

OPTIMAL HEALTH UNIVERSITY™

Presented by Dr. Wayne Terai

Preventing Cheerleading Injuries

Cheerleading is not just an activity — it is a true sport. The days of cheerleaders simply leading crowds in cheers are over; they are now serious athletes who perform difficult and often dangerous gymnastic stunts. However, as cheerleaders evolved from entertainers to athletes, the rate of injury increased as well. Dr. Terai wants cheerleaders and their parents to know the most effective strategies for preventing injuries, and how chiropractic can help mitigate many of these risks.



Perilous Pom Poms

In recent years, cheerleading has become both more athletic and more popular — and injury rates have jumped accordingly.

A 2005 study reported that “over 50% of all catastrophic injuries in women’s sport occur in cheerleading” (*Br J Sports Med* 2005;39:237-40). A 2006 study in the journal *Pediatrics* found that “an estimated 208,800 children 5 to 18 years of age were treated in US hospital emergency departments for cheerleading-related injuries during the 13-year period of 1990-2002.”

The study concludes that “the number of injuries increased by 110% from 10,900 in 1990 to 22,900 in 2002” (*Pediatrics* 2006;117:122-9). And in 2007, the U.S. Consumer Product Safety Commission reported that there were over 74,000 cheerleading injuries.

Preventing Cheerleading Injuries

Injuries among cheerleaders often result from:

- **Gymnastic tumbling**
- **The pyramid** (The cheerleader at the top is most often injured after falling onto a hard surface.)
- **The basket toss** (when a cheerleader is thrown into the air by three or four other cheerleaders)

But injuries — even serious ones — can also occur during simple, basic routines, especially when performed on unforgiving surfaces like gymnasium floors.

Read on for specific suggestions from Dr. Terai on preventing cheerleading injuries.

Ensure you’re in top shape before you start

A thorough exam by a doctor of chiropractic is an important step before starting to cheer or beginning a new season. Dr. Terai will rule out any conditions that would put you at higher risk for injury — and will also share tips for cheering safe and injury-free.

One ailment Dr. Terai will check for is **vertebral subluxations** — or misaligned spinal bones (vertebrae). These dysfunctional areas affect not



only the spine, but can also lead to conditions throughout the body, including problems that could affect a cheerleader’s performance or boost the chances of injury.

Notably, chiropractic care helps establish and maintain optimal posture, which improves balance. Balance is key to avoiding many cheerleading injuries.

Stretch and strengthen

Being flexible and strong are key to preventing many common cheerleading injuries.

Try splits, lunges and straddles for lower-body stretching. Also pull each arm across the chest to stretch the shoulders and arms. A workout with light weights or calisthenics will increase strength and endurance. Running or jogging will also improve lower body strength and endurance.

Talk to the doctor for specific instruction on the best stretching and strengthening exercises for you.

**Dr. Wayne Terai, Burtch Chiropractic (250) 860-4518
229-1634 Harvey Avenue, Kelowna, BC V1Y 6G2 www.burtchchiropractic.com**

Ensure cheerleading coaches are highly qualified

A 2004 study of cheerleading injuries and their risk factors among high school cheerleaders concluded that “cheerleaders supervised by coaches with the most education, qualifications, and training (coach EQT) had a nearly 50% reduction in injury risk ... compared to cheerleaders supervised by coaches with low coach EQT.” (*Am J Sports Med* 2004;32:396-405.)

Cheerleaders should never build a stunt without a highly qualified coach present. And the coach should review and approve all stunts, including pyramids and basket tosses, prior to execution.

Use spotters and mats

A 2003 study of catastrophic cheerleading injuries concluded that “suggestions for reducing catastrophic injuries in cheerleaders include enhancing the number and training of spotters, mandating floor mats for complex stunts, restricting complex stunts when surfaces are wet, and encouraging safety certification of coaches. Pyramids and basket tosses should be limited to experienced cheerleaders who have mastered all other skills and should be performed with spotters and landing mats.” (*Am J Sports Med* 2003;31:881-8.)

As moves get more involved, such as lifting other squad members into the air, make sure there are enough spotters and supporters. And all squads should receive thorough training in proper spotting techniques.

In addition, always practice on mats. Do jumps, tumbles and other gymnastic moves on mats and pads to avoid injuries due to falls.

Finally, progress gradually into more challenging cheerleading moves. Don't attempt stunts that you have not adequately practiced or prepared for. Learn the basic moves before trying anything that requires additional strength and flexibility.

Most Common Cheerleading Injuries

Although cheerleaders are vulnerable to a vast array of injuries, the ankle, wrist and hands seem to be the most vulnerable — at both the high school and college level.

One study of 425 high-school cheerleaders found that “of all injuries, the ankle (24.4%), back (16.1%), and wrist or hand (15.6%) were the most frequent sites of injury.” (*J Orthop Sports Phys Ther* 2004;34:261-5.) Another analysis of 440 college cheerleaders found that ankles and wrist/hand were the most frequently injured (*Br J Sports Med* 2005;39:237-40).

Fortunately, chiropractic care is a highly effective option for alleviating pain and disability after an ankle or wrist injury.

In one study, researchers divided 30 patients with ankle sprains into two groups: 15 received ankle adjustments, and 15 underwent ultrasound treatment. After eight sessions spanning four weeks, the chiropractic group showed a greater reduction in pain and increased ankle range of motion and function, compared to the ultrasound group (*J Manipulative Physiol Ther* 2001;24:17-24).

One case study looked at a woman struggling with loss of grip strength and mobility in her wrist more than a year after a wrist fracture. After three weeks of specific joint manipulation, “the patient exhibited a significant increase in grip strength and active range of motion.”

The researchers concluded that: “Appropriate intervention of chiropractic manipulation and examination procedures culminated in a successful resolution of this case. When such cases are recognized, appropriate management may occur conservatively with judicious application of joint manipulation and reevaluation procedures.” (*J Manipulative Physiol Ther* 1999;22:105-7.)

Act Quickly

Always get a chiropractic evaluation after any cheerleading injury, no matter how minor it might seem. This will help prevent the injury from worsening over time. In addition, unlike many health-care practitioners, chiropractors also know that the body works as one unit, and an injury in one area will most likely affect other areas.

Your doctor of chiropractic will work to ensure that your injury, and any other affected areas, heal as quickly and safely as possible.

And don't wait until an injury occurs to get a chiropractic checkup. Regular chiropractic care helps athletes of all ages — including cheerleaders — prevent injury and maintain optimal performance.



Optimal Health University™ is a professional service of PreventiCare Publishing®. The information and recommendations appearing on these pages are appropriate in most instances; but they are not a substitute for consultation with a health care provider. Optimal Health University™ may be photocopied (NOT reprinted) exactly as they are published noncommercially by current subscribers ONLY to share with patients or potential patients. Optimal Health University™ may NOT be reprinted in any print or electronic publication including newsletters, newspapers, magazines or Web sites. Any other reproductions are subject to PreventiCare Publishing® approval. Copyright, 2009. PreventiCare Publishing®. 1-912-897-3040. www.preventicare.com