Sleep problems in children

Many children take a long time to fall asleep, or wake up often during the night. This can cause a lot of stress for their parents or carers and also for the child. But there are some simple things you can do to help your child sleep better.

We’ve brought together the best research about sleep problems in children and weighed up the evidence about how to treat them. You can use our information to talk to your doctor and decide what's best for your child.

What are sleep problems in children?

Many babies and young children have problems sleeping at first. But if children are still not sleeping through the night by the age of 2 years, they may have a sleep problem. This information is about children over the age of 2.

There are three main types of sleep problems:
Sleep problems in children

• Too little sleep

• Nightmares, night terrors, and sleepwalking

• Too much sleep.

The first two types of sleep problems are the most common in children. We don't know exactly what causes some children to have sleep problems. There are probably many reasons. Some of these are given below.

• Children learn certain sleep patterns. For example, if you give your child lots of attention or treats when they wake at night, they may learn that waking at night is a good thing. These learned patterns may be behind some sleep problems.

• Young children have more REM (rapid eye movement) sleep than adults. During REM sleep your brain is very active but your body is limp. Most dreaming happens during REM sleep. This type of sleep is often linked to short periods of waking. Young children may need help to get back to sleep after waking from a dream.\(^1\)

• Some children have a sleep problem because their body clock is disrupted. Your body clock is sometimes called the circadian rhythm. It makes you feel sleepy at night, when it's dark, and lively during the daytime. This gets out of sync sometimes when, for example, you have jet lag after travelling.

Certain things make your child more likely to get a sleep problem. These are known as risk factors. Risk factors for children having sleep problems include:\(^2\)\(^3\)\(^4\)

• Having had colic as a baby

• Having a difficult temperament (for example, being easily excited, moody, or stubborn).

First-born children also are more likely to have sleep problems.

Sleep problems are often worse in children with physical or learning disabilities.\(^5\) These include children who have epileptic seizures, autism, or attention deficit hyperactivity disorders (or ADHD for short).\(^6\) We don't fully know why. But we know that:

• Children with sight problems who can’t see light, which controls their body clock, may get a disrupted body clock

• Many medicines can cause sleep problems (for example, drugs used to treat epilepsy can make your child drowsy)
• Some genetic disorders can cause sleep disturbance (for example, children with Down’s syndrome may have disrupted sleep because of breathing problems).

What are the symptoms of sleep problems in children?

Your child may find it hard to go to sleep or stay asleep at night. Some children go to sleep, but are disturbed by nightmares, night terrors, or sleepwalking.

Not all children who occasionally wake at night or who make some fuss about going to bed need treatment. Doctors say a child may have a sleep problem if they have one or more of the following symptoms. [7]

• They wake up three or more times a night on at least four nights a week.

• They wake up for more than 20 minutes every night.

• They have to be taken into the parents’ bed to sleep.

• They refuse to go to sleep, and it takes you more than 30 minutes to get them to bed (they have a tantrum about going to bed) or they need a parent with them to fall asleep.

How common are sleep problems in children?

Many babies and young children have sleep problems. They mostly find it hard to settle down, or wake up often at night.

More than 20 in 100 children aged up to 5 years have a sleep problem. Many children still have disturbed sleep until they’re much older. [8]

But it’s hard to know for certain how many children really have a sleep problem that needs treatment. Sleep habits and what people think is normal vary a lot. [9] [10] [11] [12] Here’s what the research shows.

• About 25 in 100 toddlers have problems settling down or wake up at night. [13]

• Many teenagers also get sleep problems. They’re more likely to have sleep timing problems. This means they find it hard to go to sleep and then they have problems getting up in the morning for school.

• About 14 in 100 children have nightmares and night terrors. Almost 10 in 100 children sleepwalk. [14]

• About 20 in 100 children have sleep-related breathing problems, such as sleep apnoea. Sleep apnoea causes them to stop breathing for a moment and wake up. [15]
Sleep problems in children

• Some people have an illness that makes them keep falling asleep, even during the day. It's called narcolepsy. People with narcolepsy usually first get symptoms between the ages of 10 and 20. About 6 in 10,000 people have narcolepsy.\(^{[16]}\)

Sleep disorders are much more common in children with physical or learning disabilities, especially at younger ages. Among children with disabilities, severe sleep problems happen in:\(^{[17]}\)

• About 90 in 100 children aged up to 6
• Around 80 in 100 children aged 6 to 11
• About 75 in 100 children aged 12 to 16.

