Concussion Management

A guide to understanding the best practices when it comes to identifying, reacting and responding to concussions

Daniel P. McCoy
Albany County Executive

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A LETTER FROM DANIEL P. MCCOY, ALBANY COUNTY EXECUTIVE

I played sports growing up and over the years I have enjoyed watching my children take the field. As County Executive, I have worked with the Amateur Athletic Union (AAU) and other organizations to provide opportunities for youngsters to be able to take part in athletics and share the experiences of teamwork and growth that team sports provide. But, I also strongly believe that we have a duty to promote safety and injury prevention protocols for kids of all ages.

In recent years, we've read and heard much about the risks associated with some sports and the consequences of sports-related concussions. Awareness of this issue has grown and we are fortunate that the equipment, treatment and rules have all been modified to make sure player safety is the main objective. Even though we've come a long way in this area, there are still some concerns about post-injury management on the scholastic sports level.

That is why I worked with experts in the field to offer best practices and other important information to serve as a guide for parents, coaches and athletics administrators on concussions and related issues. I think that this information can be helpful and provide important guidance for school and community youth sports programs in Albany County.

These findings represent the expertise of some of the leading authorities in the field and I firmly believe that by sharing this knowledge, we can minimize the risk while ensuring that the playing field remains a part of the development of our children. As a parent, I know that by working together and sharing this information we can all be winners and keep safety our top priority.

Amateur Athletic Union (AAU)

The Albany County Recreation Bureau's free recreation programs are a joint venture sponsored by County Executive Daniel P. McCoy, County Sheriff Craig D. Apple, Sr. and the Albany County Legislature.

The Albany County Recreation Bureau has formed a partnership with the AAU (Amateur Athletic Union), the first of its kind in the country. The AAU was formed in 1888 to establish standards and uniformity in amateur sports. "Sports for All, Forever" is their motto, and the youths in our programs join 670,000 participants and 100,000 volunteers across the country in this prestigious organization.

It is the purpose of the AAU to promote amateur sports and for it's participants to do so in a manner that provides reasonable safety for their well-being.

AAU's position is to believe when there is reasonable cause that a concussion has occurred such participant shall not be allowed to continue his/her participation in an AAU licensed event/activity without a medical release.

Coaches and other club leaders can take a free on-line course that will provide important information in the recommendation and decision-making in handling situations that may involve concussion injuries. This course will take approximately 30 minutes.

Further information can be found at:
http://www.aausports.org/Resource-Articles/ArtMID/1403/ArticleID/673

"You can't always see a concussion. It's important to recognize the way your child looks and how he/she is acting as well as listen to the symptoms they report to you if they experience a bump or blow to the head. Pay attention to the danger signs and use this booklet and its resources as a guide."
Elizabeth Whalen, MD, MPH
Commissioner, Albany County Department of Health

NYS 2011 Concussion Management and Awareness Act

New York State enacted the Concussion Management and Awareness Act on July 1, 2012 mandating any student who sustains or is thought to have sustained a concussion be removed from the game.

In addition to the athlete being removed from a game (or activity) if they suffer a TBI (Traumatic Brain Injury) – or are thought to have suffered one the student cannot return to play until he (she) is symptom free for at least 24 hours, and has signed documentation from the treating doctor.

The new law also requires physical education teachers, coaches, nurses and athletic trainers to take a course every two years and become certified on the recognition of TBI symptoms, understanding how a TBI occurs, prevention, proper medical treatment, and the guidelines on when the player can return to the sport.

Moreover, each school district can put together a concussion management team consisting of the athletic director (if there is one), nurse, school doctor, coach and trainer to administer these rules and guidelines for the new law. The concussion management team can then provide information on TBI to parents and guardians throughout the year.

What is a concussion?

The Centers for Disease Control and Prevention (CDC) defines concussion as a traumatic brain injury (TBI) caused by a bump, blow, or jolt to the head or by a hit to the body that causes the head and brain to move rapidly back and forth. This sudden movement can cause the brain to bounce around or twist in the skull, stretching and damaging brain cells and creating chemical changes in the brain.

There may be signs of injury to the head, such as bruising or cuts, or there may be no visible injury.

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, just not "feeling right" or is "feeling down."

Signs observed by parents/guardians

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, loses consciousness (even briefly), shows mood, behavior or personality changes.

