

# Data Update on Sleep

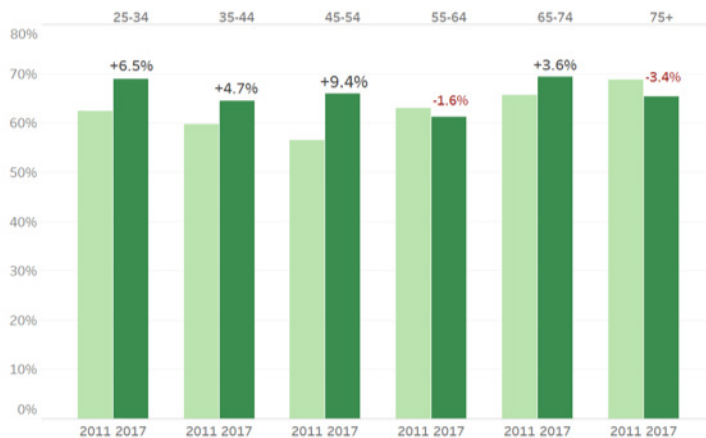
**Key Measurement:** Sleep duration of 7-9 hours per night on a regular basis for adults aged 18 and above, as recommended by The American Academy of Sleep Medicine, Sleep Research Society, National Sleep Foundation, and the Centers for Disease Control and Prevention.

**Data source:** National Health and Nutrition Examination Survey (NHANES) from the Centers for Disease Control (unless otherwise noted).

## The big picture: More Americans are getting enough sleep

- In a positive development, a greater proportion of Americans are getting sufficient sleep (7-9 hours) than in previous years - 66% in 2017, compared with 62% in 2011.
- Almost every age group was more likely to get sufficient sleep in 2017 (Figure 1), particularly younger adults.
- The public is showing an increased interest in sleep, as evidenced by increasing Google searches (Figure 2).<sup>1</sup>

### More Americans are getting sufficient sleep at almost every age



### Public interest has increased with sleep duration

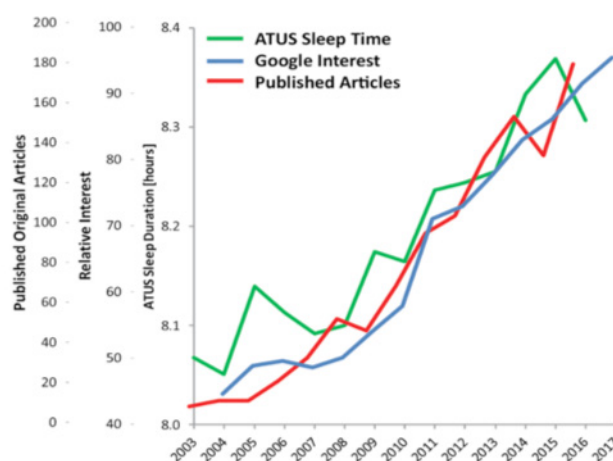


Figure 1. (Left) Percentage of adults who got 7-9 hours of sleep by age in 2011 and 2017.

Figure 2. (Right) Sleep duration increases along with public interest in sleep between 2003 and 2017. Green line: the change in American Time Use Survey (ATUS) respondents' sleep duration on weekdays. (ATUS is representative of Americans 15 and older and has been performed annually by the Bureau of Labor Statistics (BLS) since 2003.) Blue line: a Google Trends analysis of searches for the word "sleep" in the United States. Red line: the number of published original articles with the terms "sleep duration," "sleep time," "short sleep," or "long sleep" in the title.

## The Sleep Gap

- While the overall trend is positive, there are differences in who is getting sufficient sleep based on race/ethnicity, education and income levels, and gender. The most significant of these is that Black Americans consistently get less sleep than other racial/ethnic groups (Figure 3). This trend is explored on page 6 of this report's research update.
- Each racial/ethnic group experienced an increase in likelihood of getting sufficient sleep between 2011 and 2017, including Black Americans who went from under half getting sufficient sleep in 2011 and 2011, to 55% in 2017.

