

Testing Makes an ImPACT on Keeping Athletes Safe

From the gridiron to the hardwood to the soccer field, concussions can happen during the heat of competition or during practice. Local high school athletes are benefiting from Immediate Post-Concussion Assessment and Cognitive Testing (ImPACT), which is aimed at protecting their short- and long-term health.

Concussions are traumatic brain injuries that can occur from mild or severe blows to the head. Research has shown concussions can have serious, long-term effects — especially for athletes who suffer multiple head injuries.

ImPACT is a computerized concussion evaluation system developed in the early 1990s by Drs. Mark Lovell and Joseph Maroon from the University of Pittsburgh Medical Center. The 20-minute, noninvasive test measures an athlete's cognitive functioning such as attention span, memory, reaction time and nonverbal problem solving. The ImPACT system is used to test high school, college and professional athletes.

Thanks to grants in excess of \$40,000 obtained by the Stark County Educational Service Center, the Aultman and Mercy sports medicine departments have made ImPACT testing available throughout Stark County. "We take a baseline measurement at the start of the season. Athletes who get concussions take the ImPACT test again, and we compare the baseline results with the post-concussion test," said Jim Harris, associate vice president of Aultman Outpatient Centers and Sports Medicine. "ImPACT is one tool that helps us evaluate when it's safe for an athlete to return to competition. In addition, the ImPACT database allows us to track the number of concussions and the outcomes."

The Ohio High School Athletic Association (OHSAA) recently adopted concussion-related language in its handbook. Any athlete who exhibits signs, symptoms or behaviors consistent with a concussion must be removed from competition immediately. The athlete cannot return to play until cleared by a doctor.

The grant covers four years of ImPACT licensing fees for all OHSAA member schools in Stark County. "We test freshmen at the start of the season and again at the beginning of their junior seasons, if they haven't had concussions in between," Harris explained. "Together, Aultman and Mercy Sports Medicine have used ImPACT to test 3,500 athletes since 2010. It's been a group effort among the two sports medicine programs, Stark County school districts and physicians to implement this innovative program for our student-athletes."

CONCUSSION SIGNS AND SYMPTOMS

Headache or a feeling of pressure in the head
Temporary loss of consciousness
Confusion or feeling of being "in a fog"
Amnesia surrounding the traumatic event
Dizziness or "seeing stars"
Ringing in the ears
Vomiting or nausea
Slurred speech
Fatigue

JOIN IN THE FUN AT THE AULTMAN BEE HEALTHY RACES

Aultman Health Foundation welcomes community members of all ages and physical abilities to participate in the second annual Subway Challenge Series Race. The event will be held Saturday, July 16 at the main Aultman Hospital campus on Sixth Street S.W. in Canton.

There's a race for everyone: competitive runners, recreational runners, speed walkers, casual walkers, children and families. The 5-mile run starts at 7:30 a.m., the 2-mile run/walk starts at 8:20 a.m. and the Kids' Fun Run begins at 9 a.m.

Visit www.aultman.org/beehealthy to learn more and register for the event.



MACK IS BACK



■ Licensed/Certified Athletic Trainers Tricia Hawke (left) and Beth Greathouse (right) direct Mack Duffy through his workout routines.

Injuries can sideline any athlete, from the biggest lineman on the football field to the smallest guard on the basketball court

Mack Duffy, a junior at Jackson High School, knows the determination and dedication it takes to come back from a sports injury. The 6-foot-1-inch lineman spent nine months rehabilitating his surgically repaired right knee.

Mack's knee problems began with an injury toward the end of his freshman football season. After rehabilitating at Aultman West and gearing up for his sophomore year, Mack's knee problem worsened. In September 2010, he underwent surgery to reconstruct a torn posterior cruciate ligament and clean up damaged cartilage.

"Injuries are part of the game, but it's different when it happens to you or someone you love," said Mack's father Roger, a 12-year NFL veteran who played for the New York Jets and Pittsburgh Steelers. "Although it was no fault of his own, Mack felt he was letting his team down by not being able to play his sophomore year."

After surgery, Mack wore an immobilizer brace that stretched from his hip to his foot. He could not put weight on his leg for three months. "That was a very challenging time," Roger recalled. "Mack had just gotten his driver's license and wasn't able to drive. He used a wheelchair to get around at school. He couldn't do the little things you take for granted."

Mack started postsurgical physical therapy and rehabilitation in January. "I had a similar knee injury five years ago, so I was familiar with the rehabilitation process," said Matt Root, a licensed/certified athletic trainer (AT) and coordinator of Aultman Sports Medicine and Aultman North Therapy Services. "Mack worked with Aultman North physical therapists, physical therapy assistants and me."

