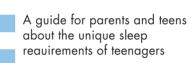
teens, young adults SLEEP









Sleep isn't just "time out" from daily life. It is an active state important for renewing our mental and physical health each day. More than 100 million Americans of all ages, however, regularly fail to get a good night's sleep.

At least 84 disorders of sleeping and waking lead to a lowered quality of life and reduced personal health. They endanger public safety by contributing to traffic and industrial accidents. These disorders can lead to problems falling asleep and staying asleep, difficulties staying awake or staying with a regular sleep/wake cycle, sleepwalking, bedwetting, nightmares, and other problems that interfere with sleep. Some sleep disorders can be life-threatening.

Sleep disorders are diagnosed and treated by many different healthcare professionals, including general practitioners and specialists in neurology, pulmonary medicine, psychiatry, psychology, pediatrics, and other fields. As part of its mission, the AMERICAN ACADEMY OF SLEEP MEDICINE (AASM) strives to increase awareness of sleep disorders in public and professional communities. The AASM is the major national organization in the field of sleep medicine. We represent several thousand clinicians and researchers in sleep disorders medicine.

For more information about sleep disorders, contact your healthcare professional. For a list of accredited member sleep disorders centers near you, write to us or visit our web site.



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INTRODUCTION

Have you ever looked at your teenage son or daughter and thought, "Oh, to be young again"? They have so much energy, potential, life, and sleepiness. Wait...sleepiness?

Research indicates that teenagers need more sleep than adults—close to nine hours every night, on average. Yet, a recent survey of teens shows that only 15% of them actually get that amount of sleep regularly. That means 85% of today's teenagers are not getting enough sleep. In fact, the survey showed that a full 26% are only getting six or fewer hours of sleep on school nights.



The factors that contribute to poor teenage sleep include: rapidly changing bodies, lifestyle choices, and peer pressure, to name a few. Because of these trends, teenagers are at risk for the serious consequences of chronic sleeplessness.

DEFINITION: Teenager

A "teenager" is typically defined by age, meaning that people from the ages of 13 to 19 are considered teens. Yet, teen sleep problems can occur both before and after those exact ages. In fact, the sleep habits of young adults and the changing bodies of pre-adolescents also relate to teenage sleep problems.

For this reason, this brochure offers information that applies to anyone who has begun puberty (or is at least 11 years old) or is up to 25 years of age.

The NEED for Sleep

There are two general factors that influence how sleepy or how alert anyone is at any given time in a 24-hour period. The first is how long it has been since you last



slept, which is called the sleep-wake balance. It basically means that the longer you stay awake, the sleepier you will become.

The second factor that influences sleepiness or alertness is called "circadian rhythm," also referred to as your body's "biological clock." Everyone's body has this natural timing system, which tells you when you should be awake, and when you should be sleeping. When you feel sleepy at night, it is your circadian rhythm telling you it is time to go to sleep. Most people feel a mild need for sleep in the mid-afternoon, and a strong need to sleep at night. Because this rhythm is set, the urge to sleep will be triggered at specific pre-set times, no matter how much sleep you got the night before. A young person can throw

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off his or her circadian rhythm by frequently staying up late or by following a constantly changing bedtime and wake-up schedule. This will cause daytime sleepiness, often when the teen most needs to be alert, such as during school or work hours, or while driving.

A SHIFT in Rhythm—Sleep Phase Delay

A teenager's body goes through many changes during puberty, and one of these normal changes is a shift in circadian rhythm. Before puberty, your son or daughter's body will trigger him or her to fall asleep around 8:00 or 9:00 p.m. When puberty begins, that rhythm shifts to a couple hours later, usually to around 10:00 or 11:00 p.m.

The natural shift in a teenager's circadian rhythm is called "sleep phase delay," because the need to sleep is delayed for about two hours. When you first notice this change, it

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may seem like your teen is suffering from insomnia. Yet, by recognizing the shift in your teenager's body clock, you can help him or her understand why he or she can't fall asleep at the usual time. It is important to understand, too, that your teenager still needs the same amount of sleep (usually about nine hours), even if he or she needs to go to sleep later. Encourage your teen not to be too frustrated by these changes. Tell your teen that these changes are a completely normal part of growing up and that, with some extra care, his or her body will soon adjust.

