Concussion Fact Sheets
For Parents & Athletes
WHAT IS A CONCUSSION?
A concussion is a brain injury that:
• Is caused by a sudden blow to the head or body
• Can change the way your brain normally works
• Can occur during practices or games in any sport
• Can happen even if you haven’t been knocked out, and even if you are wearing a helmet
• Is serious, even if you’ve just been “dinged”

WHAT ARE THE SYMPTOMS OF A CONCUSSION?
• Headache or “pressure” in head
• Nausea or vomiting
• Balance problems or dizziness
• Double or blurry vision
• Bothered by light
• Bothered by noise
• Feeling sluggish, hazy, foggy, or groggy
• Difficulty paying attention
• Concentration or memory problems
• Confusion
• Do not “feel right”

WHAT SHOULD I DO IF I THINK I HAVE A CONCUSSION?
Tell your coach and your parents.
Never ignore a bump or blow to the head, even if you feel fine. Also, tell your coach if you think one of your teammates might have a concussion.

Get a medical check up.
A doctor or other trained health care professional can tell you if you have a concussion and when you are OK to return to school and play.

Give yourself time to get better.
If you have had a concussion, your brain needs time to heal. While your brain is still healing, you are much more vulnerable to effects from a second blow to the head. Second or later concussions can cause much more and longer lasting damage to your brain. It is important to rest until you get approval from a doctor or other health care professional to return to school and play.

HOW CAN I PREVENT A CONCUSSION?
Every sport is different; but there are steps you can take to protect yourself.

• Practice good sportsmanship at all times.
Follow your coach’s rules for safety and the rules of the sport.

• Don’t use your head/helmet as a weapon.
Use the proper sports equipment, including personal protective equipment (such as helmets, padding, shin guards, eye protectors, and mouthguards). In order for equipment to protect you, it must be:
  – The right equipment for the game, position or activity
  – Worn correctly and fit well
  – Used every time you play

For more information and to order additional materials free-of-charge, visit:
www.cdc.gov/ConcussionInYouthSports

sanfordhealth.org/headsup
When in doubt, sit them out. This is Lauren’s Story.

“After colliding with my opponent’s head in soccer and then hitting my head on the basketball court just one month later, I found out how serious concussions really are. When I had the first concussion I thought it was no big deal; but after working through weeks of headaches and difficulty concentrating, I realized the severity and the importance of getting proper treatment and being fully recovered before going back to play.”

—Sioux Falls High School Senior, Lauren Thomas

Learn more at www.sanfordhealth.org/headsup
WHAT IS A CONCUSSION?

A concussion is a brain injury. Concussions are caused by a blow to the head or body. Even a “ding,” “getting your bell rung,” or what seems to be a mild bump or blow to the head can be serious. You can’t see a concussion. Signs and symptoms of concussion can show up right after the injury or may not appear or be noticed until days or weeks after the injury. If your child reports any symptoms of concussion, or if you notice the signs yourself, seek medical attention right away.

WHAT ARE THE SIGNS AND SYMPTOMS OF A CONCUSSION?

Signs Observed by Parents or Guardians

If your child has experienced a bump or blow to the head during a game or practice, look for any of the following signs of a concussion:

- Appears dazed or stunned
- Is confused about assignment or position
- Forgets an instruction
- Is unsure of game score or opponent
- Moves clumsily
- Answers questions slowly or with difficulty
- Loses consciousness (even briefly)
- Shows behavior or personality changes
- Can’t recall events prior to hit or fall
- Can’t recall events after hit or fall

Symptoms Reported by Athlete

- Headache or “pressure” in head
- Nausea or vomiting
- Balance problems or dizziness
- Double or blurry vision
- Sensitivity to light
- Sensitivity to noise
- Feeling sluggish, hazy, foggy or groggy
- Concentration or memory problems
- Confusion
- Does not “feel right”

HOW CAN YOU HELP YOUR CHILD PREVENT A CONCUSSION?

Every sport is different, but there are steps your child can take to protect him or herself.

- Ensure that the coach’s rules for safety and the rules of the sport are followed.
- Encourage practice of good sportsmanship at all times.
- Make sure the right protective equipment for the sport (such as helmets, padding, shin guards and eye and mouth guards) is worn. Protective equipment should fit properly, be well maintained, and be worn consistently and correctly.
- Learn the risks and dangers of a concussion.

WHAT SHOULD YOU DO IF YOU THINK YOUR CHILD HAS EXPERIENCED OR SUFFERED A CONCUSSION?

1. Stop play or practice.
   Your child should be immediately removed from play or practice.

2. Seek medical attention right away.
   A healthcare professional experienced in the evaluation and management of concussions will be able to determine how serious the concussion is and when it is safe for your child to return to sports.

3. Keep your child out of school.
   Concussions take time to heal. Allowing your child to participate in activities where they are stressing their brain (i.e. schoolwork, watching television, using the computer, texting, etc.) not only can prolong the healing phase, but can also make their symptoms increase, making them feel worse. A healthcare provider should help decide when is the best time for your child to return to these activities.

4. Stop/limit physical activity.
   Children who return to play too soon after a concussion have a greater chance of sustaining a second, more severe concussion, which could potentially affect your child for a lifetime. Return to play/physical activity should be determined by your healthcare provider.
Leading the Charge

Sanford Health has partnered with the American College of Sports Medicine (ACSM), the largest sports medicine and exercise science organization in the world. Together we created the National Youth Sports Health & Safety Institute (NYSHSI).

“Participating in sports is one of the most effective strategies to get kids interested in physical activity and can be a key component of a healthy lifestyle. While the benefits of sports participation are numerous, there are inherent risks while participating; many of which can be significantly reduced or avoided with proper education and training. The NYSHSI serves to promote youth sports while creating resources aimed at protecting the health and safety of youth participants,” said Thayne Munce, PhD, FACSM, Leadership Board, NYSHSI.

