



# **ZZZs and \$\$\$s: How sleep impacts the bottom line**



HEALTH SOLUTIONS



Nearly one in three adults report one or more symptoms of insomnia<sup>1</sup>—and these fatigue-related productivity losses have been estimated to cost \$2,280 per employee annually in the U.S. That’s \$63.2 billion per year.<sup>2</sup> Inside this report, you’ll learn why everyone needs adequate sleep, and how you can help your employees get the rest they need. Plus, you’ll get the scoop on sleep’s major effect on productivity, and ultimately, your company’s bottom line.



## Why do we need sleep?

If you think bedtime is your brain's chance to shut down for the day, think again. During sleep, your body is actually working long and hard to stay healthy—by growing muscle, repairing tissue, and synthesizing hormones. In other words, repairing those sore muscles from your afternoon weight-training session and keeping your hormones in check. Sleep is also the time for your brain to process, restore, and strengthen the information that you absorb all day, ultimately resulting in memories.<sup>3</sup>

Insufficient sleep has significant consequences for long-term health, and studies show that consistently failing to get enough sleep contributes to increased rates of chronic diseases and conditions, such as diabetes, heart disease, and hypertension.<sup>4</sup>



## How much sleep do we really need?

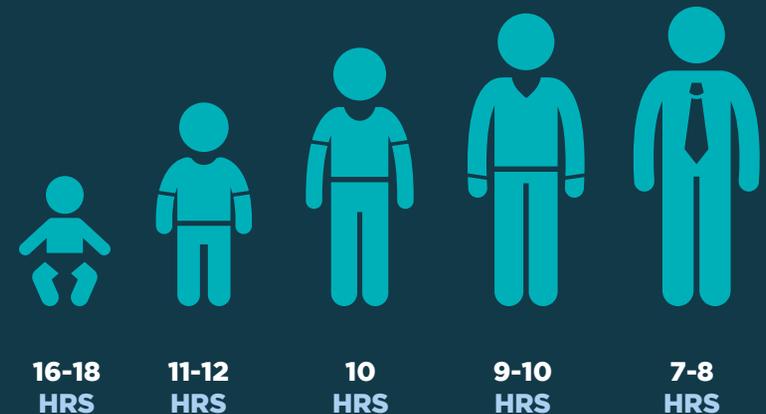
Not everyone is the same when it comes to sleep needs. Young children and teens need more sleep because they're still growing. Across early childhood and adolescence, sleep recommendations are 16-18 hours for newborns, 10 hours for school-aged children, and 9-10 hours for teens.

For adults, the National Institute of Health recommends 7-8 hours for optimal sleep—and not just to avoid feeling like a zombie the next day.<sup>5</sup> Getting between 7 and 8 hours of sleep per night helps adults fight weight gain, depression and other chronic conditions.

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Age	Recommended Amount of Sleep
Newborns	16–18 hours a day
Preschool-aged children	11–12 hours a day
School-aged children	At least 10 hours a day
Teens	9–10 hours a day
Adults (including the elderly)	7–8 hours a day

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# Bad sleep is bad for business

Sleep is also key to staying energized and productive during the day. If you show up to work after a restless night, chances are you won't be bringing your 'A' game to the office—and data backs that up.

Researchers from Brigham and Women's Hospital found that speed at a visual search computer task decreased the longer participants were awake, indicating that the more sleep-deprived you are, the slower you become at completing tasks at work. During this study, declining ability was also noticeable from midnight to 6 AM even though study participants did not know what time of day it was. According to these findings, the impact of sleeplessness on visual tasks was even stronger at night, which could indicate the importance of evening rest.<sup>7</sup>

Another study found that people who went 17-19 hours without sleep showed the same cognitive impairments as those with a Blood Alcohol Content (BAC) of .05%, the equivalent of the average adult consuming about one to two drinks in an hour, depending on sex and weight.<sup>8</sup> Clearly, the combination of slow functioning and performing as if you were under the influence is not the ideal for productivity.



**17-19 hours  
without sleep**



**1 drink**

## People who sleep 6 hours per night or less



are **4 times more**  
likely to get sick.

On top of that, lack of sleep can result in sickness and ultimately, absenteeism. A study found that sleeping fewer than 5 hours is associated with staying home sick for 4.6 to 8.9 more days per year than those who get 7-8 hours a night. That study goes on to identify insomnia-related symptoms, waking up too early, being more tired during the day than other people of the same age, and using sleeping pills were most consistently associated with sick absence.<sup>9</sup> In other words, people who sleep less are getting sick more often and missing more days of work.

Further connecting sleep and sickness, another study discovered that people who sleep 6 hours a night or less are 4 times more likely to get sick after being exposed to rhinovirus, the most common cold virus. The study also found that shorter amounts of sleep affected the body's inflammatory response, which helps the body clear out viruses when it's functioning properly.<sup>10</sup> When it's cold and flu season, adding a poor night's sleep to the shared spaces in an office is a recipe for the sniffles.

# How sleep affects the bottom line

So what does sleep have to do with the success of your company? A lot—and we're talking dollars. It has been found that insomnia and insufficient sleep contribute to significantly worse productivity, performance and safety outcomes. And insomnia could be affecting more of your employees than you may think. In fact, about 30% of adults report one or more symptoms of insomnia—including difficulty initiating sleep, difficulty maintaining sleep, waking up too early, and in some cases, nonrestorative or poor quality of sleep.<sup>11</sup>

These fatigue-related productivity losses have been estimated to cost a substantial amount per employee annually. To break this down by employee, a Harvard Medical School-led study found that insomnia cost 11.3 days, or \$2,280, in productivity for the average U.S. worker, ultimately amounting to \$63.2 billion per year nationally.<sup>12</sup> There's no denying that sleep not only does your body good, but it also does a whole lot of good to your company.

But what can you do about it? Put sleep in the spotlight at work and provide tools and resources that help employees get a handle on their sleep habits. The health of your employees and company depends on it.

**1 in 3 adults**



**report one or more insomnia symptoms**



## Run a sleep challenge without being creepy

Since sleep is essential to employee health, a sleep challenge is a no-brainer. To encourage maximum restfulness while avoiding an awkward execution, try following these six steps.

### 1. Opt for aggregate.

Put participants into teams and only track team averages. This way, employees have a goal to work towards, but know they won't be called out for late nights or bad habits.

### 2. Be transparent.

Given the sensitivity around personal sleep habits, reassure employees that only aggregate data—not individual sleep information—is being recorded.

### 3. Make participation easy.

Offer subsidized devices that automatically log sleep—like a Fitbit tracker. Employees simply need to wear the tracker to bed, and it will take care of the rest.

### 4. Choose a time wisely.

If a challenge is too short, employees might not have time to make real behavior changes. But if it's too long, they might lose momentum. Aim for a sweet spot of 4 weeks.

### 5. Go for the right goal.

Encourage employees to aim for the National Institute of Health's recommendation of 7-8 hours of sleep each night. If you've learned that the average night's sleep is much lower, pick a more realistic goal and work your way up each week.

### 6. Educate employees.

During the challenge, provide sleep education like the accompanying sleep tip sheet. This helps employees understand the importance of sleep and how they can improve.

To learn more about how Fitbit Health Solutions can help you develop successful programs, create engaging challenges and improve employee health, contact us at [www.fitbit.com/group-health](http://www.fitbit.com/group-health).

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