

For young athletes, inadequate sleep leads to decreased performance

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Most young athletes don't get enough sleep—and that may significantly affect their sports performance, according to a paper in the November issue of *Current Sports Medicine Reports*, official journal of the

American College of Sports Medicine (ACSM). The journal is published in the Lippincott portfolio by Wolters Kluwer.

"There's growing evidence to suggest that youth athletes don't get required [amount of sleep](#), and that this negatively affects their performance," comments Mark F. Riederer, MD, of C.S. Mott Children's Hospital, University of Michigan, Ann Arbor, author of the new review. He believes that the trend toward more-[intensive training](#) might contribute to a lack of adequate sleep in in [young athletes](#).

Rested and ready? Youth athletes need more sleep to do their best

Faced with competing demands including school, sports, and [social life](#), young athletes tend to put off sleep in favor of other activities.

Generally, the evidence suggests that they don't meet recommended guidelines for [sleep duration](#): 9 to 12 hours for children aged 6 to 12 years and 8 to 10 hours for adolescents aged 13 to 18 years. For example, one study found that more than 90 percent of teen gymnasts get less than 8 hours of sleep per night.

Most studies find that young athletes get less sleep than non-athletes; they may sleep longer on the weekends, trying to make up their "sleep debt." The evidence suggests that young female athletes sleep less than their male counterparts. However, elite-level teen athletes of both sexes seem to get more sleep—possibly related to higher sleep need due to higher training loads.

Although studies vary, the evidence suggests that getting less-than-recommended sleep leads to decreased performance on the playing field. Some papers report that inadequate sleep has significant effects on reaction time, strength, speed, cognitive learning, and decision-making.

"[S]tudies consistently demonstrate that lack of recommended sleep results in poor sense of well-being, increased perceived training load, and poor placement in competitions," Dr. Riederer writes. Sleep deficits may also place young athletes at risk for injury and illness.

Other recent findings include:

- Studies of napping and other sleep interventions show inconsistent effects on athletic performance.
- Young athletes with symptoms of insomnia may be at increased risk of burnout, along with a higher risk of dropping out of their sport due to injury.
- Levels of the stress hormone cortisol are increased after competitive matches, leading to reduced sleep time and quality.
- Poor sleep may be linked to obstructive sleep apnea among college football linemen.
- Inadequate sleep might be a risk factor for bony stress injuries (such as stress fractures).
- Although it has been suggested that using smartphones or other [electronic devices](#) before bed can lead to impairments of sleep or athletic performance, one recent study found no such effects.

"The message for young athletes is, getting recommended sleep can improve your performance," Dr. Riederer comments. He notes that an emphasis on increasing training workload to improve skill and performance may adversely affect young athletes in other ways.

"Trends like early-morning training schedules, two-a-day practices, and late night practices and competitions come at the expense of good sleep habits—as well as leaving kids less time to socialize and do homework," Dr. Riederer adds. "We need to ensure our youth athletes are getting adequate amounts of sleep, and there is evidence to support this claim."

More information: Mark F. Riederer. How Sleep Impacts Performance in Youth Athletes, *Current Sports Medicine Reports* (2020). DOI: [10.1249/JSR.0000000000000771](https://doi.org/10.1249/JSR.0000000000000771)

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