The Institute will initially focus on four key areas in youth sports:

• Sports Trauma: (Sport Concussion, etc.)
• Environmental Challenges: (Exertional Heat Illness/Stroke, etc.)
• Training & Competition Overload: (Overuse, Overscheduling, etc.)
• Playing with Chronic Disease & Disability: (Type 1 Diabetes, Sickle Cell Trait, Paralympics, etc.)

To learn more about the National Youth Sports Health & Safety Institute visit: nyshsi.org

Four million sports & recreation related concussions occur each year.

Many go unrecognized & improperly treated.

It is so critical for athletes, parents and coaches to be educated about the dangers of returning to play too quickly that nearly all states have passed youth sports concussion legislation. In the interest of public health, Sanford Health teamed with the National Football League, American College of Sports Medicine and the Centers for Disease Control and Prevention (CDC) to help bring concussion legislation to Minnesota, North Dakota and South Dakota; and we continue to be a leading concussion resource and advocate for education, optimal clinical care, and new research.

“Youth sports concussion laws passed throughout the US have greatly improved awareness of this serious injury and have provided guidelines for better education, management and medical care to protect our nation's youth,” says Sanford Health’s Dr. Thayne Munce.

Learn more at
www.sanfordhealth.org/headsup
Concussion Services

Services for Parents & Athletes

Post-Injury Care & Evaluation

Sanford Orthopedics & Sports Medicine offers:

• Full clinical consultation and evaluation
• Pre and Post-injury testing (ImPACT™ and other measures as needed)
• Written report of findings and specific recommendations to parents, primary care physicians, and school administrators, coaches and athletic trainers
• In-person and over-the-phone consultation as needed

Return to play guidance & support

It’s hard to hold athletes back. They want to return to play as quickly as possible. However, it’s important to make sure it’s done safely. Most athletes who experience an initial concussion can recover completely, as long as they are not returned to [physical or mental activities and contact play too soon.] An athlete whose injury is not managed properly and returns to play before the brain has had time to heal is at great risk for further, more serious injury. This medically based program provides parents, coaches, physicians, school administrators and athletic departments the right plan and more confidence that the correct return-to-school and play decisions are made.

What is a concussion?

A concussion is a brain injury that is caused by a sudden and violent rocking of the brain inside the skull prompted by a traumatic blow to the head or upper body. Concussions change the way the brain normally works. Concussion symptoms can last various lengths of time and may include:

• Headache
• Nausea
• Vomiting
• Balance problems
• Dizziness
• Fatigue
• Trouble falling asleep
• Sleeping more than usual
• Drowsiness
• Sensitivity to light
• Sensitivity to noise
• Irritability
• Sadness
• Nervousness
• Feeling more emotional
• Numbness or tingling
• Feeling slowed down
• Feeling mentally foggy
• Difficulty concentrating
• Difficulty remembering
• Visual problems

Symptoms are not always definite and the decision to allow an individual to return to school or play is not always clear. Contact a Sanford Sports Medicine Physician if any of these symptoms occur.

For more information regarding the Sports Concussion Program at Sanford Orthopedics & Sports Medicine, call:

• Sioux Falls (605) 328-2663
• Fargo (701) 471-6000
• Bemidji (218) 751-9746
• Bismarck (701) 323-8999
• Aberdeen (605) 226-5500

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Services for Parents & Athletes

Being the parent or coach of a young athlete is exhilarating. But you also know there are risks. You want your young athlete to be safe. To perform his or her best—but be safe.

Sports Concussion Program

The CDC estimates that as many as 3.8 million sports-and recreation-related concussions occur each year in the United States, including those not treated by a health care provider. As many as 40 percent of youth athletes who sustain a concussion return to the field or court sooner than modern guidelines suggest. Among people aged 15-24 years, sports are now second only to motor vehicle accidents as the leading cause of traumatic brain injury.

Sanford Orthopedics & Sports Medicine provides concussion evaluation and management for anyone—an athlete, recreational athlete or non-athlete who participates in activities that may pose a risk for concussion or after a concussion has occurred. About our program:

- Our integrated team of concussion specialists has experience with youth, high school, college and professional athletes.
- We are a Certified ImPACT™ Consultant site and offer baseline as well as post-injury testing.
- The focus of care is to provide an individualized and comprehensive approach to concussion management.

Education

Managing a concussion can be tricky. We provide information for athletes, parents, and coaches on concussions to help them recognize the injury and respond appropriately. Following a concussion, guidance is provided to make necessary modifications to daily routines such as school, work and activities to ensure each athlete receives adequate rest. Free online educational resources can be viewed at: www.sanfordhealth/headsup.org

Impact Testing

ImPACT™ (Immediate Post-concussion Assessment and Cognitive Testing) is a computer based neurocognitive test battery that has been scientifically validated to measure the effects of sports-related concussion. In the preseason, each athlete is given a baseline test. When a concussion is suspected during the season, a follow-up test is administered to see if the results have changed from the baseline. This comparison helps to evaluate and safely and appropriately manage the concussion.

ImPACT™ can help answer difficult questions about athletes’ readiness to return to school and play, protecting them from the potential serious consequences of returning too soon. While traditional neurologic and radiological procedures such as CT and MRI are helpful in identifying serious head injuries (e.g., skull fractures, hematomas), these tools are ineffective at identifying the chemical changes in the brain and the functional effects of concussion. Consequently, clinicians must often rely on subjective observations or patient self-reports to diagnose and track a concussion. This is where ImPACT™ can help.

sanfordhealth.org/headsup