What treatments work for sleep problems in children?

There are some good treatments that can help your child sleep better quite quickly. The best ones include a calm bedtime routine and training your child to sleep through the night. Doctors call these 'behavioural' treatments. These treatments are safer for your child and can help them more than taking a medicine.

Key points about treating sleep problems

• A regular, calming routine at bedtime (also known as good sleep hygiene) can be helpful.
• Sleep training, where you don't respond immediately to your child's calls for attention, is likely to help your child settle and sleep through the night.
• We don't know how well medicines work for sleep disorders in children. But drugs to make your child drowsy have some side effects.
• Melatonin may help your child go to sleep earlier and stay asleep longer. But your child could get side effects.
• If your child also has a disability, you may need to take them to a specialist to sort out their sleep problems.\(^{[23]}\)

We've looked at treatments for different types of sleep problems.

• [Treatments for children who don't sleep enough](#)
• [Treatments for nightmares, night terrors, and sleepwalking](#)
Sleep problems in children

Treatment Group 1

Treatments for children who don't sleep enough

We've looked closely at the research and ranked the treatments into categories, according to whether they work.

Treatments for children who don't sleep enough

Treatments that are likely to work

• Positive bedtime routines

• Sleep training

Treatments whose harms may outweigh the benefits

• Melatonin

Treatments that need further study

• Antihistamines

• Behaviour therapy and sleeping tablets

• Increased activity

• Light therapy

• Sleep restriction

Treatment Group 2

Treatments for nightmares, night terrors, and sleepwalking

We've looked closely at the research and put the treatments into categories. All of these treatments need more research to know whether they work.

Treatments for nightmares, night terrors, and sleepwalking

Treatments that need further study

• Safety precautions

• Scheduled waking

• Positive bedtime routines
What will happen to my child?

Your child's behaviour can be difficult during the daytime if they aren't sleeping well. Disrupted sleep can also put you under a lot of stress.

Some children grow out of sleep problems. But if your child has a serious sleep problem, it could last quite a long time. Without treatment, 4 in 5 young children still have their sleep problem two to three years later.\(^{[18]}\)

If your child is sleepy during the day or waking at night, they probably won't do so well during the daytime. Your child may:

- Behave badly
- Become moody
- Have difficulty concentrating.

Children who sleepwalk also risk accidentally injuring themselves while they're asleep. But children usually stop having nightmares and stop sleepwalking by the age of 10.\(^{[19]}\)

Children with learning disabilities and sleep disorders may have more challenging behaviour than those without sleep disorders.\(^{[20]}\) This can put you under a lot of strain. It can make it harder for you to enjoy life, and it can put stress on your relationship with your partner.\(^{[21]}\) If you're having trouble coping, talk to your doctor. There may be local groups or services that can help.

Regular lack of sleep in a child who has epilepsy means they're more likely to have more fits.\(^{[22]}\)

Treatments:

Positive bedtime routines

In this section

There's evidence that a positive bedtime routine is likely to reduce bedtime tantrums. This means changing your child's evening routine to encourage sleep. You could try this simple treatment first for sleep problems. Doctors sometimes call it good sleep hygiene.

We found one good-quality study (a randomised controlled trial), which looked at changing bedtime routines in children aged 18 months to 4 years. These children were having about five bedtime tantrums a week.\(^{[24]}\) But within six weeks of changing their sleep routine, they were having fewer tantrums. They also settled more quickly at night. And parents said their relationship improved as a result.\(^{[24]}\)

A positive bedtime routine includes: \(^{[25]}\)
Sleep problems in children

- Having a short, regular, calming routine leading up to bedtime
- Making your child's bedroom quiet, dark, comfortable, and not too hot or cold
- Avoiding boisterous play before bedtime
- Not giving your child caffeine (for example, in cola drinks and chocolate).

The study we found showed that a positive routine at bedtime helped just as much as another treatment called sleep training (this involves putting your child to bed and not responding to their cries for attention). Both of these treatments can reduce the length of bedtime tantrums and how often they happen.[24]

One study looked at children aged 2 to 8 who had a severe learning disability and a lot of sleep problems. [25] The children's sleep improved with changing their sleep routine to a positive bedtime routine and having sleep training as well. After six weeks the children:

- Were more likely to settle at night
- Took less time to settle
- Woke less during the night
- Woke at night for shorter periods.

