



Risk Management *Tips*

How Does Your Cheer Program's Safety Strategy Stack Up?

Keeping your cheer program injury free is a key component to making it fun for all participants. Understanding types of injuries and their root causes can help. A recent report highlighted in the [Journal of Athletic Training](#) on the Epidemiology of Cheerleading Fall-Related Injuries in the United States provides an informative analysis of these injuries which can support your safety practices.

According to the study, three key points were identified:

1. Cheerleading-related falls may result in catastrophic injuries and even death.
2. Most of the serious injuries in the present study were sustained on artificial turf, grass, traditional foam floors, or wood floors.
3. The risk of serious injury increases as fall height increases or the impact-absorbing capacity of the surfacing material decreases (or both).

Furthermore, it was found that 94.4 percent of cheerleading-related falls occurred during practice, and 89 percent of fall related injuries occurred while cheerleaders were attempting stunts or pyramids. Coaches were actively supervising events prior to an injury in 66.7 percent of the reported cases.

You can read more on the study at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2775358/>

Taking steps to reduce these injurious events starts with education. Share this article along with the report on the Epidemiology of Cheerleading Fall-Related Injuries in the United States with your other coaches.

To reduce the probability of a fall-related accident, reinforce spotters' understanding of what they need to do. Everyone involved with spotting should know which stunt is going to be executed and what their role is in reducing the likelihood of an injury. As the American Association of Cheerleading Coaches & Administrators (AACCA) safety manual outlines, essential spotting guidelines for cheerleading include:

1. Spotters should always be keenly aware that the prime consideration of spotting is protection of the performer's head and spinal column.
2. The difficulty level of the skill being attempted should be appropriate to the capabilities and experiences of the performer(s).
3. Learn to spot effectively the most basic skills first. Allow sufficient time to adequately master each level of spotting in progressions.
4. Establish a clear, accurate communicative link with the performer.
5. Be absolutely certain that both you and the performer(s) are in the proper position and ready to physically interact.
6. Be sure you know, understand, and appreciate the full potential of the skill/maneuver, particularly the more critical aspects of how to spot it.



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7. Spotters should carefully match their own physical readiness and capabilities to that of each individual performer. Always insure that the margin for safety is overwhelmingly in the performer's favor.
8. Learn what to expect from each cheerleader. Make every effort to read physical cues to anticipate mishaps.
9. Be prepared for the unexpected. Maintain constant vigilance throughout the skill/maneuver in its entirety.
10. Develop a healthy respect for the risks and potential hazards involved in any spotting situation. Know your limitations.

AACCA offers a National Safety Certification program that can help support coaches' knowledge of spotting guidelines and other cheerleading safety-related issues. If you own or manage a cheer program, knowing your coaches' level of experience and whether they have appropriate safety certifications are important factors in determining which activities you allow them to supervise. This certification program outlines that safe and effective planning of every cheerleading program should include careful consideration of a qualified spotter in relation to: 1) the intended activity; 2) the number, age, experience and ability levels of the participants; and 3) the environment and available safety equipment.

Stay abreast of what is and is not an appropriate impact-absorbing surface to reduce potential catastrophic head-related injuries associated with falls. The American Society for Testing and Materials (ASTM), guideline F1292, "Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment" offers insight on what is considered inappropriate surfacing. According to the ASTM, the potential for life-threatening, head-impact injuries can be minimized by increasing the shock-absorbing capacity of the surface and decreasing the height from which the person falls. The risk of serious injury increases as fall height increases.

As reported in the Epidemiology of Cheerleading Fall-Related Injuries in the United States, in 21 of 29 catastrophic injury cases, a hard, non-impact-absorbing surface was involved. Those surfaces included asphalt, concrete, or a "hard gym surface." Other non-impact-absorbing surfaces identified by the ASTM include dirt, grass, and carpet not tested to ASTM F1292 standard. Appropriate impact-absorbing surfaces include any material tested to ASTM F1292, and loose-fill materials such as pea gravel, sand, shredded/recycled rubber mulch, wood mulch, and wood chips. Studies by the ASTM show that a fall onto a minimum compressed loose-fill surfacing depth of nine-inches is less likely to cause a serious head injury than falls onto a hard surface. Gymnastics mats, a minimum of 4 inches thick, have also tested to be an appropriate impact-absorbing surface. Keep in mind that falls onto these surfaces still may result in some injuries, including broken limbs, but it is better than falling on hard surfaces. You can learn more about appropriate impact-absorbing surfacing by obtaining a free copy of the Consumer Product Safety Commissions Public Playground Safety Handbook at <http://www.cpsc.gov/cpscpub/pubs/325.pdf>.

As we continue to increase awareness of strategies you can use that may help reduce potential cheer-related injuries, keep this cheer in mind: Give me a "K." Give me an "E" and another "E." Give me a "P." Now give me an "S" and an "A" and an "F," and an "E-T-Y"; with an "F" and an "I" and an "R-S-T." What does that spell? "Keep Safety First!"

If you have a safety or risk management question or a suggestion for a topic, please contact Markel's Risk Management Department at safety1st@markelcorp.com.