Danger Signs

Be alert for symptoms that worsen over time. Your child or teen should be seen in an emergency department right away if he/she has: one pupil (the black part in the middle of the eye) larger than the other, drowsiness or cannot be awakened, a headache that gets worse and does not go away weakness, numbness, or decreased coordination, repeated vomiting or nausea, slurred speech, convulsions or seizures, difficulty recognizing people or places, increasing confusion, restlessness, or agitation, unusual behavior, loss of consciousness (even a brief loss of consciousness should be taken seriously).

Five Best Practices

#1 Prevention and Safety

Education, proper equipment, and supervision should be provided to coaches, athletes and parents/guardians in order to minimize the risk.

Instruction should include signs and symptoms of concussions, how such injuries occur, and possible long term effects resulting from such injury.

Wearing a helmet is a must to reduce the risk of a serious brain injury or skull fracture but there is no "concussion-proof" helmet. [1]

The CDC has a Heads Up App for concussion and helmet safety, to help parents learn how to spot a possible concussion. [2]

1 http://www.cdc.gov/headsup/youthsports/parents.html
2 http://www.cdc.gov/headsup/resources/app.html?s_cid=headsup_govd100

#2 Identification

It is imperative that students know the symptoms of a concussion and to inform appropriate personnel, even if they believe they have sustained the mildest of concussions. This information should be reviewed periodically with athletes throughout each season.

Symptoms of a concussion may appear immediately, may become evident in a few hours, or evolve and worsen over a few days.

In accordance with the Concussion Management and Awareness Act, any student suspected of having a concussion either based on the disclosure of a head injury, observed or reported symptoms, or by sustaining a significant blow to the head or body must be removed from athletic activity and/or physical activities (e.g., PE class, recess), and observed until an evaluation can be completed by a medical provider.

#3 Assessment

Have the student athlete assessed immediately by a medical professional. In NYS, only doctors, nurse practitioners and physician assistants can diagnose a concussion. The CDC recommends evaluating characteristics of the injury, type and severity of cognitive and physical symptoms and risk factors that may prolong activity.

A student diagnosed with a concussion will not return to athletic activities until at least 24 hours have passed without symptoms and the athlete has been assessed and cleared by a medical professional to begin a return to activities.

#4 Post Concussion Management

Athletes who have been diagnosed with a concussion require both physical and cognitive rest. Delaying rest may prolong recovery from a concussion.

Children and adolescents are at greater risk of a longer recovery period and severe, potential permanent disability, or even death if they sustain another concussion before they have recovered from the first one fully.

What is Physical Rest?

Physical rest includes getting adequate sleep, taking frequent rest periods or naps, and avoiding physical activity that requires exertion. Some activities that should be avoided include, but are not limited to:

Ones that result in contact and collision and are high risk for re-injury, high speed and/or intense exercise and/or sports, any activity that results in an increased heart rate or increased head pressure (e.g. straining or strength training).

What is Cognitive Rest?

Cognitive rest requires that the student avoid participation in, or exposure to, activities that require concentration or mental stimulation including, but not limited to:

Computers and video games, television viewing, texting, reading or writing, studying or homework, taking a test or completing, significant projects, loud music and bright lights.

#5 When in Doubt… Take Them Out!

New York State Department of Health has launched a sports-related concussion prevention campaign designed to empower coaches, parents, athletes, and school administrators to effectively prevent, recognize, and respond to concussions.

Return to Play Guidelines

Once a student diagnosed with a concussion has been symptom free at rest for at least 24 hours, a private medical provider may choose to clear the student to begin a graduated return to activities.

If a district has concerns or questions about the private medical provider's orders, the district medical director should contact that provider to discuss and clarify.

Additionally, the medical director has the final authority to clear students to participate in or return to extra-class physical activities in accordance with 8NYCRR 135.4(c)(7)(i).

Students should be monitored by district staff daily following each progressive challenge, physical or cognitive, for any return of signs and symptoms of concussion and a student should only move to the next level of activity if they remain symptom free at the current level.

If any post-concussion symptoms return, the student should drop back to the previous level of activity, and then re-attempt the new activity after another 24 hours have passed.

Common Myths about Concussions

A grade-one concussion is less serious than one that's a grade-three:

"We used to grade concussions during the initial diagnosis, but we no longer do that because we now know it's difficult to accurately assess the severity of a concussion right away," said Chris Hummel, a certified athletic trainer and clinical associate professor in Ithaca College's Department of Exercise and Sport Sciences . "We have to wait and see how the symptoms resolve over time before we can determine how significant the concussion is or is not." [1]

Concussion treatments are "one size fits all":

There's no one method to treat a concussion. Everyone's symptoms are a bit different, and they last for varying periods of time.