In the study, some parents had support from therapists. Other parents used advice from a booklet. But the study wasn't big enough to find out if having support from a therapist helped more than using advice from a booklet.

There's no evidence that a positive bedtime routine can be harmful.

---

**Melatonin**

In this section

Giving your child a tablet or capsule of melatonin before bedtime may help them sleep sooner and for longer. But there's a risk of side effects with this treatment.

The brand of melatonin that's available in the UK is only recommended for adults over the age of 55. [26] It's called Circadin. Doctors can prescribe melatonin to children, but they'll only tend to do this for serious sleep problems that can't be sorted out without drugs. Your child will probably need to see a specialist to get melatonin.[27]

Melatonin is a hormone. Hormones are chemicals your body makes naturally to control some of the things it does. For example, hormones can tell your body how to use energy, or when to go to sleep.
Sleep problems in children

Melatonin is the hormone that controls your body clock. Normally, your brain produces melatonin during the night to help you sleep. Your body starts to make melatonin when it gets dark, and stops when it gets light. The melatonin that's sold as a treatment is a man-made version of this hormone.

We found one good-quality study (a randomised controlled trial), which looked at how well melatonin worked for children aged 6 to 12 years who had sleep problems. The children took melatonin before going to bed. The study found that the children:

- Went to bed one hour earlier on average
- Slept about half an hour longer.

But the study also found that the children:

- Took just as much time to go to sleep after going to bed
- Woke up just as early.

There hasn't been much research on the best dose of melatonin for children to take. For some children, high doses of melatonin don't help. Melatonin may be more helpful if your child has only a low dose.

We also found two small studies that looked at children with epilepsy, and one study that looked at children with attention deficit hyperactivity disorder (ADHD for short). Taking melatonin didn't make much difference to how well the children slept overall.

We don't know how safe melatonin is for children, or how safe it is to take regularly for a long time. There hasn't been enough research to say.

The studies we looked at found that children did have some side effects. Some of the children who took melatonin felt cold or dizzy or they had a low mood. Some children also didn't feel hungry and had mild headaches.

There's also some evidence that children who have epilepsy may get worse fits if they take melatonin, but we don't know this for sure.

Some studies also suggest melatonin could delay the start of puberty.

**Antihistamines**

In this section

We don't know if giving your child an antihistamine tablet or syrup will help them sleep better. There hasn't been much research.
Doctors usually recommend you first try a behaviour treatment, such as sleep training, to improve your child's sleeping, instead of using medicine to make them drowsy. Antihistamines can have side effects. There’s also a risk that your child will get used to them, so they may need bigger and bigger doses for the medicine to have an effect.

Antihistamines are usually used to treat allergies such as hay fever. But some of them can have the side effect of making you drowsy. These include:

- Alimemazine (brand name Vallergan)
- Chlorphenamine (Piriton)
- Promethazine (Phenergan).

Your child may also get some of these side effects: [38]

- Headache
- Dry mouth
- Problems urinating
- Blurred vision
- Upset stomach.

---

**Behaviour therapy and sleeping tablets**

In this section

We couldn’t find any good research that looked at combining sleeping tablets with a behaviour therapy (such as sleep training) for children with severe sleep disorders. Doctors rarely give sleeping tablets such as benzodiazepines to children. Sleeping tablets such as cloral betaine (brand name Welldorm) were used quite often in the past, but are much less commonly used nowadays. These drugs have serious risks. There hasn’t been enough research to know how safe sleeping tablets are and how well they help children with sleep problems. [39]

---

**Increased activity**

In this section

If your child is active during the day, it's reasonable to expect they might be more tired at bedtime. But we didn’t find any good-quality studies to show children sleep better if they get more exercise.
Light therapy

Light therapy involves going outside into the daylight during the daytime. Light is important for your body to produce a hormone called melatonin. Melatonin helps keep your 'body clock' regular, so you sleep at night and are awake in the day. We couldn't find any good research to show whether light therapy could help your child sleep better.

Sleep restriction

Sleep restriction involves limiting the amount of sleep your child gets and then extending it again. There isn't any evidence that this treatment works for sleep disorders in children. But sleep restriction does work for adults with poor sleep. Avoiding naps late in the afternoon or for too long may help your child if they have sleep problems.

Sleep training

Sleep training is likely to help. There’s evidence that putting your child to bed and not responding to cries for attention will probably help them to settle and reduce their night waking. But some parents find it distressing to leave their child to cry. Doing this gradually may cause you less distress. For example, for the first time, you can wait for two minutes before responding to your child's cries. Then the next time you can respond after four minutes and so on to a maximum of 20 minutes.

