

How to help young children with sleep



Why read this?

By understanding how sleep changes over childhood, parents and caregivers can support their children to sleep well and spot signs that a child may be struggling with a sleep problem. This information sheet will help adults to understand and, where necessary, improve the sleep of pre-school and school-aged children, to foster good physical and mental health for the whole family.

What is the ideal sleep duration for pre-school and school-aged children?

According to the National Sleep Foundation (NSF):¹

- The ideal sleep range for pre-school children (3-5 years) is between 10 and 13 hours but getting 8-9 or 14 hours a night is appropriate for some children. If your pre-school child is typically sleeping less than 8 hours or more than 14 hours a night, you should speak to your doctor.
- The ideal sleep duration for school-aged children (6-13 years) is between 9 and 11 hours, but 7-8 or 12 hours of sleep a night is appropriate for some. If your school aged child is usually sleeping less than 7h or more than 12h a night, you should speak to your doctor.

How does sleep change across childhood?

The amount of sleep that children need decreases as the duration and number of daytime naps they take reduces.² By the age of six or seven, most children have stopped taking naps altogether. In countries with a 'siesta culture' though, napping remains a normal part of life for many individuals of all ages.

The quality of your sleep and that of your child are interwoven. Bedtime tantrums and waking at night affect the sleep quality of both children and caregivers, resulting in parental sleep deprivation, psychological distress and poor health.³ Children are of course influenced by our moods, and parental anxiety can be transferred to children as young as infants.⁴ Anxiety can disrupt children's sleep by making it difficult to fall asleep. When bedtime anxiety disrupts the parent-child bond it can become more difficult to settle a child at night.

By the time children reach school-age, they tend to be able to sleep in their own bed, and many children sleep through the night - an important sleep milestone for you and your child.

What are the benefits of healthy sleep in childhood?

Age-appropriate sleep duration is generally associated with better physical health in children and adults. In pre-school, healthy sleep is a foundation of emotional regulation and growth.⁵ In older children, adequate sleep is associated with better school performance, quality of life, and well-being.⁶

Why don't some children get the sleep they need?

Studies have highlighted that children are sleeping less than they did a decade ago. The factors responsible for this decline in sleep duration include exposure to artificial light in the evenings, late-night screen time, and a lack of bedtime rules in the household. For example, a National Sleep Foundation poll⁷ of 1473 parents/caregivers of children aged between new-born to 10 years old found:

- Most children had a nightlight in their bedroom (60%-72%).
- 30% of pre-schoolers and 43% of school-aged children had a TV in their bedroom. Children who did not have a TV in their bedroom were more likely to obtain more sleep compared to their counterparts.
- School-aged children were the most likely to change their sleep routine on weekends with 17% sleeping more on weekends and 27% sleeping less on weekends.
- One-third of all older school aged children (33%) consumed one or more caffeinated beverages daily, with 8% drinking two or more per day.

A further study found that between 20%–60% of children have sleep problems linked to refusing to go to bed when told to and the use of intrusive light.⁸



How to help pre-school and school aged children with sleep

The RU_SATED model of sleep health in adults⁹ consists of six dimensions:

- sleep **Regularity**
- **Satisfaction** with sleep
- **Alertness** during the day
- sleep **Timing**
- sleep **Efficiency** (quality), and
- sleep **Duration**

The model can also be applied to improve the sleep health of children. Accordingly, the following guidance is intended to help you to maintain or improve the sleep health of your child.

How to help pre-school and school aged children with sleep

1. Go to bed at the right time

Is the amount of sleep your child usually obtains within the National Sleep Foundation guidelines for their age group? If not, you should work out when they need to go to bed to get the sleep they need. For example, if your 6-year-old has a sleep need of 11 hours and must be awake at 07:00 to get ready for school, they should be asleep at around 20:00. As healthy children take between 15 and 45 minutes to fall asleep, you should aim for a bedtime at around 19:15

2. Try and go to bed at a similar time on all days of the week

Children who get enough sleep during the school week and have a regular bedtime shouldn't need to catch-up by 'sleeping in' on weekends. Your child will sleep best if you can encourage them to get into a regular sleep pattern and keep a regular bedtime on all days of the week. Different bedtimes on weekdays and weekends can be associated with behavioural problems, such as hyperactivity.¹⁰

A regular bedtime across the week can help your child achieve the sleep they need. Some parents and caregivers struggle to keep a regular bedtime themselves, so here are some tips to help your child (and yourself!) achieve a consistent bedtime.

