National Association For Continence is a national, private, non-profit 501(c)(3) organization dedicated to improving the quality of life of people with incontinence. NAFC's mission is threefold: 1) To educate the public about the causes, diagnosis categories, treatment options, and management alternatives for incontinence, nocturnal enuresis, voiding dysfunction and related pelvic floor disorders, 2) To network with other organizations and agencies to elevate the visibility and priority given to these health concerns, and 3) To advocate on behalf of consumers who suffer from such symptoms as a result of disease or other illness, obstetrical, surgical or other trauma, or deterioration due to the aging process itself.



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# Nocturnal Enuresis:

## Bedwetting in the Older Child

Promoting Quality Continence Care through

Consumer Education

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# Nocturnal Enuresis:

## Bedwetting in the Older Child

Written by:
Howard J. Bennett, MD

Nocturnal enuresis, or bedwetting, is a common problem of childhood. Bedwetting is not a serious medical disorder, but it can be very difficult to live with. Wetting the bed may interfere with a child's socialization and lead to stress within the family.

Bedwetting refers to the involuntary passage of urine during sleep in children over the age of five. Primary nocturnal enuresis is defined as bedwetting in an individual who has never been dry for six consecutive months. Secondary nocturnal enuresis is bedwetting in an individual who was dry for six consecutive months and then began wetting again.

Bedwetting affects approximately five million children in the U.S., though it largely resolves over time. Most children become dry at night between ages 3 and 5.

### Causes of Bedwetting

**Genetic Considerations:** The risk of a child having bedwetting is 44% and 77% if one or both parents, respectively, wet the bed as children.

**Reduced Bladder Capacity:** Children with bedwetting often have a small bladder capacity.

**Increased Nighttime Urine Production:** The brain releases a hormone at night called vasopressin that reduces the amount of urine the kidneys make. Some children may wet the bed because they do not make enough of this hormone.

**Arousal Disorder:** Research demonstrates that some children do not respond to their internal bodily signals while asleep. Therefore, children with bedwetting may be unable to wake up when the bladder is full.

**Constipation:** If a child has a lot of stool in his rectum, it may push against the bladder. This can "confuse" the nerve signals that go from the bladder to the brain. a full rectum may also reduce how much urine the bladder can hold or how well the bladder empties when a child urinates.

**Psychological Factors:** Children may develop secondary enuresis due to stressful situations such as moving to a new home, changing schools, or the death of a loved one.

Bedwetting has been reported with sleep apnea, sickle cell disease, urinary tract infections, diabetes, and neurologic problems.

### What To Do If A Child Has Bedwetting

Remember that children do not wet the bed on purpose, and most pediatricians do not consider bedwetting to be a problem until a child is at least six. However, a recent study shows that while 80% of parents want healthcare providers to discuss bedwetting, most feel uncomfortable initiating the discussion, and 68% of parents said their children's doctor has never asked about bedwetting. Therefore, parents need to be more proactive by asking for help.

Most children show some concern about bedwetting by the time they are 6- to 7-years-old. There are signs parents can look for to see if their child is ready to work on becoming dry:

- He starts to notice that he is wet in the morning and doesn't like it.
- He says he does not want to wear pull-ups anymore.
- He says he wants to be dry at night.
- He asks if any family members wet the bed when they were children.

• He does not want to go on sleepovers because he is wet at night.

There are a number of things parents can do to reduce stress associated with bedwetting, such as letting children know that a lot of kids have the same problem, not punishing children for being wet at night, and making sure the child's siblings do not tease him about wetting the bed.

In most cases, a child's regular healthcare provider will be able to treat his bedwetting. However, if parents are not getting the help they need, a number of specialists have an interest in bedwetting.

**Pediatric urologists:** surgeons/urinary tract specialists, experts in bedwetting who are particularly skilled in helping with complicated types of wetting

**Pediatric nephrologists:** pediatricians specialized in kidney problems

**Child psychologists & child psychiatrists:** treat children with bedwetting

More often than not, bedwetting is addressed at routine checkups. Healthcare providers obtain a medical history and examine the child and get a urine analysis. Blood tests and radiologic procedures are not routinely needed for the diagnosis and treatment.

## Treatment Options

Treatment options will vary depending on the child's age, the frequency of wetting, the impact on the family, and symptoms associated with the bedwetting. Unless an underlying medical cause is identified, primary and secondary bedwetting are treated the same way.

The most important aspect of treatment is determining if the child is motivated to become dry, especially for behavioral management. If a child is not motivated to become dry, treatment should be postponed or simplified until the child is ready.

### Practical Management Tips

In addition to a treatment program, parents can take practical measures, such as using a mattress cover, odor eliminators or room fresheners, and underpads to make it easier to deal with wet bedding.

