# Sleep Disorders and Sleep Hygiene

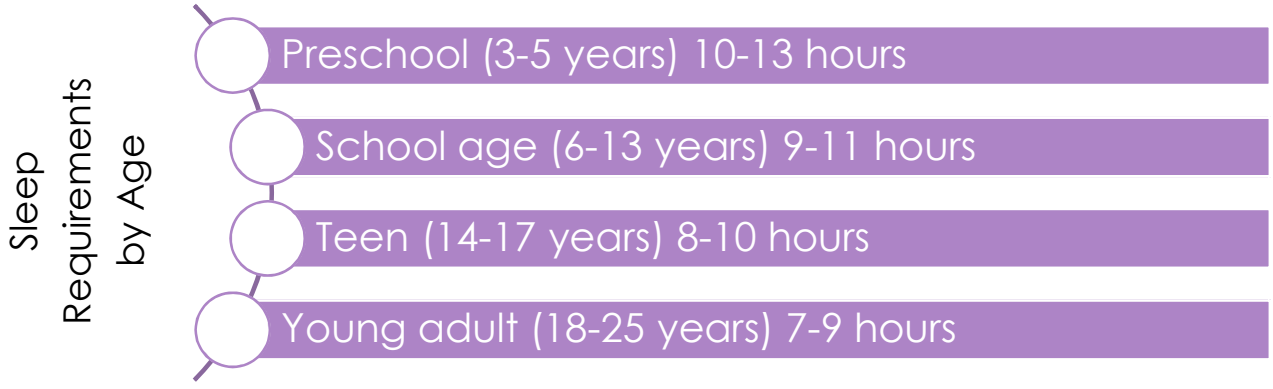
## Sleep Disorders

Sleep is natures natural restorer. It is the only time our body and mind are able to regenerate, restore and repair. Without good quality sleep the brain cannot function properly. This can lead to impaired focus, concentration, emotional wellbeing and management.

Children spend a significant part of their lives sleeping. In reality a developing brain seems to need more time asleep than awake in infancy and early childhood. This illustrates the importance of sleep for a child's overall health. Every night, adolescents need between 8.50 and 9.25 hours of sleep – much more than it is generally thought. In contrast, children aged 5 to 12 require 10 to 11 hours of sleep every night while adults require 7 to 9 hours of sleep.

Adolescents and older children may suffer from lack of sleep simply because they don't sleep a sufficient number of hours, or they may lack good quality sleep. Much goes on in the older child's life with the typical school and after-school activities, homework and evening activities (e.g., watching TV and Internet involvement).

However, late bedtime hours are not due solely to those activities. With the onset of puberty, teens start experiencing a delay in their biological clock's "phase." As a result, they fall asleep later on in the evening, making it harder for them to wake up for school in time. In fact, the timing of the sleep hormone release, melatonin, is delayed.




The Sleep Foundation.org, September 2020

**Did you know that sleep disorders are common in children and adolescents, however they are often under-recognised. Sleep disturbances are seen in 30% of children. Biological clock delays can also be seen in more than 10% of adolescents.**

## Stages of Sleep

Our brains pass through five stages of sleep when we are sleeping. Stages 1,2,3,4 and Rapid Eye Movement (REM) sleep make up a sleep cycle. One complete sleep cycle lasts about 90 to 100 minutes, therefore during an average night's sleep a person can experience four or five cycles of sleep.

### Stages 1 and 2: Light Sleep

During these stages, eye movements slow down and eventually top, heart and breathing rates slow down and body temperature decreases.

### Stages 3 and 4: Deep Sleep

It is harder to wake someone up during these stages, and when awakened a person often will feel groggy and confused for a few minutes.

Stages 3 and 4 are the most refreshing of the sleep stages. This is the sleep we crave when we are tired. They are also the sleep stages during which the body releases hormones that contribute to growth and development.

### Rapid Eye Movement (REM) Stage

During REM sleep, breathing is rapid, the heart beats faster and the limb muscles don't move. This is the stage of sleep when we have our most vivid dreams.

### Sleep Hygiene

Sleep hygiene is a number of different activities and behaviours that involve good sleep quality at night and maximum daytime alertness. It is important to get healthy sleep for both physical and mental health. It can also increase efficiency and quality of life overall.

## How to Improve Sleep Hygiene?


### Limit Food and Drink Late at Night

Drastic changes in blood sugar levels & stimulating foods late at night can cause sleep disruptions.

### Limit Screen Time

Blue light emitted from computers, phones and TV screens can impact circadian rhythm. These disruptions can have knock-on effects on mood, energy levels & overall health.