When teens don't understand these normal changes and actually resist or ignore them, they complicate their bodies' transition to "sleep phase delay" and have more trouble adjusting to their body's new circadian rhythm. Staying up too late at night doing homework or socializing and/or consuming nicotine



and caffeine make it even more difficult for a teenager's body to get the rest it needs. While it may seem that allowing your teen to sleep-in much later on weekends will help him or her "catch up," it may actually keep your teen from falling asleep at an appropriate time during the week, and prolong your teen's transition into the new circadian rhythm.

SLEEP is One of Many Demands for Teenagers' Time

Our society makes it more difficult for teens to get enough sleep at night. For instance, early school start times often prevent teenagers from getting the sleep they need. Their shift



in circadian rhythm (sleep phase delay) doesn't allow them to fall asleep until later at night, but they are still expected to wake up, sometimes very early in the morning, for school. Many sleep specialists are now active in addressing this issue in the nation's school systems, often lobbying for later school start times. Allowing teenagers to start school later would help this shift in circadian rhythms, not to mention emphasize the importance of a good night's sleep.

School and family pressures also can contribute to sleep problems in teens. Responsibilities like part-time jobs, family chores, and schoolwork can put stress and time constraints on a teenager's sleep schedule. Teenagers may also give in to peer pressure and make poor decisions, staying out late at night, smoking, drinking alcohol, and using drugs, all of which can disrupt sleep. When teens are just beginning to make their own decisions, their need for enough sleep is rarely an important consideration. As a parent, you need to educate your teenager on the importance of a good night's sleep.

These pressures, along with a teen's shifting body rhythms, are the cause for the battles that so many teenagers fight against "daytime sleepiness." Many teens struggle so much that they have a hard time getting up for school, or they fall asleep during class, sleep through evening or weekend family time, or experience difficulty with personal relationships. If deprived of sleep on a regular basis, they are also at higher risk for automobile or on-the-job accidents.

Physiological changes, societal pressures, and poor decision-making all combine to present overwhelming obstacles to a teen getting an appropriate amount of sleep. As teens struggle to adapt to new life stresses and the emotions and mood swings of puberty, sleep deprivation can make this transition period even more difficult.

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Intervention AND Treatment

If your teenager exhibits signs of excessive sleepiness, you need to consider several different options. Excessive sleepiness can be caused by more than just sleep deprivation. Other sleep disorders, such as sleep apnea (throat muscles relaxing too much during sleep, causing difficulty breathing and repeated awakenings during the night) and narcolepsy, can develop during the teenage years. Emotional problems (e.g., depression), common in teenagers, can also disrupt sleep and daytime alertness. Additionally, medical conditions (such as epilepsy) may be involved with your teen's sleep problems, as well as any use of drugs or alcohol.

You need to examine these different scenarios in relation to your teen to determine how to correct his or her sleep problem. Sometimes a teenager's sleep problems can be remedied by simply changing habits. However, if your teen's sleep problems do not seem to be easily treated with a change in habits and choices, he or she may benefit from seeing a sleep specialist. A sleep specialist would diagnose your teenager's problem based on the symptoms he or she reports and a careful evaluation. The sleep specialist would then discuss with you and your teen the best treatment plan.

Common Treatment OPTIONS for Sleep Phase Disorders



There are two treatments that sleep specialists often recommend for teenagers with sleep phase delay problems. These include ways for your teenager to develop healthy sleep habits.

"LIGHT THERAPY INVOLVES EXPOSURE TO BRIGHT LIGHT OR DARKNESS TO HELP RESET THE BIOLOGICAL CLOCK, ENCOURAGING A MORE APPROPRIATE SLEEP-WAKE SCHEDULE."

LIGHT THERAPY involves exposure to bright light or darkness to help reset the biological clock, encouraging a more appropriate sleep-wake schedule. This form of therapy is usually done at home. Your teenager would be exposed to light early in the morning, to help his or her body know it is time to wake up. Then, in the evening hours, he or she would be in darkness or subdued light, signaling to the body that it is now time to sleep. Light therapy may make use of natural home lighting, or a device called a light box. Light boxes come in the form of a dawn stimulator, tabletop light box, or a visor that is worn on the patient's head. For more information about this therapy, see your healthcare professional, or a sleep specialist.

