



NEWS

Contact: Christina Camilli-Whisenhunt
camillic@umich.edu
734.930.7466

U-M researchers say coaches, parents and scientists must work together on and off the athletic field

Highlights

- Coaches, parents and scientists need to work together on the athletic field.
- Specializing in one-sport, immature bones, and insufficient rest leads to a spike in sport injuries.
- Simple prevention steps can help minimize sport injury risk.

Watch the video: <http://www.youtube.com/watch?v=ct8rE5hW2SE>

Download photos for this story at <http://tinyurl.com/luoyns> (requires registration)

The return of fall sports and youth athletes back on the field means millions of youngsters will experience an injury even before their sports season is officially over. Youth sports account for almost four million emergency room visits each year. The range of injuries can be anything from ACL tears for soccer players to concussions for football players – even as young as 12. Each time one of these fearless young athletes steps on the field, he or she steps into the injury arena.

According to the Centers for Disease Control, participation in organized sports is on the rise – nearly 7.5 million high school kids play at least one team sport. High school athletes account for an estimated 2 million injuries, 500,000 doctor visits and 30,000 hospitalizations each year. It's also estimated that 62 percent of organized sports-related injuries occur during practices and only one-third of parents take the same safety precautions during practices as they would during game time.

Dr. Edward Wojtys, orthopaedic surgeon and associate director of the University of Michigan Bone & Joint Injury Prevention & Rehabilitation Center, says that many youth sport injuries are preventable and simply should not happen – especially when coaches and parents work together to understand the importance of injury prevention programs.

Specializing in one-sport, immature bones, insufficient rest after an injury and poor training or conditioning are all factors that lead to a spike in sport injuries. The good news is research within the last five years shows injuries are preventable and mainstream prevention programs work. Simple neuromuscular training, proper coaching, training programs, hydration, officiating, equipment, medical coverage at sporting events and preseason physical exams can aid in reducing injuries exponentially – an ounce of prevention goes a long way.

Wojtys said, “Through biomechanics, kinesiology and mechanical engineering we understand a lot more today about how injuries occur than we did five years ago. It's more important than ever to get prevention information out to coaches and parents and have them truly understand the long-term health consequences of sport injuries and how to prevent them in the first place.”

Tearing or damaging the ACL is one of the leading injuries for youth athletes, especially in young females. Even after a successful ACL reconstruction, signs of degenerative arthritis begin to show within 5 to 14 years. It only takes one wrong move – regardless of how many hundreds of times a person has completed the same move – to be susceptible for injury. Wojtys says having an ACL injury also comes with a steep price because nearly 70 percent of all ACL injuries will lead to an early onset of [osteoarthritis](#) – a form of degenerative arthritis that can worsen over time.

Center Member and Kinesiology Professor Scott McLean notes many good injury prevention programs come out of research labs but never make it to the sports field. He said, “It’s important to educate scientists on how to communicate and interact with coaches and also educate coaches on the role scientists play in advancing injury prevention and performance programs. Everyone plays an important role in preventing injuries – coaches, parents and scientists all need to work together.”

The National Institutes for Health offers a few simple action step parents and coaches can enroll now to help minimize sport injury risk for children:

- Register children in organized sports through schools, community clubs, and recreation areas that are properly maintained. Any organized team activity should demonstrate a commitment to injury prevention.
- Coaches should be well versed in the proper use of equipment, and should enforce rules on equipment use.
- Organized sports programs should have Certified Athletic Trainers who are trained to prevent, recognize, and provide immediate care for athletic injuries.
- Make warm-ups and cool downs part of your child's routine before and after sports participation.
- Make sure your child stays properly hydrated.
- Learn and follow safety rules and specifications for each sport.

McLean believes the public health threat of youth sport injuries will worsen unless we enlist current injury prevention interventions. Parents, coaches and scientists need to be partnering on the field to protect the long-term health of their athletes.

Meet the expert:

[Scott McLean, Ph.D.](#)

[Edward Wojtys, M.D.](#)

Learn more:

[U-M School of Kinesiology](#)

[Bone & Joint Injury Prevention & Rehabilitation Center](#)

[Department of Orthopaedic Surgery](#)

About the Center

The University of Michigan Bone & Joint Injury Prevention & Rehabilitation Center is a collaborative effort between the Medical School, the College of Engineering, the School of Kinesiology and the School of Public Health. The Center’s mission is to excel in the creation of new knowledge in all areas relevant to the prevention, treatment, and rehabilitation of musculoskeletal injury and arthritis. The Center is dedicated to conduct mission-driven research, train the next generation of multi-disciplinary researchers, provide leadership for local, national, and international collaborations and partnerships, promote the effective translation, use, and exchange of knowledge and develop organizational excellence. For more information about the Center, visit <http://www.bjiprc.umich.edu>.