- **Light**

Our circadian body clock, a cluster of cells in the brain which regulates sleep, is itself regulated by exposure to light, for example sunshine during the day and darkness at night. Spending time outside during the day and having a predictable evening routine, which involves dimming the lights in your house one to two hours before bedtime, can help maintain sleep regularity. Light in the evening is an alerting signal to the body clock, so try not to use your smartphone before bed either.

- **Bedtime routine**

A bedtime routine, for example including having a bath, putting pyjamas on, and a bedtime story, provides your child with a cue that it will soon be time to go to sleep and can help them to unwind so they can fall asleep more easily.

- **Ensure the bedroom is comfortable**

As well as being dark, your child's bedroom should be quiet and comfortable.

3. Tips to help children sleep through the night

Some children sleep through the night naturally, but for others it may take more time to achieve. Evidence suggests that certain techniques can help young children to transition to more independent sleep so they can fall sleep on their own, in their own bed and self-soothe when waking in the night. Below are some tips for helping young children to sleep well.

- **Ensure young children have regular naps during the day**

The sleep patterns of young children are different to adults and children do not sleep in one bout until the age of about five. Napping ensures longer attention spans and children do not get overtired and hyperactive which makes it difficult to settle children for bed. Be aware that naps after 16:00 can interfere with falling asleep at the usual bedtime.

Ensure your child is ready for bed

- By checking they are 'sleepy tired' - look out for the right signs, e.g., yawning, rubbing eyes.
- Once clean and fed, **put your child down in their own bed** whilst awake but sleepy. You're trying to create a positive association between sleep and the child's bed. Falling asleep in their parents' bed and not being sleepy enough before bed will increase the time taken to fall asleep and reduce sleep quality as the child learns to associate being awake in bed, further disrupting sleep.
- Support your child during the bedtime routine but **use graduated extinction**¹¹ to gradually remove your attention during bedtime and night-time waking in healthy children. This approach allows for brief checks during the night to ensure your child is well.

Graduated extinction has been shown to be effective¹¹, and can be safely used in healthy children from the age of 6/8 months with relative ease, but it may be more difficult and take longer to implement with older children who may have become accustomed to continual parental attention to sleep. Research shows that children whose parents were present at bedtime were 2.6 times more likely to have night wakings.¹² Cultural and parental preferences will dictate whether and how parents teach their children to sleep independently. Every family is unique and therefore parents are encouraged to choose techniques that fit with cultural expectations and suit their parental style. However, for parents who are struggling with bedtime tantrums and night-time waking, it is good to know that graduated extinction may be an option.

4. Look out for signs of sleep disorders

Being able to stay awake during the day to focus and pay attention is particularly important for school children. Feeling sleepy during the day is a telling sign that sleep is not optimal. If your child has good sleep habits and is still sleepy during the day, they may have a health problem such as a sleep disorder. Long-term sleep problems affect between 20% and 30%¹¹ of children and include problems getting to sleep and staying asleep and undesirable behaviours during sleep.

Potential signs of sleep disorders to look out for:

1. A return to napping in children who had previously stopped
2. A return to napping in children who had previously stopped.
3. A return to bedwetting after being dry at night
4. Loud snoring and pauses in breathing during sleep
5. An increased frequency of nightmares or night terrors
6. Difficulty sleeping for 3 or more nights, over at least 3 months

If your child shows any of these signs you should speak a doctor.

To Summarise

Sleep is vital for attention, school performance, physical and mental health in children. However, during childhood sleep can be problematic and children may learn poor sleep habits, such as relying on a parent or caregiver to help them sleep or using a smartphone in bed. Calm and careful parental support, without being over involved, is fundamental for helping children set-up a bedtime routine to achieve good sleep health. When a child is sleeping well this in turn has benefits for family harmony and parental wellbeing.

What should I read next?

