

Fatigue Risk Management Info sheet:

How can I help my teenager to get more sleep and feel less tired?



Why read this?

In this article, you will read why sleep is important for teens' cognition and mental health, why many teenagers do not sleep enough, and what you can do to help your teen to get more sleep of high quality. If you are worried that your teenager is tired and not sleeping enough, you may be right. Teenagers should sleep 8 to 10 hours, but research suggests that two in three teenagers sleep less than 8 hours per night¹

The evidence that sleep is essential for teens' cognition and mental health

Sleep deprivation can have serious implications for cognition with studies showing that even one night of sleep loss results in distraction, longer reaction times, and slowed cognitive processing in teens. Therefore, it is not surprising that sleep-deprived teenagers are more likely to perform worse at school².

Sleep is the foundation of emotional regulation and research suggests that sleep disturbance is on the rise in teenagers and so are mental health disorders such as anxiety and depression. Teenagers' vulnerability to depressed moods is amplified by the fact that the brain regions that produce our emotional responses (amygdala) and logic thinking and emotional regulation (prefrontal cortex) may not develop in parallel with each other. The development of the prefrontal cortex, and thus emotional regulation, often develops relatively slowly. This means that in teenagers, their ability to regulate their emotions lags behind the rest of their development – and sleep deprivation further weakens their emotional regulation.



The relationship between sleep loss and teenagers' mood was emphasized in a poll of 1602 respondents which found that 73% of teenagers who felt unhappy, sad or depressed also reported not getting enough sleep at night³. Sleep deprivation in teens has been also linked to drunk driving, drug use², and thinking about or planning taking their own life⁴. These results confirm that shortened sleep can play havoc with teenagers' mood.

Why your teenager probably isn't getting enough sleep

- **Biology conflicts with early school start times**

With puberty, teenagers become progressively more 'evening types', which means they are biologically driven by a cluster of cells in the brain called the body clock, to fall asleep late and wake up late. This conflicts with the need to wake-up early to get to school for early school start times. Many teenagers don't feel tired until after midnight and on school days they often need to wake up early, for example at 06:00 am, and consequently they don't obtain adequate sleep.

- **Difference in sleep timing during the week versus on the weekend**

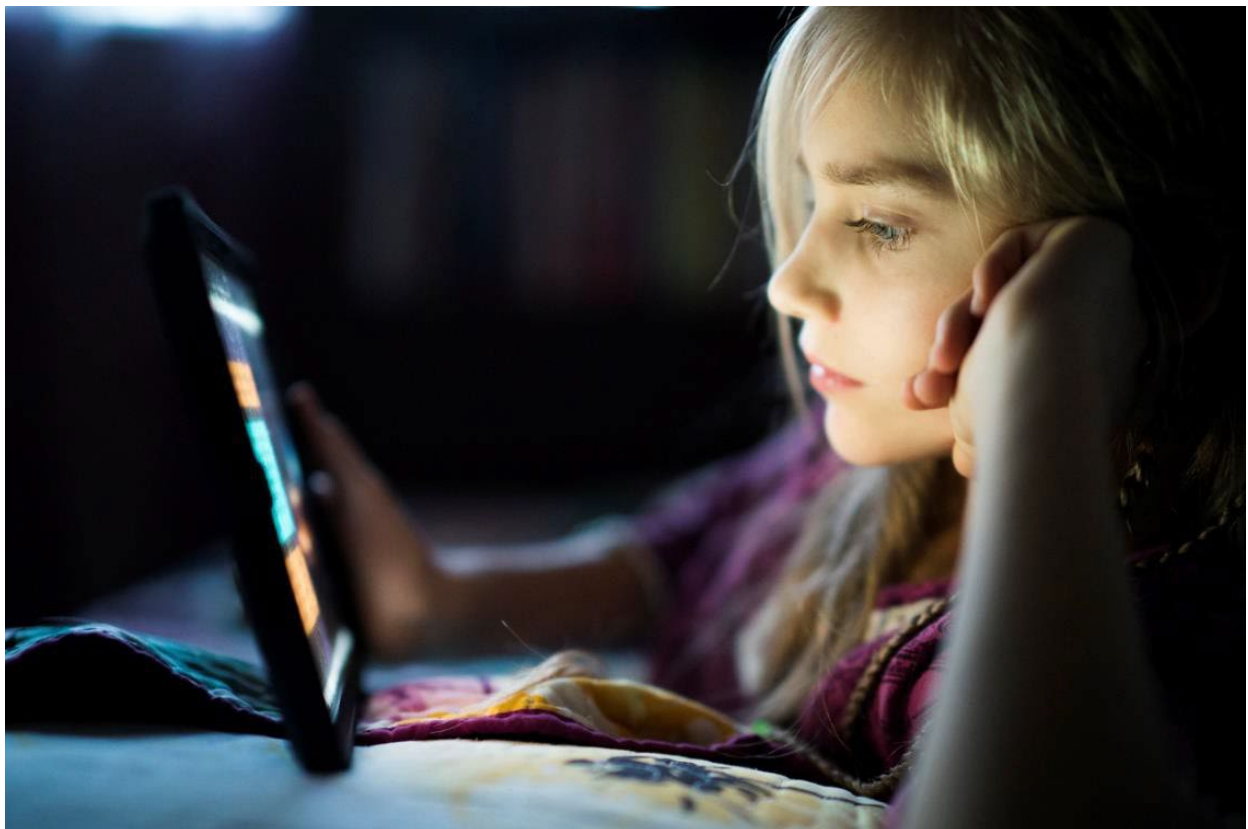
Many teenagers are sleep deprived by about 2 or 3 hours per school day and accumulate a 'sleep debt' across the week. They tend to try to pay back their sleep debt on weekends by sleeping more and waking up late, for example 11am. The difference in the timing of sleep on school days versus weekends causes 'social jet lag', which refers to the lack of synchronization between our body clock and daily activities.

