

# The Importance of Educating Children and Teenagers About Sleep Hygiene

By Karla J. Thompson, BA, RPSGT, CCSH

With the close of summer comes the return to school for children and teenagers. For many, school might look a little different due to the coronavirus pandemic; however, whether school is taking place in a traditional setting or via an online format, it is important for children and teenagers to understand and maintain a healthy sleep schedule.

Maintaining a regular sleeping schedule becomes increasingly difficult as children get older and extracurricular activities increase. In addition to their full social schedules, as children become teenagers, they “experience delayed patterns of melatonin secretion and a slower buildup of homeostatic pressure during wakefulness.”<sup>1</sup> Due to these changes, the circadian rhythm is delayed, causing teenagers to fall asleep and wake up later.

According to the American Academy of Sleep Medicine (AASM), “teenagers 13 to 18 years of age should sleep eight to 10 hours per 24 hours on a regular basis to promote optimal health.”<sup>1</sup> However, multiple studies report that teens continuously average less than eight hours of sleep per night.<sup>2</sup>

It’s reported that the percentage of high school students who get enough sleep has decreased from 25.4% in 2017 to 22.1% in 2019.<sup>3</sup> Chronic sleep loss wreaks havoc on the body, both physically and mentally. In adolescents and teenagers, chronic sleep loss has been associated with an increased risk of obesity, metabolic dysfunction and cardiovascular morbidity.<sup>4</sup> Moreover, when these health issues begin in the teenage years, there is an increased likelihood that these issues will lead to poor health as the individual ages.

Studies have also shown that chronic sleep loss leads to a decline in academic performance along with decreases in motivation or drive and an increased risk of

anxiety or depression.<sup>4</sup> Fewer than 15% of U.S. high schools start their days at 8:30 a.m. or later, and 42% start at 8 a.m. or before.<sup>5</sup>

In the START study conducted by the University of Minnesota, in which researchers looked to determine the effects of delaying school start times on adolescent sleep, it was discovered that students at schools that delayed start times received an average of 43 more minutes of sleep on school nights, slept less on weekends — accumulated less sleep debt — and had similar bedtimes when surveyed two years later.<sup>5</sup> However, the average amount of total sleep time for these students was eight hours and five minutes — barely within the recommended eight to 10 hours.

Lo et al.<sup>6</sup> published the findings of a similar study in which 375 students in grades seven to 10 were studied to evaluate the short- and long-term effects of a 45-minute delay in school start times. After one month, researchers found that participants’ time in bed increased by 23 minutes. At the nine-month follow-up, total sleep time increased by 10 minutes. The researchers noted that despite the East Asian sentiment of “trading sleep for academic success,” delaying school start times was successful because of the combined efforts between the parents and teachers to encourage the students “to use the opportunity to get more sleep.” It is simply not enough to delay school start times if teenagers aren’t educated on sleep health in a positive way.

In an effort to align school start times with teenagers’ normal circadian rhythms, organizations such as the AASM and the American Academy of Pediatrics (AAP) have released policy statements recommending that high schools implement start times of 8:30 a.m. or later.

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## Sleep Education in Action

Tan et al.<sup>7</sup> published the results of a study in which a small sample of adolescents ages 10 to 18 years with sleep problems were subjected to one-on-one counseling sessions about sleep hygiene and then followed said adolescents for 20 weeks to observe sleep hygiene, sleep quality and daytime symptoms. Researchers concluded that there were significant improvements in sleep hygiene and sleep quality, as well as a reduction

in daytime symptoms of sleepiness. However, the researchers had several limitations, including a small sample size. The 90-minute food, emotions, routine, restrict, environment and timing (FERRET) program was geared toward adolescents and consisted of a simple rating system.

Blunden et al. hypothesized that sleep education programs do work, but the changes are rarely sustained because the programs lack the proper focus. "Delivery of sleep education in schools is clearly not sufficient if we are to achieve sleep behavior change, given that sleep and sleep hygiene practices occur within the family. Family inclusion in sleep education programs is paramount ... as children age, however, the influence of peers becomes increasingly important with less parental jurisdiction ... This interplay between 'significant others' such as family and peers, and how these groups view the importance awarded to good sleep is paramount to achieving behavior change. Sleep behavior change must be considered important, not just by the individual but by their family, their peers and their school community."<sup>8</sup>

Educating adolescents about sleep will involve more than the school and administrators. Having a local sleep specialist present on sleep is effective for launching a program, but it will take an investment from the entire community to make the program successful. Teachers will have to commit to not only

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## For a proposed definition of sleep health, see:

Daniel J. Buysse, MD, *Sleep Health: Can We Define It? Does It Matter?*, *Sleep*, Volume 37, Issue 1, January 2014, Pages 9–17, <https://doi.org/10.5665/sleep.3298>

encouraging students to practice sleep hygiene but also ensure that their curriculum accommodates this request. Parents will have to reinforce sleep hygiene and schedules at home.

Sleep education should begin at an early age so that it becomes a lifestyle and not something that is dreaded by the youth. Toddlers see naps as punishment, and it is not until one reaches adulthood that naps are truly appreciated. Sleep is the easiest thing you can do for your health. Ideally, schools should support schedules that coincide with adolescent circadian rhythms. Barring that, parents, teachers, administrators and health care professionals should work together to educate themselves and their community about the benefits of sleep health. 🌙



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