Mack's therapy started gradually due to his physical limitations from surgery. "We began with leg strengthening and range-of-motion exercises, and Mack faithfully did everything we asked of him," Matt said. "He really made big gains, and we transitioned him from physical therapy to a limited fitness program. Then we progressed to sport-specific activities to get him ready for football."

Through surgery and rehabilitation, Mack focused on one goal: returning to the football field. "My main motivation," he shared, "was that I still wanted a shot to play football in high school."

AULTMAN CENTER FOR ATHLETIC MEDICINE AND PERFORMANCE

- Sport-specific enhancement training provided by an AT or strength and conditioning specialist.
- Individual or team sessions available.
- Training helps athletes improve their strength, skills, speed and agility.

For more information, call Lindsay Milano or Tricia Hawke at Aultman West at 330-834-4101.

Mack is preparing for his junior season with performance enhancement training at Aultman West, which ranges from agility drills to weight training to running. Tricia Hawke and Beth Greathouse, who are the ATs for Jackson High School, guide Mack through his workouts. "We've been working with Mack since his freshman year," Tricia said. "It's hard not to get attached to the athletes when you see them every day."

When two-a-day practices start for football, Tricia and Beth will keep a close eye on Mack. "We'll make sure his knee is doing and feeling fine, but we won't dwell on the past," Tricia explained. "There's a mental aspect of rehabilitation in addition to the physical. Athletes who are overly hesitant and worry too much about reinjuring themselves put themselves at greater risk."

The Duffy family is grateful to

the Aultman physical therapy and sports medicine team for helping Mack make his way back from injury. "The Aultman facilities are nice, and the athletic trainers have been knowledgeable and supportive," Roger said. "Dr. Jeffrey Dulik, the Jackson team physician, has also been very helpful throughout this whole process."

In June, Mack was cleared to resume full physical activity. "It's been a long road for him," Roger reflected. "His mom would rather see him concentrate on track and field, but Mack loves football. He's excited to get back on the field and, God willing, the injuries are behind him."

This season, Mack will anchor the Jackson offensive and defensive lines. "We'll be good," Mack offered with quiet confidence and a smile. "And I'm ready to play."

DID YOU KNOW ... ?

Aultman has provided sports medicine coverage for:

- Junior World Football Championships
- USA Women's Olympic Softball training camp
- Pro Football Hall of Fame Game and special events
- Ohio High School Athletic Association (OHSAA) state football championships
- East/West All-star football games
- Local OHSAA softball, baseball and basketball tournament games
- Aultman Bee Healthy Race

“INJURIES ARE PART OF THE GAME, BUT IT'S DIFFERENT WHEN IT HAPPENS TO YOU OR SOMEONE YOU LOVE.”

ROGER DUFFY, FATHER AND 12-YEAR NFL VETERAN



■ Mack Duffy strengthens his lower body using a leg press at Aultman West.

AULTMAN: A CENTER OF EXCELLENCE FOR...



SPORTS MEDICINE

AULTMAN



CENTER of EXCELLENCE



Orthopaedics

Many orthopaedic problems need more than one medical service. You may require emergency room treatment, medical treatment, surgery, therapy, medical equipment for the home or intense on-site rehabilitation.



Heart

Aultman Hospital has been named one of the nation's 50 Top Cardiovascular Hospitals by Thomson Reuters for 2011. At the Aultman Heart Center, prevention is a priority. Our education and risk factor identification programs can help you keep your heart healthy.



Cancer

The Aultman Cancer Center is a fusion of ideas, technology, talent and compassion. The physicians associated with Aultman Cancer Center evaluate and design individual patient treatment plans based on the type, stage and aggressiveness of the patient's disease.



Neurosurgery/Stroke

Trauma or illness involving the brain, spinal cord or nervous system can be a frightening experience for a patient and loved ones. Take comfort in knowing you are in the hands of some of the region's most skilled neurological experts, neurosurgeons and stroke specialists.



Women/Children

Together with our patients, the Aultman Birth Center is promoting and uniting families for life. We take a team approach to providing the best care for you and your baby — under one roof.



Emergency/Trauma

Aultman's Emergency/Trauma Center, staffed by board-certified physicians, is designed to allow the fastest access possible to the latest in emergency-care technology.



Critical Care Medicine

Going to an intensive care unit (ICU) can be a very emotional experience. Aultman patients receive specialized care from our Intensivist Program and our dedicated group of critical care nurses, critical care pharmacists, respiratory therapists and intensivists.