### Behavioral Treatment

**Restricting Fluids:** Reducing a child's fluid intake after dinner is designed to reduce his urine production at night. If parents choose this option, it is important not to severely restrict the child's fluid intake because children may view this as a punishment, and it can lead to hostility within the family.

**Nighttime Waking (Lifting):** Parents can take children to the bathroom a few hours after they go to sleep to help them stay dry. This technique is called lifting because children may barely wake up and walk "zombie-like" to the bathroom.

**Motivational Therapy:** This is a basic intervention that should be included with any bedwetting program.

• Encourage the child to take some responsibility for his bedwetting such as urinating before bed and putting wet underwear in the laundry basket.

• Give the child rewards for dry nights by encouraging the child to make a calendar to monitor his progress and giving him stickers for dry nights.

**Bladder Therapy:** Bladder therapy focuses on having children pay more attention to bladder function by encouraging children to increase their fluid intake during the day, think about the sensation of a full bladder, respond to their bladder at the first signal, and fully empty their bladder each time they go.

**Bedwetting Alarm:** The bedwetting alarm requires a highly motivated child, but it is the most effective treatment for bedwetting. This device awakens a child from sleep when he wets the bed. Bedwetting alarms have two basic parts: a wetness sensor that detects urine and an alarm unit that buzzes after the child wets the bed. A few models also have the ability to vibrate. Bedwetting alarms come in three styles: wearable alarms, wireless alarms, and bell-and-pad alarms (see Figure 1).

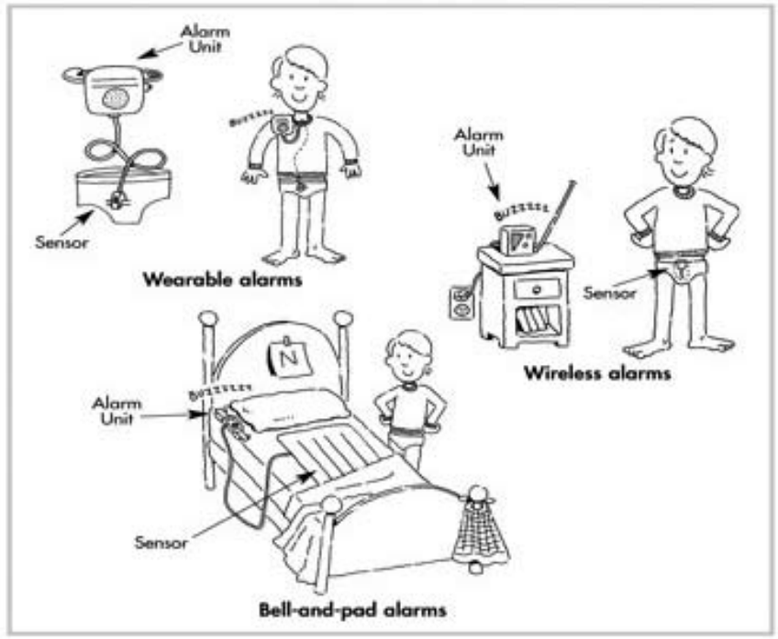


**Figure 1:** Courtesy of **Waking Up Dry: A Guide to Help Children Overcome Bedwetting**
Written by Howard J. Bennett, MD


### Psychotherapy

Psychotherapy is a treatment option for children with secondary enuresis due to a change or traumatic event in their life or for those experiencing a significant problem with self-esteem because of their bedwetting.

### Pharmacologic Treatment

Medication can be used alone or with behavioral treatment. The effects of drug therapy are not long lasting and most children often relapse when medication is stopped, so healthcare providers generally recommend medication for short-term use or to control a child's symptoms if other measures have failed.

**Desmopressin:** Desmopressin is a manufactured form of the hormone, vasopressin. It causes the kidneys produce less urine. Desmopressin is a safe medication when used as directed.

**Imipramine:** Imipramine is a drug that was initially prescribed for depression. Doctors have found that it helps reduce bedwetting in some children. A major concern, however, is the fact that the line between an effective and toxic dose is small.

**Oxybutynin:** Oxybutynin is a medication usually prescribed for individuals with an overactive bladder. When used in conjunction with the bedwetting alarm or desmopressin, it may relax the bladder enough to make those treatments more successful.

## Conclusion

Bedwetting is a common and embarrassing problem that can greatly affect children and families. It is neither the fault of the child nor the parent. Despite the frustrations that families have to endure, many parents do not raise the issue with their healthcare providers. The most important thing to remember is that with care and perseverance, bedwetting is a problem that can be successfully treated.

For more information, vist www.nafc.org or speak to our Health Educator by calling 1.800.BLADDER (1.800.252.3337).