# **Basketball Safety**

# SPORTS MEDICINE

# A Guide to Injury Prevention

Basketball is a fast-paced, contact sport. All of the components (passing, dribbling, shooting and playing defense) require athletes to move their bodies in many different ways. The sudden cutting, jumping and physical contact puts basketball players at risk of multiple injuries.

About 15% of basketball players ages 5-14 suffer injuries each year. Traumatic injuries are common, as well as overuse injuries caused by the demands athletes put on their bodies. However by preparing properly, athletes can greatly reduce their risk of sustaining an injury.



# **Common Basketball Problems**

# **Ankle Injuries**

Lateral ankle sprains are common in many sports. In basketball, they may occur while changing direction or landing on another player's foot while going for a rebound. Mild ankle sprains are treated with RICE (Rest, Ice, Compression and Elevation). More severe sprains or inability to bear weight may require an X-ray and evaluation by a sports medicine specialist.

# **Finger Injuries**

Deflecting or catching a powerful pass puts the fingers at risk of being jammed, fractured, or dislocated. Jammed fingers can typically heal with ice and rest, but a fractured or dislocated finger may need medical attention.

# **Knee Injuries**

Sudden cutting, jumping and physical contact with other players puts the ligaments around the knees at risk of injury. Sprains and tears to ligaments and cartilage, especially to the anterior cruciate ligament (ACL), medial collateral ligament (MCL), and the meniscus, are common in basketball players, especially females. A swollen knee after an injury warrants a medical evaluation. A young athlete should not continue to play if the knee remains swollen.

# **Shoulder Dislocations**

When falling on outstretched arms, or blocking a shot, the ball portion (humeral head) of the shoulder may be forced out of the socket (glenoid). A shoulder dislocation requires urgent treatment to put the ball back into the joint. Due to the high risk of recurrence after one dislocation, an athlete should consult a sports medicine specialist to discuss treatment options and how to minimize the risk of another dislocation.

### **Concussions**

Most athletes that suffer a concussion do not lose consciousness. An athlete with any symptoms or change in behavior, thinking, or physical functioning after a blow to the head or body should be suspected of having a concussion and removed from play immediately.



Scottish Rite Hospital's Center for **Excellence in Sports Medicine is a** comprehensive practice specializing in the treatment of sports-related injuries and conditions in young and growing athletes. Sports medicine physicians, pediatric orthopedic surgeons, physical therapists, athletic trainers, psychologists and others work side-by-side with athletes and their parents and coaches to develop the best game plan for recovery.

Call 469-515-7100 to schedule an appointment or request an appointment online.

**Scottish Rite for Children Orthopedic** and Sports Medicine Center is located at the northeast corner of the Dallas North Tollway and Lebanon Road.

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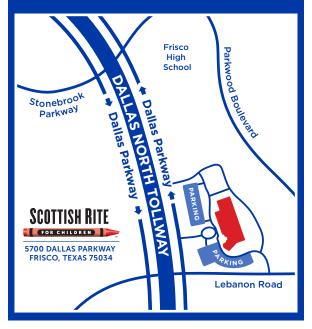
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# **Preventing Basketball Injuries**

# Play Smart and Be Aware of the Environment

All coaches want their players to hustle, but it is equally important to make smart plays. An athlete should be aware of objects surrounding the court (score table, bleachers, benches, etc.) when running or diving for the ball. Learning to determine when to make a play or let it go can keep the athlete healthy for the next play.

#### Follow the Rules

Coaches and parents should emphasize the importance of obeying the rules of the sport and discourage dirty and ill-intentioned play.

### Clean the Court

Make sure the floor is swept clean of debris, dust and trash. Also keep a towel near the bench to clean up water spills during timeouts and to wipe up sweat when players fall down.

## Warm-up

A dynamic warm-up involves continuous movement to raise the body's core temperature in preparation for competition. Warming up the body increases the elasticity of the muscles, tendons and ligaments around the joints, decreasing the likelihood of injury. Furthermore, there is growing evidence to support the effectiveness of ACL prevention programs, such as the FIFA 11+ program. FIFA 11+ includes warm-up exercises that have been proven to reduce injury rates in teams that complete the 20-minute program at least twice a week. More information about the FIFA 11+ program can be found at http://f-marc.com/11plus/manual/.

# Stay in Shape and Use Proper Form

When playing basketball, athletes must jump, pivot and sprint all at a moment's notice. When athletes become fatigued, they are more likely to sustain injuries during these sudden movements. Players will inevitably get tired during practices and games, but increasing stamina can help the athlete have enough energy to make plays with the proper stance, form and technique.

# Stay Hydrated

An athlete's performance can be impacted by even mild dehydration. Players should drink often—ideally every 15-20 minutes. Water should be readily available, but sports drinks are recommended for vigorous activities lasting longer than one hour to replace electrolytes lost through sweat and carbohydrates needed for energy.

# Pre-season Physical Exam & Baseline **Neurocognitive Testing**

Many leagues require a physical exam before allowing participation. These exams help identify existing injuries or conditions, heart or lung problems, and other issues that could make an athlete more prone to injury during play. In the event of a concussion, a baseline neurocognitive test (i.e. ImPACT test) gives doctors access to information that can help develop the best plan of care for the athlete.

# Wear Appropriate Gear

Athletes should wear shoes that are the correct size, in good condition, and appropriate for the surface where play will be conducted. Many leagues do not require protective equipment, but athletes may consider wearing ankle braces to reduce the risk of ankle sprains and mouth guards to protect the teeth.