AULTMAN

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TEAM DOCTOR GIVES BACK TO THE COMMUNITY

For more than two decades, James Johns, M.D., has paced the sidelines at McKinley football games and witnessed buzzer beaters on the basketball court

He's not a coach ... he's the McKinley High School team physician.

Johns, a family medicine doctor with Little Flower Family Medicine, became the McKinley team physician in 1985. "I had sports medicine training during my family medicine medical residency, so I thought being a team physician would be a good way to put that training to use," he said. "I graduated from Lehman High School, which no longer exists, so McKinley is my substitute alma mater."

As a family medicine physician, Johns can handle athletes' issues ranging from exercise-induced asthma to ankle sprains to stabilizing more serious injuries. "I work with orthopaedic doctors when an athlete's injury requires that specialty," he said. "I also collaborate with Aultman Sports Medicine athletic trainers, who have been super to work with over the years. They are the first line of care for the athletes."

Johns enjoys the atmosphere at high school games. "Stark County is a great area for high school sports. The Federal League is competitive, and the McKinley/Massillon rivalry sparks good competition," he said. "Volunteering as the team physician is a way to give back to the community, and it's a great stress reliever too."

Benefits abound for students who participate in sports. "Kids get the chance to exercise, relieve stress and break up their day after being in class," he said. "Most kids aren't going to play college sports, let alone make it to the professional level. Therefore, it's important for kids to have a fun and rewarding experience in high school sports — while making academics their top priority."

With childhood obesity on the rise in America, Johns educates parents and children on healthy living. "My entry point to talk about weight and diet is often at



■ Licensed/Certified Athletic Trainer Jim Harris (left) and Team Physician James Johns, M.D., celebrate the McKinley boys' state basketball championship in 2006.

preseason sports physicals," he said. "Some high school football players want to 'get big,' but they need to consider the impact on their blood pressure, blood sugar and overall health. They need to maintain a healthy weight."

Despite a full schedule with his medical practice and duties as team physician, Johns makes exercise a priority in his life. "Exercise is good for you, and it makes you feel good," he said. "If I'm talking to the student-athletes about health and exercise, I need to practice what I preach."

In May, Johns ran the 10K race at the Cleveland Rite Aid Marathon while his wife, Donna, completed the half-marathon. "We have two exercise bikes and a treadmill at home," he said. "We work out together, or I'll play continuing medical education tapes while I exercise."

Johns encourages family medicine physicians to get involved with local schools. "The schools need

help, as many don't have team physicians. That's a shame because team doctors contribute to injury prevention and care," he said. "Being a team physician is a fun activity and a great way to build your medical practice."

Over the decades, Johns has built relationships with other medical professionals who care for student-athletes.

In 2008, Johns received the Ohio Outstanding Team Physician Award. Two years later, he was inducted into the McKinley High School Football Hall of Fame. "It was a real honor, one that makes me feel like I'm part of the McKinley family even though I never played a down of football," he said. "I've enjoyed great relationships over the years with the coaching staff, orthopaedic doctors, athletic trainers, principals, parents and players. Whether it's a school administrator or a coach or the team doctor, our ultimate goal is to do what's best for the kids."



■ James Violet, D.O.



■ Paul Welch, M.D.

Thank You

James Violet, D.O., and Paul Welch, M.D., — orthopaedic surgeons with Spectrum Orthopaedics — recently retired. Among their many contributions to sports medicine, Violet co-authored the Ohio High School Athletic Association wrestling rule book and spent decades midside at the state tournament. Welch provided sports medicine coverage at the Pro Football Hall of Fame Game for many years.

On behalf of the thousands of patients and student-athletes helped over the decades, Aultman Health Foundation would like to recognize these physicians for their expertise and contributions. Thank you, Drs. Violet and Welch, for being leaders in the sports medicine field.

Encouraging Success in Young Athletes

The Sports Trauma and Overuse Prevention (STOP) campaign was created by a coalition of organizations and corporations to help prevent athletic overuse and trauma injuries in U.S. kids. The coalition offers these tips to help parents ensure positive sports experiences for their children:

- **Place your child in the best and safest environment** — with proper training and equipment — for them to enjoy and succeed in athletics.
- **From the first day of practice, work with the coaches and other parents** to define and communicate clear goals, values and procedures for everyone involved.
- **Understand that some coaches in youth sports are volunteers who are not professionally trained.** Travel team and high school coaches are more likely to be professionally trained and certified.
- **Temper expectations of what you want for your child with the goals of the team and coaches.** Remember that other parents and kids have their own expectations, which have to be considered equally to yours.
- **Set realistic goals** for your child, the team and the coaches.
- **Emphasize that improved performance is key,** not just winning.
- **Resist the temptation to recreate or reinvent your own athletic past through your child.** Stay focused on your child's unique abilities, interests and goals.
- **Remember to control your emotions** at games and events.
- **Maintain a positive attitude,** and don't yell at other players, coaches or officials.
- **Be a role model.** Show respect, and your child will follow your example.
- **Communicate openly.** If you disagree with a coach's approach or the behavior of other parents, discuss it with them respectfully at an appropriate time and place.

