



A PARENT'S GUIDE TO SLEEP DISORDERS

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FACTS ABOUT CHILDHOOD SLEEP DISORDERS

As a parent, you know how important a good night's sleep is for your child's health and well-being. You also know that if your child is not sleeping well, you are probably not sleeping well. But how do you know if your child's sleeping problems are serious enough to require a doctor's care?

If you are not sure what is causing your child's sleeping problems, ask your primary care physician for help. A basic examination can usually pinpoint the problem. This brochure describes various sleep problems, offers suggestions for dealing with disorders and helps you understand when it's appropriate to contact your primary care physician.

Sleep Disordered Breathing

Sleep disordered breathing is a general term used to describe any abnormalities in ventilation/air exchange during sleep, and may include conditions that can cause central or obstructive apnea.

Central Apnea

A rare problem more often seen in infants and neonates. Prolonged apnea is defined as a respiratory pause of 20 seconds or longer or one of shorter duration when associated with significant or abrupt color changes (turning pale or bluish) or slowing of the heart rate and decreased muscle tone. You should contact your primary care physician if you think your child has central apnea.

Obstructive Sleep Apnea

Researchers have found that 10 percent of children snore every night. In many cases, children who snore are healthy, but two percent of children snore because they suffer from obstructive sleep apnea syndrome. Obstructive sleep apnea syndrome (OSAS) is described as breathing that starts and stops during sleep. It can be caused by a number of factors including:

1. Enlarged tonsils and/or adenoids
2. Obesity
3. Enlarged tongue

4. Abnormalities in jaw or face area
5. Muscular weakness
6. Congenital problems such as Down syndrome.

Call your Primary care physician if your child has loud/noisy snoring WITH:

1. Abnormal sleep positions like head propped up with many pillows
2. Episodes of gasping and/or choking during sleep
3. Mouthbreathing
4. Increasing daytime sleepiness
5. Complaints of morning headaches
6. Displays significant behavioral changes
7. Poor growth
8. New onset bedwetting

You should see a sleep specialist who has experience with children to determine if your child has OSAS. A special test to record your child's sleep for at least one night called polysomnography may be needed. This is the only way to know for sure if your child has OSAS.

Narcolepsy

Narcolepsy often begins in childhood or adolescence. It is a lifelong neurologic disorder that is primarily characterized by excessive daytime sleepiness, associated with disturbed night time sleep and abnormal early REM (Rapid Eye Movement) onset. During normal REM sleep in adults, the brain is very active but the major muscle groups are frozen. Normal REM onset begins at 60-90 minutes or longer after going to sleep, whereas in narcoleptics abnormal REM onset often begins within 20 minutes or less. Other symptoms can include cataplexy, sleep paralysis, and hypnagogic/hypnopompic hallucinations.

- Excessive daytime sleepiness is the main symptom of narcolepsy. The urge to fall asleep is very strong and often people are found to fall asleep not only during non-stimulating activities, but also during stimulating activities, such as eating and during a





conversation. The sleep periods may only last several seconds that sometimes no one notices, not even the person with narcolepsy.

- Cataplexy is the sudden, brief, temporary loss of muscle control that may involve the whole body (collapsing to the floor), or just specific muscles (drooping of the head or arm, or weakness to the knees). The episodes are usually triggered by strong emotions, most commonly laughter, but also anger, sadness, or stress.
- Sleep paralysis is the inability to move or speak for a brief period either when falling asleep or upon awakening. The paralysis typically ends on its own, or by being touched or called can cause it to disappear as well.
- Hypnagogic and hypnopompic hallucinations are vivid, dream-like experiences that involve images that are seen, heard, or felt, and occur when falling asleep (hypnagogic) or just after waking up (hypnopompic). These hallucinations are particularly scary because they can occur at the same time as sleep paralysis and the child would have no means to escape from the images.

You should talk with your primary care physician to identify the causes of your child's excessive daytime sleepiness. Narcolepsy can be treated, usually with medication, lifestyle changes, and educating others, but there currently is no cure. Narcolepsy is a serious problem that can be effectively treated. If your child has symptoms of narcolepsy, being treated by a sleep specialist is very important.