Concussion requires an individualized treatment plan, Dr. Richard So, MD says. That's why it's especially important to see a doctor and craft the right plan for recovery. [2]

A normal CT scan rules out a concussion:

"A concussion results from a neuro-metabolic event brought on by the trauma," Hummel said. "Simply put, there is an imbalance of the needed chemicals or fuel that helps the brain function when an athlete is concussed. That's not a structural injury, so a CT scan won't pick it up. CT scans can only view structural damage." [3]

Male athletes sustain more concussions than female ones:

"Male athletes sustain concussions at similar rates as female ones," Hummel said. "However, recent studies have shown that symptoms might vary by gender, as males with concussions experience more physiological issues such as balance problems while females experience more psychosocial issues such as fatigue or low energy." [4]

Sources:
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2, 5 http://health.clevelandclinic.org/2014/06/7-myths-about-kids-concussions-and-sports/
7 http://www.huffingtonpost.com/scott-sailor/6-myths-about-concussion_b_8172612.html

Your child must go to the emergency room for a concussion:

Not all concussions require emergency care but watch for red flags: complaints of the worst possible headache, vomiting, unequal pupils or other neurological concerns. These may warrant a trip to the ER, Dr. So advises. Call your primary care physician's office with concerns. [5]

Helmets prevent concussions:

"Helmets are designed to prevent skull fractures, not concussions," Hummel said. "If a helmet is fitted properly, it might reduce the risk or severity of concussions, but no one helmet is capable of preventing a concussion, yet!" [6]

If you don't lose consciousness you were not concussed:

Loss of consciousness used to be one of the signs we used to identify and grade the severity of a concussion. We know today that individuals who have sustained a concussion can have a variety of signs and symptoms that are equally important to consciousness. It is very common for a concussed individual to experience a headache and dizziness or demonstrate balance problems while not ever losing consciousness. In fact, fewer than 10 percent of concussions result in loss of consciousness. [7]

Important Take-Away Points

After sustaining a concussion it is very important to avoid any activity that places the student at risk of sustaining another concussion.

The majority of concussions will resolve without requiring additional treatment beyond cognitive and physical rest.

Some concussions may need additional treatment. Specialists can address specific symptoms and needs.

2-3 weeks is a good time frame to seek additional follow-up care if symptoms have not resolved. Your Primary Care Provider can provide direction on the most appropriate specialists to address your student's needs.

In a small percentage of students symptoms may persist beyond the usual 2-3 week period of recovery. In these cases a specialist should consider a diagnosis of post-concussion syndrome (PCS).

Concussion Management - Best Practices

(Pocket Guide)

A guide to understanding the best practices when it comes to identifying, reacting and responding to concussions

#1 Prevention and Safety: In order to minimize the risk, education, proper equipment, and supervision should be provided to coaches, athletes and parents/guardians.

#2 Identification: It is imperative that students know the symptoms of a concussion and to inform appropriate personnel, even if they believe they have sustained the mildest of concussions. This information should be reviewed periodically with athletes throughout each season.

#3 Assessment: Have the student athlete assessed immediately by a medical professional. In NYS, only doctors, nurse practitioners and physician assistants can diagnose a concussion.

#4 Post Concussion Management: Athletes who have been diagnosed with a concussion require both physical and cognitive rest. Delaying rest may prolong recovery from a concussion.

#5 When in Doubt… Take Them Out: New York State Department of Health has launched a sports-related concussion prevention campaign designed to empower coaches, parents, athletes, and school administrators to effectively prevent, recognize, and respond to concussions.

Concussion Management—Pocket Guide, Tear along perforated line to keep these helpful tips with you at all times

What is a concussion?

The CDC defines concussion as a traumatic brain injury (TBI) caused by a bump, blow, or jolt to the head or by a hit to the body that causes the head and brain to move rapidly back and forth. This sudden movement can cause the brain to bounce around or twist in the skull, stretching and damaging brain cells and creating chemical changes in the brain.

Signs and symptoms:

Not all signs and symptoms are immediately present but here is a list of the most common:

- Dizziness
- Headaches
- Blurred vision
- Nausea/Vomiting
- Slurred speech
- Appearing dazed
- Ringing in the ears
- Delayed response to questions
- The person may or may not lose consciousness

Facts About Concussions:

An athlete who has had one concussion is more likely to have another than an athlete who hasn't been concussed.
Concussions should be treated and managed on an individual basis.
If you suspect a student-athlete of having a concussion, assume it's a concussion.

