



High School Sports... Who's at Risk?



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In a family of sports enthusiasts, which athlete is more likely to be injured – the son who plays football or the daughter who runs cross-country? The answer may surprise you.

Football conjures up images of full contact, bone jarring, and midair collisions, but football is not the number one injury sport in high school, it is number two.

Well then, you say, it must be wrestling. Those athletes writhe and wrap around one another like a python crushing its prey until one ends up on the top and the other ends up flat on his back looking up at the lights. Sorry, guess again; wrestling is third.

According to Dr. Steven Rice, an orthopedic surgeon based in Washington State, Girls' Cross Country is the high school sport with the highest rate of injury. Rice studied 60,000 athletes at 20 high schools and found the injury rate in Girls Cross Country was 61.4 runners per 100. One third of those runners had multiple injuries, accounting for this high rate. The overall injury rate for cross country runners was 17.3 per 1,000 "athletic exposures" – one athlete participating in a practice or a game. Football players had a significantly lower risk of injury at 12.7 per 1,000 athletic exposures.

"The fact that fall sports had such a high injury level suggests that we

need to do a better job in keeping kids on off-season programs," Rice said. His study found shin splints, ankle sprains, tendonitis of the knee and lower extremity stress fractures were the most common injuries.

Rice proposed several reasons why the injury rate for Girl's Cross Country was so high, and many had to do with estrogen levels. Adequate levels of estrogen promote proper bone growth and healing after injury, but preteen and teenage girls often have low levels of estrogen. Hence, their stress fractures take longer to heal, and girls who train heavily may not menstruate regularly, which further lowers estrogen levels.

To ensure the health of a young female runner, families should inquire regularly how the young athlete is tolerating the training and competition. Watch for dips in performance levels and encourage her to talk to the school's coach or athletic trainer, and to visit a physician, orthopaedist, or a physical therapist when an injury occurs. Another very important factor, shoe selection, often does not receive adequate consideration. The right shoes can help to prevent many overuse injuries. In our next column, we will discuss how to go about selecting the best athletic shoe and why it is so important.

Common injuries among runners

- ★ Hip Flexor (groin) Strain – Pain is located to the front and inside of the thigh. It's felt when running, climbing stairs and sitting. Low back pain is often a related problem.
- ★ Kneecap Maltracking – Pain occurs during or after runnings. Grinding with stairs or squats. Tight calf muscles, flat feet and hip pain often accompany this injury.
- ★ Chronic Ankle Sprain – The athlete experiences pain or swelling after practice that lasts for weeks.
- ★ Flat Feet or Heel Spurs – The athlete experiences pain in her feet that often gets worse at night.