

# Safe Off-Season Conditioning Creates Future Wins

By Lance LeClare, MD

Each year, millions of children and adolescents participate in organized sports in the U.S. But after the season comes to a close, many athletes use the off-season to improve fitness, increase strength, and address areas of their game that need improvement. Although many off-season conditioning programs involve sports specific drills and exercises, there are several principles to keep in mind when designing any off-season conditioning program. Adhering to these principles can keep your child safe and healthy and may actually reduce the risk of injury once the season begins again.

According to the American Academy of Orthopaedic Surgeons, 3.4 million youth athletes aged 14 years or younger are treated for sports injuries annually in the United States.<sup>1</sup> Of these injuries, the vast majority are soft tissue bruises, sprains, and strains. Many of these injuries occur at the beginning of the season and athletes who have not maintained fitness and activity levels in the off-season may be more at risk. A recent study that reviewed more than 150 clinical papers concluded that preseason condition and education programs are essential for preventing injuries in youth athletes.<sup>2</sup>

Off-season conditioning programs may differ by sport and skill level. But there are key components to any successful conditioning program. First and foremost, an off-season program should include adequate time for rest. This is important from not only from a physical standpoint,

but a mental standpoint as well. Providing athletes with adequate time away from sports and conditioning can help prevent burnout.

When designing an off-season program, always practice the 10 percent rule.<sup>3</sup> The 10 percent rule states that increases in mileage, training time, weights lifted, or

overall activity should not be increased by more than 10 percent from one week to the next. The overall design of any program should include gradual increases in activity and intensity from week to week, with the peak coming just before the season.

Many experts recommend specific phases to off-season conditioning programs. Initial efforts should focus on core strength and balance.<sup>4</sup> Once these aspects are optimized, the focus should turn to cardiovascular fitness and endurance. Strength training then follows, and the program should conclude with sport-specific drills. Ideally these drills will address specific weaknesses that the athlete may have in their sport. Seeking advice and feedback from the coach can be invaluable when designing this component of the program.

A well-designed off-season conditioning and strengthening program should have a balance of gradually increasing intensity



but appropriate rest. An effective off-season program will help prevent overuse injuries, muscle strains, and tendonitis injuries that are so common at the outset of a new athletic season. Consult your local strength and conditioning expert and work with your coach to design a program that can get you ready for your best season yet!

**For more information on how to prevent youth sports injuries visit [www.STOPSportsInjuries.org](http://www.STOPSportsInjuries.org).**

## References

1. AAOS. The changing landscape of youth sports injuries. [www.aaos.org/news/aaosnow/nov09/clinical8.asp](http://www.aaos.org/news/aaosnow/nov09/clinical8.asp).
2. Abernethy L, Bleakley C. Strategies to Prevent Injury in Adolescent Sport: A Systematic Review. *British Journal of Sports Medicine*. Published May 11, 2007.
3. Teaching Kids Safe Ways to Participate in Sports. STOP Sports Injuries-Keeping Kids in the Game for Life. [www.stopsportsinjuries.org](http://www.stopsportsinjuries.org).
4. STOP Sports Injuries: An Injury Prevention Curriculum for Coaches. 2011. [www.stopsportsinjuries.org](http://www.stopsportsinjuries.org)

# 10% rule

When designing an off-season program, always practice the 10% rule—activity should not be increased by more than 10% from one week to the next.