Sleep Enuresis (Bedwetting)

Involuntary bedwetting during sleep is present in 15 percent of 5-year olds, 10 percent of 6-year olds, three percent of 12-year olds and one percent of 15-year olds. There may be many causes for bedwetting, including:

- Delay in bladder development
- Small bladder volume
- Bladder contractions
- The inability to arouse from sleep in response to impulses from the bladder
- Obstructive sleep apnea syndrome
- Stress and anxiety
- Other medical problems, like diabetes

What to Do:

Check with your primary care physician to determine whether the episodes require behavioral modification techniques, medication or both. Enuresis beginning after a long period of nighttime dryness may signal a more serious health problem and should be discussed with your primary care physician.

Parasomnias

Parasomnias are abnormal movements and behaviors occurring just before, during, and after sleep. They are very common in childhood. Children of all ages can experience parasomnias for a number of different reasons. The first step in solving these sleep problems in your child is identifying the causes, some causes may include:

- The interruption of routine
- Developmental challenges (separation anxiety, fear of monsters or the dark)
- Stress
- Insufficient sleep
- Medical or physical ailments or imbalances
- Obstructive sleep apnea
- Inherited predisposition



Nightmares

Nightmares often occur in the later part of the night, typically after 2 a.m. Older children can usually remember parts of the dream if asked immediately. Frequent nightmares may be a sign of emotional trauma, stress or sleep deprivation.

What to Do:

The best thing to do after a child has a nightmare is to reassure him/her that everything is all right and that he/she is safe:

- Cuddle and comfort your child; sit on the bed until your child is calm
- Offer to leave the bedroom door open when you leave the room (never close the door on a fearful child)
- Provide a night-light if the child wants one
- Do not encourage the child to sleep in bed with you, but work on making the bedroom a safe place to be
- Talk about the nightmare the next day (you may have to remind the child what the nightmare was about)
- Protect your child against frightening movies and TV shows

See your primary care physician IF:

- Nightmares become worse over time
- Nightmares continue after using this approach for two weeks
- The fear interferes with daytime activities
- The child has several fears
- You have other concerns or questions

Confusional Arousals

Confusional arousals are a very different form of parasomnias than nightmares. Confusional arousals involve the transition between sleep stages, as the child partially awakens from deep, non-dreaming sleep. Confusional arousals usually happen during the first third of the night. Children are usually unaware of parents' efforts to soothe them, and do not respond or wake up. Most episodes end after a few minutes and the child abruptly returns to quiet sleep. Confusional arousals are most common until 6 years of age and usually resolve spontaneously.



Sleep Terrors

Sleep terrors are seen more often in older children. Sleep terrors are thought to be an inherited disorder in which the child tends to have an episode of agitated behavior during sleep from which he/she is difficult to awaken. Night terrors usually occur in the first third of the night. They may be triggered by fatigue or lack of sleep. They are often made worse by disruptions in a child's usual sleep schedule.

Signs of sleep terrors or night terrors include:

- Your child is frightened but cannot be awakened or comforted.
- Your child is agitated and may sit up or run helplessly about, possibly screaming or talking wildly.
- Your child doesn't appear to realize you are there. Although your child's eyes are wide open and staring, he/she looks right through you.
- Your child may mistake objects or persons in the room for dangers.
- The episode lasts only a few minutes and subsides spontaneously with the child going back to sleep.
- Your child cannot remember the episode in the morning.

What to do:

Intervention should be focused on preventing injury and guiding the child back to bed. Episodes in older children can result in injury to the child or parent who is trying to intercede.

- Hold your child only if it seems to make him/her feel better. Some children who experience sleep terrors do not want to be touched.
- There is no way to shorten an episode. Shaking or shouting at your child will prolong the attack and make the child more agitated.
- Keep your child on a regular and consistent bedtime schedule.
- If you want, you can try to prevent sleep terrors with prompted awakenings. Notice how many minutes pass from your child's sleep onset to night terrors. Then, begin awakening your child 15 minutes before the expected time of the night terror; keep the child fully awake and out of bed for five minutes.

CALL your primary care physician if:

- Any drooling, jerking or stiffening occurs.
- The episodes occur two or more times per week after seven prompted awakenings.
- Episodes last longer than 30 minutes.
- Your child does something dangerous during the episode.
- Episodes occur during the second half of the night.
- Your child has several daytime fears.
- You feel family stress may be a factor.
- You have other questions or concerns.

