

Cheerleading causes more injuries to females than any other sport

In the past 25 years, cheerleading has transformed from a spirited activity supporting athletic teams to one that now involves complicated acrobatics and gymnastic-like routines. At the same time, severe sports-related injuries to female athletes participating in cheerleading have increased significantly, according to new data from the University of North Carolina (UNC) National Center for Catastrophic Sports Injury Research.

An estimated 4,954 hospital emergency room visits in 1980 were caused by cheerleading injuries. By 1986 the number had risen to 6,911. From 1994 to 2004, the number increased from 16,000 to more than 28,000.

From 1982 to 2007, the center reports, cheerleading accounted for 65 percent of all serious injuries to female athletes at the high school level and 67 percent at the college level. Male cheerleaders were not included in the cheerleading data. Both male and female athletes in all sports were covered in the report, including football, baseball, field hockey, gymnastics and other injury-heavy sports. Overall, there were 63 fatal or serious injuries in cheerleading during this time period. Gymnastics was the second most injury-prone sport for young women, with 11 incidents.

The data was compiled by the center with the help of the National Collegiate Athletic Association, the National Federation of State High School Associations, the American Football Coaches Association and the National Cheer Safety Foundation.

In 2005 the NCAA insurance program found that 25 percent of money spent on student athlete injuries resulted from cheerleading, despite the fact that football players far outnumber cheerleaders. The rate of cheerleaders to football players is 12 to 100.

According to the Consumer Product Safety Commission, an estimated 4,954 hospital emergency room visits in 1980 were caused by cheerleading injuries. By 1986 the number had risen to 6,911. From 1994 to 2004, the number increased from 16,000 to more than 28,000.

The authors of the UNC report note that cheerleading has grown more competitive over the years, yet only 20 or 25 states consider it a sport. If the purpose of cheerleading is entertainment and competition, safety guidelines should be initiated, the authors state.

Increase in safety regulations

Among the injuries the report cites are the following:

- A college cheerleader was paralyzed after being injured while performing a double flip during a basket toss. She is now quadriplegic.
- A high school cheerleader was injured during a stunt when a fellow cheerleader fell on her head. She has had permanent medical problems since the accident.
- A high school cheerleader suffered a 15-foot fall. She had spinal cord trauma and is paralyzed.
- A college cheerleader was injured during a tumbling routine and is now quadriplegic. She was attempting a back handspring into a single back tuck during practice and landed on her head.
- A 14-year-old high school cheerleader was injured while doing a dance routine at practice. She slipped on some water, fell

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Non-catastrophic injuries, eating disorders also common

Parents and cheerleaders need to recognize how dangerous the sport of cheerleading is. The National Center for Catastrophic Injuries reports that cheerleaders have more serious injuries than athletes in any other sport.

“Parents need to be aware of the risks their child has in competing in any sport. They should make sure their youngsters are happy, regardless of the athletic competition.”

Fortunately for our state, cheerleading is sanctioned by the Kentucky High School Athletic Association as an organized sport, and coaches must attend a four-hour symposium each year as well as know how to perform CPR. For the last 10 years, the Kentucky Sports Medicine Clinic (now UK HealthCare Sports Medicine) has sponsored these symposiums. We talk not only about catastrophic cheerleading injuries at these symposiums but also about the problem of the female athlete triad – a combination of disordered eating, amenorrhea or abnormal menses, and osteoporosis.

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and hit her head. She was in intensive care but has recovered.

- A middle school cheerleader fell while attempting a stunt during practice. She injured the ligaments around her spinal cord and was placed in a halo brace. She is prohibited from participating in contact sports but will recover.

Such incidents have led to an increase in safety regulations governing cheerleading and to more coaches being certified. In July 2006 the National Collegiate Athletic Association (NCAA) and Varsity Brands created the College Cheerleading Safety Initiative. The National Cheer Safety Foundation, organized by parents, is interested in cheer safety and the collection of cheerleading injury data.

New safety guidelines for cheerleading and a parent's guide to cheerleading safety can be found on the Web site of the American Association of Cheerleading Coaches and Administrators, www.aacca.org.

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Eating disorders among cheerleaders are far more common than catastrophic injuries because the competitions emphasize thinness and looking good. We know that 15 to 62 percent of female college athletes have eating disorders and up to 60 percent have amenorrhea. Thirty percent of the girls who have anorexia will relapse. By the time they get to college, anorexia is much harder to cure.

“I’ve asked patients in their 20s and 30s who are former cheerleaders and now have back pain if they would do it all over again, and invariably they say, ‘No.’”

The female athlete triad can lead to a girl losing too much body fat, which may in turn contribute to abnormal periods and bone softening or the beginning of osteoporosis. If this condition is not diagnosed, it can potentially cause serious illness or death. Girls in middle school are particularly vulnerable to eating disorders. At the same time, the younger the age when these disorders are understood, the more likely the cure.

Preventive strategies

I also have concerns about injuries that are not catastrophic but far more common. The main problems I see in my practice are injuries to the back, shin splints and patellofemoral stress syndrome, which is an injury to the knee often caused during tumbling or landing. I also see ankle sprains, ACL injuries and fatigue. Cheerleaders don't take time off; they go year round. They're doing a lot of spirit support for other teams as well as competing in the off season.

Usually the chief concern of the parents and the cheerleaders is getting the ill or injured girl back into practice as soon as possible because she has a competition. The long-term effects of these injuries are not being communicated to the cheerleader and her family. I've asked patients in their 20s and 30s who are

former cheerleaders and now have back pain if they would do it all over again, and invariably they say, “No.”

We talk to coaches about prevention strategies such as supervising practice, having an emergency plan and not letting the cheerleaders do stunts that are too hard. Contact problems in landing, fatigue and a mismatch of the level of talent and what a girl is asked to do are major factors in injury. Some things can be changed, such as lowering the height of the pyramids; others cannot. The main message to parents and cheerleaders is to be prepared. Don't do stunts that involve illegal climbing and landing, and make sure you always have a spotter.

Some cheerleaders have been gymnasts and others have not. It is very important to have the proper skills and coaching supervision to do tumbling and landing maneuvers safely.

Too much tumbling practice on poor surfaces without proper conditioning, strength and balance can lead to injury.

Cheerleading has evolved, in part, because of national competitions and scholarship opportunities. The University of Kentucky has earned more than a dozen national championships. Scholarships can be a major motivating factor for young cheerleaders to compete aggressively, but they must be aware of safety issues.

As far as evaluating cheerleaders for the female athlete triad, it really takes a team effort. For instance, you need to have a dietitian or knowledgeable person like an athletic trainer keep a diary of what the girls are eating.

Parents need to be aware of the risks their child has in competing in any sport. They should make sure their youngsters are happy, regardless of the athletic competition. If the child is injured often, is frequently ill and isn't getting good grades in school, there may be an issue.

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