### Sleep/Wake Cycle.

A regular bedtime each night with a regular wake-up time each morning can promote healthy sleep. Irregular asleep/wake times can disrupt sleep.

### The Bed is for Sleeping

If the bed is being related to work tasks such as schoolwork, assignments etc, it will become a less relaxing environment.

### Journaling


Gratitude journaling each night, even for a few minutes can help reflect on the positive events of the day and ensure a positive mindset prior to falling asleep.

### Meditation

5-10 minutes of breathing meditation can help relax the body, reduce stress and dampen the racing mind.

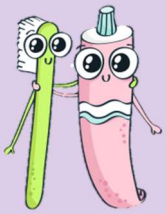
### A Worry List

Writing down any worries that are on the mind, or things that want to be achieved over the coming days can help rest the mind to falling asleep.

### Reading a Book/Audiobook

Reading a book or listening to an audio book can help promote healthy sleep as it enables people to leave their screens and relax in bed before sleeping.

### Bedtime Routine



Keeping a regular bed-time routine each night e.g. brush teeth, floss, wear pyjamas etc. will signal the brain that you are preparing for sleep, and physiology will respond accordingly.

## Sleep and Memory

When an individual gets enough rest and sleep, their brain is clear and alert which allows them to focus, learn and remember information and to be creative. On the other hand, when an individual lacks sleep, they make more mistakes and may find themselves to be less productive in school and work.

Research shows that sleep actually strengthens the connection between brain cells and the transfer of information from one brain region to another. Ultimately, sleep triggers changes in the brain that solidify memories. Scientist believe that while we sleep, memories and skills are shifted to more efficient and permanent brain regions, making for higher proficiency the next day. Research suggests that sleeping shortly after learning new information helps retention; when people learn before they go to sleep or even before taking a nap, they remember the information better in the long term.

## School Performance and Sleep

Children of all ages-preschool through university-need energy, the ability to focus, concentrate, retain knowledge, and be innovative problem solvers to succeed academically. Success at school also requires children to keep track of impulses and manage emotions and behaviour. All those skills are heavily dependent on healthy, consistent sleep.

Signs of sleepiness show up as behavioural and cognitive challenges for all ages. Children who seem to be excessively sleepy during the day are more likely to experience learning, attention, hyperactivity and behaviour problems than children who are not sleepy. Sleepiness causes concentration and mood problems and can even make it difficult for students to stay awake in class.

Sleepiness leads to slipping grades as the children get older. For example, in a study of approximately 1,000 children and preadolescents, researchers measured children's sleep and school performance and found that poor sleepers (who had difficulty falling asleep and waking up at least once a night) were significantly more likely to have difficulty with school achievement.

## Adolescents, School & Sleep

For a long time now, scientists have understood that a person's biological clock changes in adolescence. Instead of feeling drowsy at night, teenagers actually tend to get more alert and have a hard time settling in to sleep (probably because melatonin, which causes sleepiness, is later secreted). When people of other ages are awake and prepared for the day in the morning, adolescents still have elevated levels of melatonin, and often feel groggy as a result. Many adolescents also feel drowsy in the middle of the day, whatever their sleeping habits.

That is why a lot of doctors and school administrators advocated later starting times for secondary school. A teen who gets up at 6:30 a.m. for school is fighting against a biological force of sleepiness, and later might find it hard to doze off with sufficient time to get the roughly nine hours of sleep that adolescents require.

Limiting screen time in the evening is important for teens who need to wake up brightly and early, because the blue light emitted by screens on devices like iPad's and mobile phones can send alert signals to the brain. Teens who seem to be too tired for what seems to be the end of a full night should contact their doctor for further advice.

### How to Help

- **Things to do/not to do**

✓ Avoid eating or drinking heavy or sugary drinks such as milk and hot chocolate before bed. Ideally a 4 hour window between last meal and bed time.

✓ Make sure the room is not too hot or too cold. 17°C – 19°C is ideal.

✓ Make sure the room is not too light as this will keep the brain active. If a child requires light to sleep, a soft low level lamp of landing light is best.

✓ Avoid any blue light stimulus for at least 1 hour – ideally 2 – before bed which includes devices such as TV, iPad and Mobile Phones. If mobile phone is required for alarm, this should be placed face down on the floor out of sight.

- **Routine is Key!**

Having a clear and simple bed time routine, a chart, visual diagram or use of social stories are all very helpful in supporting a good routine. This is particularly important for those children who struggle without routine, in which case it is best if a bedtime routine remains throughout the school holidays.