- **Social and other activities**

Teenagers can have lots of out of school activities, for example long hours spent socializing, doing sport and homework, which leaves inadequate time for sleep. There may also be social pressure from their peers relating to going to bed late, which could cause further sleep deprivation.

- **Use of smartphones, tablets, and laptops**

Many teenagers regularly use electronic devices with a bright screen, such as a smartphone or tablet, late into the evening. The light from these screens is rich in blue light, the part of the light spectrum known to increase wakefulness, so use of these devices increases the amount of time it takes us to fall asleep and can reduce sleep quality. Many devices have a 'night mode' which automatically dims the screen and reduces the blue light in the evening. Even with this mode activated, devices can still cause sleep disruption. Many teenagers keep their phones within easy reach while sleeping, so they are still tempted to check messages, causing sleep disruption, and tiredness the next day. A more effective, albeit initially unpopular strategy, is to ask everyone in your household to connect all devices to a family charging dock in the kitchen 2 hours before bedtime.



8 tips to help your teenager get enough sleep of good quality

1. Get behind the movement calling for later school start times to align school schedules to the natural late body rhythm of teenagers. This Ted talk explains the benefits of later school start times:
https://www.ted.com/talks/wendy_troxel_why_school_should_start_later_for_teens.
2. Limit your teen's exposure to bright light at night
 - In the evening, instead of bright overhead lights, use dim lighting.
 - If possible, set a rule to not use phones in the bedroom, and no devices should be used in the evening.
 - Give your teenager an alarm clock so they don't need their phone in the bedroom for the alarm function to wake up in the morning
3. Get your teen into the habit of being exposed to natural light in the morning, for example, by encouraging them to open the curtains of their room when they wake-up or to walk to school. Morning light exposure can help stabilise the body clock and help with feeling more alert in the morning.
4. Encourage them to exercise during the day and not in the evening. Exercise improves sleep quality, but evening exercise can delay sleep.
5. Help your teen to implement a good bedtime routine by suggesting having a shower, reading a book or using a relaxation technique before bedtime. One simple technique to try is diaphragmatic breathing and this can be learnt by watching the following video:
<https://www.youtube.com/watch?v=UB3tSaiEbNY/>.
6. Every minute of sleep counts, so encourage your teenager to use strategies that will allow them to sleep as late as possible in the morning. For example, if they shower in the evening and prepare for school by laying out their school clothes, they can set their alarm clock for slightly later.
7. A comfortable mattress and pillow and a cool room temperature, approximately 19°C, have a positive impact on sleeping.
8. Encourage your teen to keep a regular sleep schedule (i.e., sleep and wake up at approximately the same time every day) on weekdays and weekends. If your teen has too many activities in the day, you may discuss about limiting or removing some of them so that setting an earlier bedtime is easier.

To summarise

Sleep is essential for performance and mental health and many teens do not sleep enough. If your teen is one of them, follow the tips in this article to help them to go to sleep earlier and sleep more. Part of growing up is becoming more independent, but parental support helps teens to keep good sleep habits. If your teenager still finds it difficult to sleep, consider visiting a sleep expert for advice.

References

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Dr Alexandra Holmes is Research Director at Baines Simmons, specialising in scientific safety cases and the implementation of Fatigue Risk Management Systems (FRMS) in aviation. With a PhD exploring the health effects of sleep loss and shift work, Alex is a current member of the ICAO Helicopter Fatigue Management Task Force and assists the UK CAA and Irish CAA to evaluate FRMS applications and safety cases.

About the reviewers

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Dr Cristina Ruscitto is a Senior Researcher at Baines Simmons. She specialises in the psycho-behavioural predictors of jet lag and fatigue in the aviation sector. Her role involves fatigue management training, the development of fatigue surveys and survey analysis, the scientific study of roster patterns to quantify fatiguerisk as well as writing evidence-based recommendations to improve sleep in different operational settings. Cristina is a Chartered member of the British Psychological Society and an Associate Fellow of the Higher Education Academy.

Our Fatigue Risk Management Team help organisations manage the risks associated with fatigue and workload and specialise in delivering fatigue risk management solutions for companies whose employees are involved in safety critical work, such as aviation, the petrochemical industry, road transport and the emergency services. Their work provides organisations with the evidence needed to ensure that the business is operating within an acceptable risk threshold.

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