Aultman Athletic Trainers Keep Local Athletes Healthy

From assessing injuries to rehabilitating players, licensed athletic trainers are integral members of the athletic health care team.

Licensed/certified athletic trainers (ATs) are educated and trained in the prevention, assessment, treatment and rehabilitation of injuries. ATs work under the direction of physicians, communicating by phone, fax, email and in-person when evaluating athletes.

ATs work with more than just high school, college and professional athletes. Athletic trainers can be found at performing arts centers, military bases, businesses and industrial plants, hospitals, physician offices and public safety/law enforcement agencies.

A dozen Aultman athletic trainers provide services for Carrollton, East Canton, Jackson, Massillon, McKinley, Perry, St. Thomas, Timken and Tuslaw high schools. "The level of coverage varies from school to school," said Matt Root, AT and coordinator of Aultman Sports Medicine and Aultman North Therapy Services. "For smaller high schools, we provide game-day coverage and weekly injury checks. For bigger schools, athletic trainers are on-site before, during and after every practice and game."

Athletic trainers work in the school setting, providing support such as rehabilitating injuries and assessing on-field problems. If a physician determines an athlete needs more concentrated rehabilitation than can be provided in a school setting, outpatient physical therapy may be ordered.

In this era of specialization, three-sport athletes are becoming the exception rather than the rule. "Younger kids play sports much more competitively today and often play a single sport all year long," Root said. "That means their bodies aren't doing different things, such as jumping for basketball or throwing for baseball. Consequently, we're seeing a rise in chronic conditions and overuse injuries."

The risk of overuse is more serious in adolescent athletes because their growing bones cannot handle as much stress as adult bones. In addition, young athletes may not have learned proper mechanics or may not recognize early signs of injury. "We've had kids in physical therapy as young as 12 or 13 with overuse problems," said Physical Therapist Jennifer Proffitt, a director of Aultman Outpatient Therapy Services. "Overuse injuries, overtraining and burnout among adolescent athletes are growing problems in our country."

Sites of prevalent sports injuries include knees, shoulders and ankles. "ACL tears are common among football players and girls playing soccer," Root shared. "The same injuries occur in both boys and girls, just in different sports due to their bodies being built differently and the number of participants playing a specific sport."

Jim Harris, AT and associate vice president of Aultman Outpatient Centers/Sports Medicine, believes sports play an important role in developing future leaders. However, he warns coaches, parents and fans to remember that student-athletes are under considerable pressure. "We're asking kids to go to school, be good students and good people, practice hard every day, deal with family situations and play at high levels for every game," he said. "Sometimes we forget they're just kids. They're entitled to have a bad day now and then."

When it comes to keeping young athletes healthy, Proffitt recommends warming up and stretching, listening to your body instead of "playing through pain" and eating a healthy diet. "You'd be surprised at the junk kids eat and expect to stay healthy," she said. "Good nutrition is important for everyone, and it can make a big difference in athletic competition."

While helping with injury prevention and treatment, ATs forge special bonds with students. "It's all about the relationships you build. Players spend a lot of time with athletic trainers, and they learn to trust you," Harris shared. "You're not a coach, and you're not a parent. But you're a role model kids can confide in when they need help through difficult times."

A critical component of an AT's job is focusing on the long-term health of student-athletes. "Sometimes a coach, parent or teammate wants a player to return to the court or field prematurely," Root said. "I cheer for the kids and want them to win, but my job is to keep them healthy. I look at the big picture and understand it may be in the athlete's best interest to miss a few games this season in order to come back strong and healthy next year."

An athletic trainer since 1984, Harris is continuously inspired by the determination of the athletes with whom he works. "Seeing kids succeed and grow — from victories as well as defeats — is very special," he shared. "Athletes are very competitive, and it's amazing to see kids who have the fortitude to come back from injury or other adversity."



■ Matt Root (left) and Jim Harris provide sports medicine coverage for events including the Junior World Football Championships.

AULTMAN OUTPATIENT THERAPY/SPORTS MEDICINE SERVICES

Aultman North
330-244-8113

Aultman West
330-834-4101

Aultman Carrollton
330-627-6801

Aultman Louisville
330-875-6050

Aultman Tusc
330-363-6215