- **Regular Sleep Schedule**

Keeping a sleep schedule within an hour of what's usual helps keep the circadian rhythm in check. Sleeping in hours later than normal on the weekends and during school breaks makes it even more difficult to switch back — and can lead to more tiredness and grogginess. "Catch-up" sleep is also unlikely to make up for the full amount of sleep debt accrued over a week, and it not as restorative to the body.

- **Exercise**

Regular exercise helps children sleep more soundly, as well as improving their general health. Teenagers should be aiming for at least 60 minutes' exercise every day, including aerobic activities such as fast walking and running. Exercising out in daylight will help to encourage healthy sleep patterns, too.

**Strategies for the Classroom to support Motivation**

- **Checklists**

For the very impulsive student who rushes into things without listening, it is important to ensure that his or her attention is directly sought and held, with an explicit instruction to not begin work until a specific signal has been given. This instruction should become routine for the teacher. In addition, the task needs to be spelled out very clearly. It is often useful if the student writes down keywords or symbols about the process of the task or activity and uses this as a checklist to work through.

- **Tailor made tasks**

For the more generally apathetic, bored and unmotivated student, it is crucially important that tasks are made as personally relevant as possible, using themes and interests that are tailor-made to the individual. It is important for the teacher to try to understand what legitimate needs the student is protecting by being bored and apathetic.
To be able to follow a task through to completion will initially involve short tasks with clear beginnings and endings. Students need to know what they are doing, where to begin and how they will know when they have finished.

- **Rewards**

Rewards should be given in the first instance to students attempting to follow the procedures and techniques that have been established to help them persist with a task that they would normally give up on. For the impulsive student, rewards and praise should be directed to success in waiting for instructions, developing an outline of what needs to be done, etc. For the student with low-frustration tolerance, praise and recognition should be given to following through the procedures as well as for the actual completion of the task.

- **Clear targets**

Small precise targets need to be clearly specified, with prompts and cues to enable the student to achieve these. These prompts and cues, often very visual, are there to help the student work through a given task. Rules need to be clear especially for these students, with positive rewards directed primarily to effort in staying on a task rather than for attainment.

- **Clear instructions**

It is helpful if teachers try to adopt the viewpoint that they have the responsibility for communicating what the task is about and how to do it. Then, if students do not achieve, it is because the teacher has not been successful in communicating rather than the students' 'fault' for not understanding. This fundamentally non-judgemental response to failure sometimes needs to be expressed quite explicitly by the teacher: 'I'm sorry, I don't think I explained that to you very well'.

## Further Reading

https://youngminds.org.uk/find-help/feelings-and-symptoms/sleep-problems/#get-help

https://www.betterhealth.vic.gov.au/health/healthyliving/teenagers-and-sleep#:~:text=Sleep%20research%20suggests%20that%20a,to%20sleep%20in%20the%20mornings.

https://www.nhs.uk/live-well/sleep-and-tiredness/sleep-tips-for-teenagers/

## Further Support

**GP:** Chat to your GP if your sleep problems continue for a long time, things you try at home are not helping, or if you are worried about an emotional or physical problem. Severe sleep problems can be a sign of depression. Young people with attention deficit hyperactivity disorder (ADHD) may also have problems with sleep.

YoungMinds Crisis Messenger

- Provides free, 24/7 crisis support across the UK if you are experiencing a mental health crisis
- If you need urgent help text YM to 85258
- All texts are answered by trained volunteers, with support from experienced clinical supervisors
- Texts are free from EE, O2, Vodafone, 3, Virgin Mobile, BT Mobile, GiffGaff, Tesco Mobile and Telecom Plus.

Samaritans

- www.samaritans.org
- If you're in distress and need support, you can ring Samaritans for free at any time of the day or night.
- Freephone (UK and Republic of Ireland): 116 123 (24 hours)
- Email: jo@samaritans.org
-

childline

- www.childline.org.uk
- If you're under 19 you can confidentially call, email, or chat online about any problem big or small
  Freephone 24h helpline: 0800 1111
- Sign up for a childline account on the website to be able to message a counsellor anytime without using your email address
- Chat 1:1 with an online advisor

The Mix

- www.themix.org.uk

- If you're under 25 you can talk to The Mix for free on the phone, by email or on their webchat. You can also use their phone counselling service, or get more information on support services you might need.
- Freephone: 0808 808 4994 (13:00-23:00 daily)

## References


The Sleep Foundation (September, 2020).

https://www.sleepfoundation.org/

National Institute of Health (August, 2019) Brain basics: Understanding sleep, national institute of neurological disorders.

The Science of Sleep Help Guide: Harvard Health Article.