 percent), ball handling (7.0 percent), blocking a shot (5.6 percent), and goaltending (4.2 percent).

Injuries Unique to Field Hockey

Muscle strains and contusions are the most common types of injury in NCAA field hockey. The nature of the sport puts extraordinary amounts of strain on muscles in the back and pelvic regions, which is supported by the large proportion of muscle strains in these data. In addition, contusions are frequent due to contact with sticks, balls and other players. Collegiate field hockey players sustain hand or finger injuries, such as fractures, more often than players in other stick-handling sports. The proportion of injuries to the head and face in field hockey is higher than in sports such as basketball, football and wrestling, but less than sports such as ice hockey. In addition, a large proportion of injuries occur from elevated balls and sticks, so rules restricting elevated balls and sticks should be diligently enforced.

Catastrophic Injuries*

During this five-year time period, there were no fatalities from direct mechanisms in college field hockey. There was one nonfatal catastrophic injury during this time period. During the 22 years that the National Center for Catastrophic Sports Injury Research (NCCSIR) has collected collegiate field hockey data, there have been no deaths related to direct mechanisms (collisions), and one nonfatal catastrophic injury. The incidence of sudden cardiac death in the NCAA is roughly 1 in every 40,000 student-athletes per year and is the leading medical cause of sudden death.

Heat Illness Related Injuries

There were only a few heat injuries reported during this time period. All cases reported did occur during practice, however. It is important to remember that heat illness conditions are preventable and coaches, athletic trainers and administrators should work diligently to prevent them, especially during practice sessions.

*National Center for Catastrophic Sports Injury Research
Concussions

- A concussion is a brain injury.
- Concussions can occur from blows to the body as well as to the head.
- Concussions can occur without loss of consciousness or other obvious signs.
- Concussions can occur in any sport.
- All concussions are serious and can change a student-athlete’s behavior, thinking or physical functioning.
- Recognition and proper response to concussions when they first occur can help prevent further injury or even death.

Injury Prevention Tips‡

For coaches:

- All on-field personnel should review, practice, and follow their venue emergency plan and be trained in administering first aid, AED use, and cardiopulmonary resuscitation (CPR).
- Regarding concussions, if in doubt, sit them out.
- Athletes with a concussion must be removed from practice or competition, and should not return that day and not until given clearance by an approved medical provider according to the institution’s concussion management plan.
- The use of protective gloves during practice and competition can protect against hand and finger fractures.
- Wearing protective eyewear can guard against the loss of an eye and other serious eye injuries.
- Hydrate adequately — waiting until you are thirsty is too late to hydrate properly.
- Rest. Take some time away from training both during and between seasons to avoid overuse injury and burnout.
- After a period of inactivity, progress gradually back to field hockey through activities such as aerobic conditioning, strength training and agility training.
- Participate in adequate and supervised rehabilitation for all injuries. Returning to a sport prematurely is associated with a high risk of re-injury.
- Speak with a sports medicine professional or athletic trainer if you have any concerns about injuries or field hockey injury prevention strategies.

For student-athletes:

- Have a preseason physical examination and follow your doctor’s recommendations.
- Hydrate appropriately — waiting until you are thirsty is too late to hydrate properly.
- Wear appropriate and properly fitted personal protective gear.
- The use of protective gloves during practice and competition can protect against hand and finger fractures.
- Wearing protective eyewear can guard against the loss of an eye and other serious eye injuries.
- Gradually increase the frequency, intensity and duration of training to avoid overuse injuries.
- Gradually increase the frequency, intensity and duration of training to avoid overuse injuries.
- Rest. Take some time away from training both during and between seasons to avoid overuse injury and burnout.
- After a period of inactivity, progress gradually back to field hockey through activities such as aerobic conditioning, strength training and agility training.
- Participate in adequate and supervised rehabilitation for all injuries. Returning to a sport prematurely is associated with a high risk of re-injury.
- Speak with a sports medicine professional or athletic trainer if you have any concerns about injuries or field hockey injury prevention strategies.

Playing Rules and Safety

- The NCAA requires all players to have a preparticipation medical examination.
- The NCAA mandates institutions have a Concussion Management Plan.
- All field players are required to wear a mouthguard at all times.
- Goalkeepers are required to wear appropriate protective headgear — a helmet incorporating fixed full-face protection and cover for the head, including the back of the head. Goalkeepers must wear a throat protector and chest protector at all times. Mouthguards for goalkeepers are strongly recommended.
- Field players are permitted to wear throughout a game only a smooth, preferably transparent or white but otherwise single-colored, face mask that fits flush with the face, soft protective head covering or eye protection in the form of plastic goggles (i.e., goggles with a soft-covered frame and plastic lenses; a caged frame cannot be worn).
- Players have the option of wearing soft headgear; subject to game official approval.
- Players may not wear anything that may be dangerous to other players.
- Referees will suspend the game and stop the clock because of a player injury.
- If a player incurs a wound that causes bleeding, the umpire must stop the game at the earliest possible time. The wound must be evaluated by an athletic trainer or medical personnel.
- Play will be stopped and fields cleared based on lightning safety standards.

More Facts about Collegiate Field Hockey Injuries

- Injuries are defined as those that occurred as a result of participation in an organized intercollegiate game or practice, required the attention of an athletic trainer or physician, and resulted in the restriction of participation one or more days beyond the day of injury.
- In competitions, elevated balls account for 23 percent of all injuries.
- Anterior cruciate ligament (ACL) sprains account for 2.3 percent of all injuries.
- The majority of injuries (32.2 percent) cause three to six days of time loss from participation, while injuries resulting in 21 or more days account for 13.1 percent of all injuries.
- Injuries are distributed equally among positions.
- The acute non-contact category is the most common mechanism (39.8 percent) for all injuries, followed by contact with elevated balls (15.3 percent), overuse (13.0 percent) and contact with a stick (9.5 percent).
- More injuries occur in the second half (45.5 percent) versus the first half (29.5 percent) of competitions.
- The majority of practice-related injuries occur during team drills (48.0 percent), followed by conditioning (21.9 percent) and individual drills (8.3 percent).
- Surgery results in 6.2 percent of all injuries.

Resources


NCAA Concussion Fact Sheets and Video for Coaches and Student-Athletes. Available at www.NCAA.org.


Injury Prevention Tips‡ are provided in collaboration with STOP Sports Injuries.