CHRONOTHERAPY is a rigorous treatment, and requires strong and consistent motivation from both the teenager and parents. It involves delaying your teenager's bedtime in two- or three-hour increments every night until your teen's body clock is shifted all the way around the clock to the ideal time for him or her to go to bed. For example, if your teenager is going to bed regularly at 3:00 a.m., the first night he or she would stay up until 6:00 a.m., the next until 9:00 a.m., and so on until he or she reaches 10:00 or 11:00 p.m. Then your teen's body clock would be shifted to the ideal bedtime. Once on the new schedule, it must be strictly maintained.

Of course, to perform chronotherapy, parents need to choose a period when they and their teenager are free to make these adjustments, such as during school holidays and summer vacation. Chronotherapy is usually combined with light therapy, as it seems to work best when the teen is stimulated by light on a consistent schedule. This treatment may require future sessions as well, as it is possible for your teenager to slip back into his or her old habits of staying up too late.

Overcoming YOUR Teen's Sleep Problems

To help your teen overcome his or her sleep problems, you should be aware of the signs of sleep deprivation. Take notice if your teen consistently has trouble waking up in the morning, is irritable in the early afternoon, is falling asleep easily during the day, has a sudden drop in grades, or is sleeping for extra long periods on the weekends. Other signs can mimic behaviors commonly associated with attention deficit hyperactivity disorder (ADHD). These might include trouble concentrating, mood swings, hyperactivity (trouble sitting for long periods), or aggressive behavior.

Remind your teen often that he or she should never drive when feeling tired. If a situation arises when your teen feels he or she cannot safely drive home, you or someone you trust must be available to pick him or her up. If this is not possible, make sure your teen has money to take a taxi.

As a parent, you need to help your teenager make

wise choices regarding afterschool and social activities. Check up on your teen's schoolwork load and other responsibilities. Help your teen decide what is most important, and help him or her make decisions about what activities may need to be dropped if they interfere with getting enough sleep. If your

teen needs to work to help contribute money to your family, see if his or her work hours can be minimized

during the week and maximized on weekend days.

It is also important for you to pay attention to any changes in your teen's mood and/or school performance. Such changes are often early signs of a sleep phase delay problem, or a possible sleep disorder. If sleep problems are consistent, it is often helpful to see a sleep specialist to make an appropriate diagnosis for your teenager and start the necessary treatment.

If you are concerned with your teenager's sleep habits, consult a sleep specialist. Help is available, and many times the treatment is as simple as teaching your teenager to make wise decisions, and helping him or her to modify behavior.

By paying attention and talking to your teen about his or her sleep habits, and by seeking the advice of your healthcare professional, you will help your teen increase his or her awareness of the importance of sleep. That valuable lesson could lead to a lifetime of feeling well rested.



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GOOD SLEEP HABITS FOR TEENAGERS

Good sleep hygiene is important for everyone, from the youngest infant to senior citizens. However, what works well for an infant does not work well for a middle-aged man. Teenagers, too, have unique sleep requirements and sleep hygiene. Because teenagers' bodies are going through changes associated with adolescence, an approach that addresses a variety of factors is required for solving teenage sleep problems. Below is a suggested checklist for teenage sleep hygiene.

- Help your teenager establish a regular, relaxing routine to unwind at night, just before bedtime. This will help signal your teen's body that it is time to sleep.
- Have your teen avoid all products containing caffeine (including soda, chocolate, etc.) after about 4:00 p.m.
- Tell your teen to avoid smoking (including smokeless tobacco) since, in addition to other bad health effects, nicotine is a stimulating drug.
- Teach your teenager to avoid alcohol.
- Keep your teen away from stimulating activities in the late evening such as heavy studying, computer games, and violent or frightening television shows, videos, or books.
- Promote a calm family atmosphere surrounding bedtime.
- Do not let your teenager fall asleep while watching television or videos.
- Help your teenager to establish a regular exercise routine and healthy diet.
- Have your teen avoid late afternoon and evening bright light, and open blinds first thing in the morning.
- Allow your teen to go to bed later on weekends, but make sure he or she wakes up within two hours of his or her usual weekday wake time. If allowed to "sleep-in" on the weekends, your teen's body clock will be disrupted, and he or she will have a very hard time waking up on Monday morning. It is important to establish and maintain a consistent sleep-wake schedule.
- Encourage your teen to avoid napping. If your teenager is very sleepy, a short nap is okay, but limit it to 30 or 45 minutes.

