- Teens are among those least likely to get enough sleep; while they need on average $91 / 4$ hours of sleep per night
- teens average fewer than 7 hours per school night by the end of high school, and most report feeling tired during the day (Wolfson \& Carskadon, 1998)
- hectic schedules with afterschool activities and jobs, homework hours and family obligations; and a clash between societal demands, such as early school start times, and biological changes that put most teens on a later sleep-wake clock. As a result, when it is time to wake up for school, the adolescent's body says it is still the middle of the night, and he or she has had too little sleep to feel rested and alert.


## https://www.sleepfoundation.org/articles/backgrounder-later-school-start-times

- since sleep deprivation impairs their ability to be alert, pay attention, solve problems, cope with stress and retain information. Young people who do not get enough sleep night after night carry a significant risk for drowsy driving; emotional and behavioral problems such as irritability, depression, poor impulse control and violence; health complaints; tobacco and alcohol use; impaired cognitive function and decision-making; and lower overall performance in everything from academics to athletics.


## Test \#1

- project spearheaded by Dr. Mary A. Carskadon

Who: whom the transition from junior high to senior high required a change in school starting time from 8:25 am to 7:20 am
How: The 25 students completed the study at two time points, in the spring of 9th grade and autumn of 10th grade. The students kept their usual schedules, wore small activity monitors on their wrists, and kept diaries of activities and sleep schedules for two consecutive weeks. At the end, participants came to Carskadon's sleep lab for assessment of the onset phase of melatonin secretion, an overnight sleep study, and daytime testing with MSLT. The in-lab sleep schedule was fixed to each student's average school night schedule, based on data from the wrist monitors.

