

# FIELD HOCKEY

ield hockey is one of the oldest sports in existence: 4,000-year-old wall decorations from the tomb of Kheti in Egypt depict players with rudimentary "crooks" and a ball. The modern game of field hockey was subsequently developed in England in the mid-19th century and exported to the United States as a women's sport in 1901. Interest in field hockey has grown dramatically in North America, and today there are more than 6,000 women competing at the collegiate level each year. As the sport has evolved, it has become faster-paced and more physical. As a result, the number of and severity of injuries has increased.

## What are the common field hockey injuries?

Although field hockey is classified as a non-contact sport, acute injuries may result from contact with a stick, the ball, another player or the playing surface or goal cage. The most common injuries in women's field hockey include:

## Hand and Wrist Injuries

Because field hockey is played in a semi-crouched position with the right hand placed low on the stick, the hands and fingers are extremely vulnerable to injury from contact with the ball or an opponent's stick. Hand fractures, especially in the fingers are common.

### Facial Injuries

Accidental contact with a ball or an opponent's stick may result in injury to the face. While the majority of these injuries are minor cuts and bruises, more severe injuries such as facial fractures, penetrating eye injuries, and broken teeth have been reported.



#### FIELD HOCKEY

### Ankle Injuries

Ankle sprains are the most frequent injury in sports. Inversion-type ankle sprains have been estimated to comprise roughly 15 percent of all injuries sustained during field hockey participation.

#### Knee Injuries

Knee injuries, including anterior cruciate ligament (ACL) tears, are very common, as are muscle strains, particularly of the quadriceps and hamstrings.

#### Concussion

Concussions represent approximately 7 percent of all injuries sustained during field hockey competitions. Dizziness and confusion are the most common symptoms of a concussion, although longer-term issues such as headache, fatigue, and difficulty concentrating may also occur.

## Overuse Injuries

While acute injuries are often more dramatic in nature, chronic injuries comprise a significant number of injuries. Chronic injuries such as low back pain, tendinitis of the hip, knee or ankle, and stress fractures of the leg and foot, typically result from repetitive activity and overuse.

## How are field hockey injuries treated?

With any injury, participation should be stopped until an assessment is made by a qualified health professional. For minor injuries, treatment usually includes rest, ice, and elevation.

Other injuries may be more serious and may require additional evaluation with X-rays or an MRI and a longer period of rest combined with supervised rehabilitation and a gradual return to play as symptoms permit. All head injuries should be thoroughly evaluated. Athletes should return to play only after appropriate physician evaluation, and only when completely symptom free.

#### **Expert Resources**

Cordelia W. Carter, MD Mininder S. Kocher, MD, MPH

#### References

Dick R, Hootman JM, Agel J, et al. Descriptive epidemiology of collegiate women's field hockey injuries: National Collegiate Athletic Association Injury Surveillance System, 1988–1989 through 2002–2003. *J Athl Train.* 2007; 42(2):211-220.

Murtagh K. Injury patterns among female field hockey players. *Med Sci Sports Exerc.* 2001;33(2): 201-207.

Murtagh K. Field hockey injuries. *Curr Sports Med Rep.* 2009; 8(5) 267-272.

Field Hockey History and Tradition. Available at: usafieldhockey.com (accessed 3/31/2011).





## FIELD HOCKEY

### TIPS TO PREVENT FIELD HOCKEY INJURIES

As we learn more about the types of injuries that most commonly occur in field hockey, it is possible to design and implement strategies targeted to injury prevention.

- Wear appropriate personal protective gear.
- Gradually increase the frequency, intensity, and duration of training to avoid overuse injuries.
- Balance cardiovascular, strength, flexibility, and skills training.
- Be aware of potentially hazardous environmental conditions like excessively hot or wet conditions and plan accordingly.
- Rest. Take some time away from training both during and between seasons to avoid overuse injury and burnout.
- Don't specialize in one sport. Take time to participate in other sports to enhance your performance.
- Report all injuries in a timely fashion and seek appropriate medical care. Don't try to play through the pain.
- Participate in adequate and supervised rehabilitation for all injuries. Returning to a sport prematurely is associated with a high risk of re-injury.
- Consider participation in neuromuscular training programs to prevent common ankle and knee injuries.

An AOSSM & STOP Sports Injuries Collaborating Organization



Sports Tips are brought to you by the American Orthopaedic Society for Sports Medicine. They provide general information only and are not a substitute for your own good judgment or consultation with a physician. To learn more about other orthopaedic sports medicine topics, visit sportsmed.org.