## Black Americans are least likely to get 7-9 hours

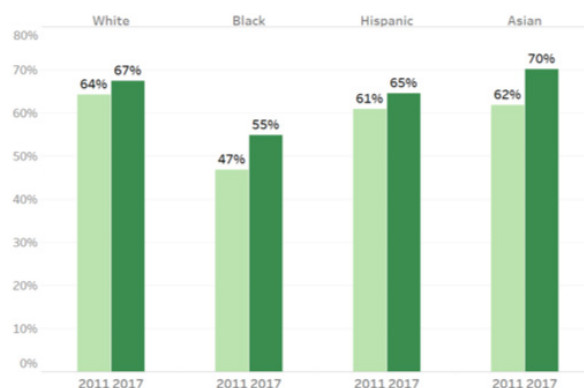


Figure 3. Percentage of adults who got 7-9 hours of sleep in 2011 and 2017 across race/ethnicity.

## Other Key Trends

- Sleep trends from 2011-2017 were positive for virtually all groups.
- Women are slightly more likely to get sufficient sleep than men (69% of women in 2017, versus 62% of men).
- Married people are more likely to get sufficient sleep than unmarried individuals (68% of married people in 2017, versus 62% of unmarried people).
- The percentage of people getting sufficient sleep increases with level of education and income, particularly at the top levels of both (Figures 4 and 5).

### Likelihood of sufficient sleep increases with income and education



Figure 4. Percentage of people who sleep 7-9 hours per night by income

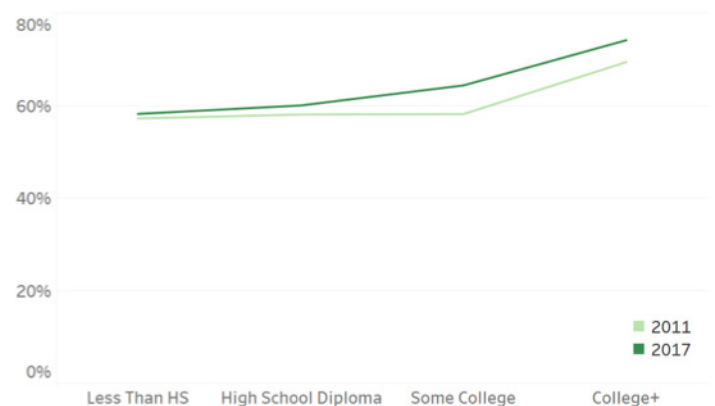


Figure 5. Percentage of people who sleep 7-9 hours per night by education

### Best Practices for Better Sleep

Stanford Lifestyle Medicine has compiled a list of recommendations for lifestyle changes that will help optimize sleep health:

1. Follow a consistent sleep schedule.
2. Establish a relaxing bedtime routine.
3. Optimize your sleep environment by keeping it cool (60-67 degrees F) and dark.
4. Exercise daily and minimize extensive sitting.
5. Avoid stimulants such as caffeine and cigarettes in the afternoon.
6. Avoid afternoon naps.
7. Avoid large meals close to bedtime.
8. If you are having difficulty falling asleep, get out of bed.
9. If sleep problems persist, consider keeping a Sleep Diary.

### More Stanford Resources

Stanford Lifestyle Medicine: <http://longevity.stanford.edu/lifestyle-medicine-2/lifestyle-pillars/lifestyle-medicine-2-sleep/>

Stanford Sleep Medicine Center: <https://stanfordhealthcare.org/medical-clinics/sleep-medicine-center.html>

Stanford Medicine Division of Sleep Medicine: <https://med.stanford.edu/sleepdivision.html>

<sup>1</sup>Basner, M., & Dinges, D. F. (2018). Sleep duration in the United States 2003–2016: First signs of success in the fight against sleep deficiency? *Sleep*, 41(4). <https://doi.org/10.1093/sleep/zsy012>