You can also gradually increase the distance between yourself and your child when settling them to sleep.\(^{[40]}\) For example, you may start off sitting next to your child's bed. Then, on the next night you can move 30 centimetres (one foot) away, and so on until you are outside your child's bedroom.

We found one summary of the research (a **systematic review**) and another good-quality study (a **randomised controlled trial**) that looked at sleep training. The research showed that children who regularly woke through the night didn't wake so much after one month of sleep training.\(^{[41]}\)

Some parents had support from therapists. Other parents took advice from a booklet. Taking advice from the booklet helped nearly as much as having support from sleep programme staff.

The research also shows that children have fewer and shorter tantrums at bedtime if parents withdraw their attention gradually.\(^{[24]}\)
Another study looked at sleep training in children younger than 4 years. The children had at least four difficult bedtimes or nights in one week. They took more than half an hour to settle or refused to settle alone. After waking in the night, the children needed resettling or slept in their parents’ bed. But after three weeks of sleep training the children had:

- About five good bedtimes a week, when the children took less time to settle and settled alone
- Between three and five good nights a week, when the children were less likely to need resettling after waking at night.

We don’t know whether it’s best to not respond to your child’s cries from the start or to gradually increase the amount of time you wait before responding.

We also found a study that looked at sleep problems in children with a severe learning disability. The children slept better when they had gradual sleep training as well having a positive bedtime routine (this involves changing your child’s evening routine to encourage sleep).

Sleep training can have other positive effects besides reducing sleep problems. The studies showed:

- Parents felt less stressed
- Parents and children got on better.

But we don’t know how long the benefits of a sleep training programme last.

---

**Safety precautions**

In this section

You may need to check your home for safety if your child sleepwalks. This is to make sure they don't have an accident while they’re asleep. For example, you may need to put safety gates at the top of the stairs and make sure windows are locked, so they can't fall out. Unfortunately, there hasn't been much research to show what helps most.

---

**Scheduled waking**

In this section

Some doctors suggest scheduled waking, which means regularly waking your child up, just before the time when they usually start sleepwalking or having nightmares or night terrors. But there hasn't been much research to show whether scheduled waking works to prevent these problems.
Positive bedtime routines

In this section

A positive bedtime routine may help your child to have less disturbed sleep. This is also known as good sleep hygiene. It involves having a calm and reassuring bedtime routine, and a comforting bedroom. But we don’t know if having a positive bedtime routine can help prevent nightmares, night terrors, or sleepwalking.

Further informations:

Glossary:

Down's syndrome
Down's syndrome affects some people from birth. It causes learning difficulties, and it also makes some physical problems more likely. It is caused by an extra chromosome. Chromosomes are found in all our cells, and contain genes, which tell cells how to grow and behave.

sleep apnoea
Sleep apnoea is a condition in which you stop breathing for ten seconds or longer while you are asleep. This may happen frequently throughout the night and make you feel tired the next day.

randomised controlled trials
Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

hormones
Hormones are chemicals that are made in certain parts of the body. They travel through the bloodstream and have an effect on other parts of the body. For example, the female sex hormone oestrogen is made in a woman's ovaries. Oestrogen has many different effects on a woman's body. It makes the breasts grow at puberty and helps control periods. It is also needed to get pregnant.

puberty
Puberty is the time when boys and girls develop secondary sexual characteristics. For boys, the major changes include pubic hair, a deeper voice, and growth of their penis and testicles. For girls, major changes include pubic hair, breasts and starting to have periods. After puberty, girls are able to become pregnant and boys are able to father children.

allergy
If you have an allergy to something (such as pollen or a medicine), your body always overreacts to it. The reaction happens because your immune system (your body's system for fighting infection) is too sensitive to it.

systematic reviews
A systematic review is a thorough look through published research on a particular topic. Only studies that have been carried out to a high standard are included. A systematic review may or may not include a meta-analysis, which is when the results from individual studies are put together.

Sources for the information on this leaflet:

Sleep problems in children


This information is aimed at a UK patient audience. This information however does not replace medical advice. If you have a medical problem please see your doctor. Please see our full Conditions of Use for this content. For more information about this condition and sources of the information contained in this leaflet please visit the Best Health website, http://besthealth.bmj.com. These leaflets are reviewed annually.