Sleepwalking and Sleepwalking

Sleepwalking and sleeptalking are generally harmless, and usually occur during the first half of the night. They are more common when children become very tired. Fifteen percent of normal children sleep walk, particularly during ages 4-15 years. During an episode:

- Your child's eyes are open and blank.
- Your child is not as well-coordinated or coherent as when awake.
- Your child may perform semi-purposeful acts, such as dressing and undressing, opening and closing doors, turning lights on and off.

- The episode may last 5-20 minutes.
- Waking your child during this episode is very difficult; if awakened, your child may seem confused or disoriented.

What to Do:

- Gently lead your child back to bed, or speak very softly and soothingly. Do not expect your child to wake up before returning to deep sleep.
- Protect your child from accidents. Avoid letting your child sleep in bunkbeds.
- Protect stairs with a gate; make sure bedroom windows have child guards.
- Put a bell on child's door as an alarm to notify you when he/she leaves the bedroom.
- Help your child avoid exhaustion. It is a main trigger of sleepwalking and sleeptalking.
- Try prompted awakening technique (see instruction under night terror.)
- Discuss with your primary care physician how to ensure safety on overnight trips away from home.

Limit-Setting Problems

Limit-setting problems involve children refusing to go to bed, stalling or using other tactics to keep a parent in the bedroom. Sometimes children cry or become upset, or begin describing fears, or begin telling you about a problem.

A firm and consistent approach to children's delay tactics will help the child learn to follow parents' instructions. It may be necessary for parents to place a gate in the doorway or close the door to make sure the child remains in the bedroom. Parents can speak calmly to the child at regular intervals, and gradually increase the amount of time between intervals. A positive reinforcement system may also help.



Sleep-Onset Association Problems

Sleep-onset association problems and excessive nighttime feeding involve habits that children have learned. The child may associate, or closely connect, the experience of falling asleep with something else. If your child has gotten used to falling asleep while being rocked, nursed, fed and/or held, your child may learn to fall asleep only when these conditions are present. The goal is for infants and children of all ages to learn to fall asleep independently, without relying on parents to do something. The relearning process usually works better if parents gradually make changes, such as gradually reducing the number and frequency of feedings.

Ask your primary care physician about strategies for addressing limit-setting problems, excessive nighttime feeding, and sleep-onset association problems.

Insomnia

Older children and adolescents can experience insomnia just as adults do. Problems sleeping may involve trouble falling asleep at night, waking in the middle of the night, or waking up too early in the morning and not being able to fall back asleep. Often children or teens will experience sleepiness during the day, and perhaps decreased attention and concentration, anxiety or irritability. Insomnia can have many causes, and is frequently learned; something happens that interferes with sleep, then a pattern of poor sleep develops. Insomnia can also be caused by another sleep disorder, such as sleep apnea, or by anxiety or depression. You should talk with your primary care physician to identify the causes of your child's insomnia. Strategies that can help include maintaining a sleep schedule, learning relaxation techniques, avoiding caffeinated drinks during and after dinner, and working to establish better sleep associations (for example, using the bed only for sleep, not doing homework or talking on the phone.)

Talk to your primary care physician if:

- You have tried to make changes to improve your child's sleep and the problems persist.
- Your teen's lack of sleep is interfering with daytime functioning.
- You feel that anxiety or depression could be affecting your teen's sleep.

The first step in helping your child overcome sleep problems is to help determine the cause, then try to eliminate the factors causing the disorder. However, some sleep problems may require the help of a physician. If your primary care physician recommends that your child be examined by a sleep specialist, the doctors, nurses and sleep technicians at the St. Louis Children's Hospital Sleep Clinic and Sleep Lab are here to help. The Sleep Lab is fully equipped with the latest equipment and the staff is fully trained in a wide array of sleep disorders in children.

For more information, physician referrals, or more tips on how to correct sleep problems in children visit our Web site at www.StLouisChildrens.org or call the St. Louis Children's Hospital Answer Line at **314.454.KIDS**, or **800.678.KIDS**. Our pediatric registered nurses will be happy to assist you.



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