In teenagers, late bedtimes and early wake-up times in order to get to school on time, lead to sleep loss. Teenagers' body clocks are naturally delayed so teenagers are unable to fall asleep early enough to get the sleep they need. If you would like to know more about sleep in teenagers, have a look at our information sheet titled '[How can I help my teenager to get more sleep and feel less tired?](#)'¹³

If you have tried to improve your child's sleep habits and they are still struggling, talk to your doctor. You can also read our information sheet titled '[How to seek professional support to help with chronic sleep disorders](#)'¹⁴

References:

1. Hirshkowitz, M., Whiton, K., Albert, S. M., Alessi, C., Bruni, O., Don Carlos, L., & Neubauer, D. N. (2015). National Sleep Foundation's sleep time duration recommendations: methodology and results summary. *Sleep Health*, 1(1), 40-43.
2. Iglowstein, I., Jenni, O. G., Molinari, L., & Largo, R. H. (2003). Sleep duration from infancy to adolescence: reference values and generational trends. *Pediatrics*, 111(2), 302-307.
3. Meltzer, L. J., & Mindell, J. A. (2007). Relationship between child sleep disturbances and maternal sleep, mood, and parenting stress: a pilot study. *Journal of Family Psychology*, 21(1), 67.
4. Waters, S. F., West, T. V., & Mendes, W. B. (2014). Stress contagion: Physiological covariation between mothers and infants. *Psychological Science*, 25(4), 934-942.
5. Chaput, J. P., Gray, C. E., Poitras, V. J., Carson, V., Gruber, R., Birken, C. S., ... & Tremblay, M. S. (2017). Systematic review of the relationships between sleep duration and health indicators in the early years (0–4 years). *BMC Public Health*, 17(5), 91-107.
6. Chaput, J. P., Gray, C. E., Poitras, V. J., Carson, V., Gruber, R., Olds, T., ... & Tremblay, M. S. (2016). Systematic review of the relationships between sleep duration and health indicators in school-aged children and youth. *Applied Physiology, Nutrition, and Metabolism*, 41(6), S266-S282.
7. National Sleep Foundation. Children and sleep poll (2004).
<https://www.sleepfoundation.org/wp-content/uploads/2018/10/FINAL-SOF-2004.pdf?x41620>
8. Spruyt, K., O'BRIEN, L. M., Cluydts, R., Verleye, G. B., & Ferri, R. (2005). Odds, prevalence and predictors of sleep problems in school-age normal children. *Journal of Sleep Research*, 14(2), 163-176.
9. Buysse, D. J. (2014). Sleep health: can we define it? Does it matter?. *Sleep*, 37(1), 9-17.
10. Pesonen, A. K., Räikkönen, K., Paavonen, E. J., Heinonen, K., Komsu, N., Lahti, J., & Strandberg, T. (2010). Sleep duration and regularity are associated with behavioral problems in 8-year-old children. *International Journal of Behavioral Medicine*, 17(4), 298-305.
11. Bruni, O., & Novelli, L. (2010). Sleep disorders in children. *BMJ clinical evidence*, 2010, 2304.
12. Mindell, J. A., Meltzer, L. J., Carskadon, M. A., & Chervin, R. D. (2009). Developmental aspects of sleep hygiene: findings from the 2004 National Sleep Foundation Sleep in America Poll. *Sleep Medicine*, 10(7), 771-779.
13. Ruscitto, C., & Holmes, A. (2019). How can I help my teenager to get more sleep and feel less tired? London. Available at: <http://www.clockworkresearch.com/publications/>
14. Ruscitto, C., & Holmes, A. (2019). How to seek professional support to help with chronic sleep disorders. London. Available at: <http://www.clockworkresearch.com/publications/>

About the Author:

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 fatigue risk 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.

About the Reviewers:

Sarah Booth, Senior Research Manager

Sarah Booth is a Senior Research Manager at Baines Simmons. A specialist in human performance in the aviation and aerospace environments, Sarah has worked with aviation operators to develop and implement Fatigue Risk Management Systems (FRMS) across multiple regulatory environments. A regular speaker at both academic and industry conferences, Sarah is also a trainer, delivering to operators in the implementation of Fatigue Risk Management, as well as courses in the use of biomathematical modelling.

Dr Alexandra Holmes, Research Director

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 Baines Simmons

We are specialists in aviation regulations, compliance and safety management and partner with the world's leading civil and defence aviation organisations to improve safety performance. As trusted advisors to business, armed forces, governments and regulators across all sectors of aviation, we help to advance best practice, shape safety thinking and drive continuous improvement to safety performance through our consulting, training and outsourced services.

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.

For further information on our Fatigue Risk Management Research, Training and Consultancy services contact + 44 (0) 203 805 7792, hello@bainessimmons.com