Where to Find Help:

Albany County
Department of Health
(518) 447-4580
www.albanycounty.com/health

Albany County
Executive's Office
(518) 447-7040
www.albanycounty.com

Daniel P. McCoy
Albany County Executive

Where to find help:

Centers for Disease Control (CDC)
http://www.cdc.gov/headsup/youthsports/index.html
1-800-CDC-INFO

NYS Department of Health
http://www.health.ny.gov/prevention/injury_prevention/concussion.htm
(518) 473-1143

Albany County Department of Health
175 Green Street, Albany, NY 12202
www.albanycounty.com/health
(518) 447-4580

Albany County Executive's Office
112 State Street, Room 900, Albany, NY 12207
www.albanycounty.com
(518) 447-7040

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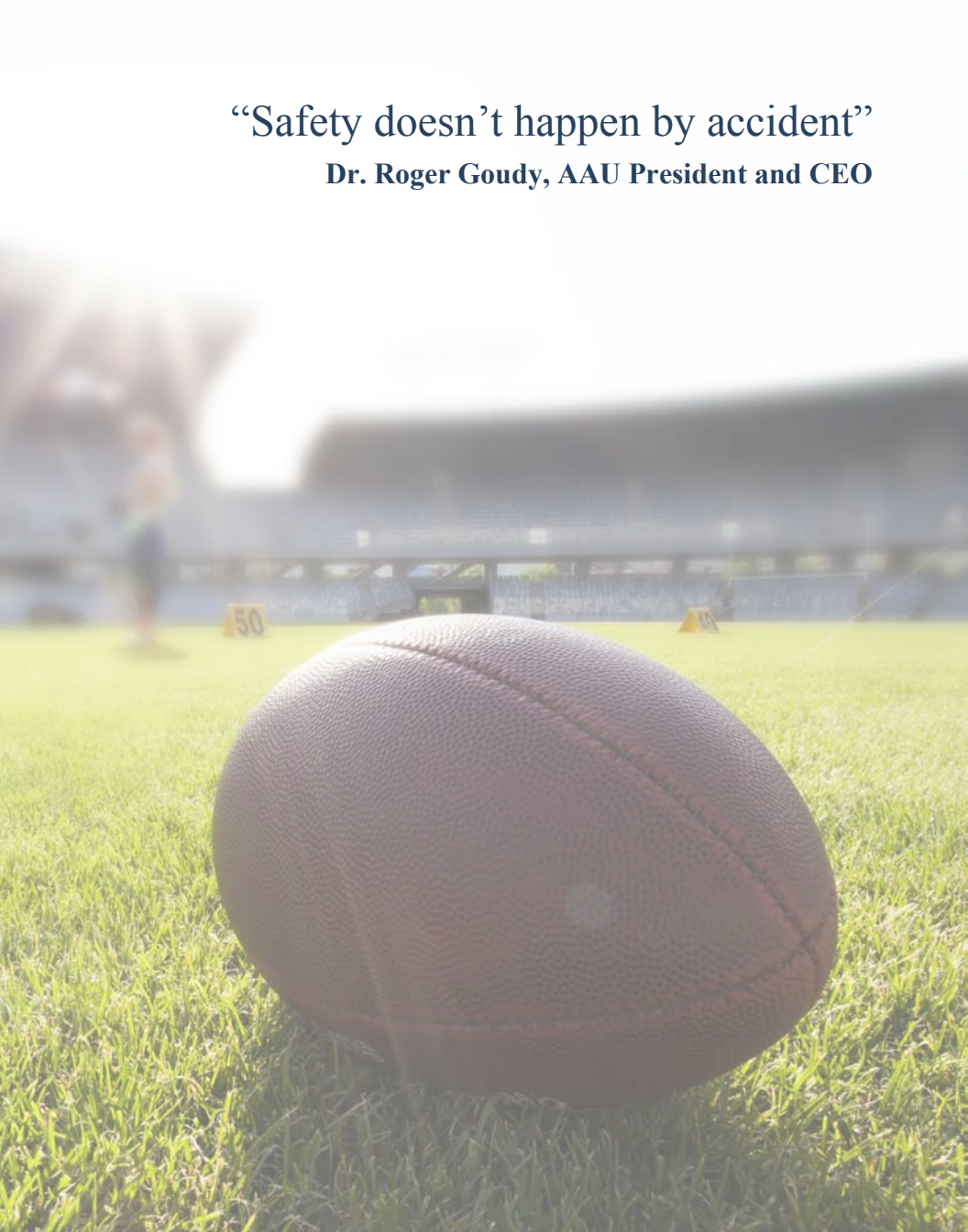
Albany County Executive

“Safety doesn’t happen by accident”

Dr. Roger Goudy, AAU President and CEO