



Pediatric Clinic  
PATIENT EDUCATION HANDOUTS  
**NOCTERNAL ENURESIS (BEDWETTING)**

DEFINITION:

**Nocturnal Enuresis** is the medical term for wetting the bed at night

**Diurnal Enuresis** is the medical term for wetting accidents day and night

WHAT CAUSES ENURESIS?

Enuresis is probably caused by many factors, not just one. Some of the common causes include:

- Abnormal sleep pattern  
Many children who wet the bed are very deep sleepers. Sleep brain-wave tests have shown that these children spend longer periods than normal in deep or paralytic sleep, and this is the period of time when they wet the bed. These children will sometimes have other sleep disorders also, such as sleep-walking or night-terrors.
- Abnormally small bladder capacity  
Many children with nocturnal enuresis have an overactive bladder and a small functional bladder capacity. This means that a bladder may have many muscle spasms which cause an urge to empty the bladder often. The bladder is made of muscle and can grow and shrink as urine enters or leaves. The bladder in most cases is a normal size physically. It is not able to hold a normal amount of urine because of the muscle spasms.
- Abnormal hormonal fluctuations  
Some children appear to produce abnormally low levels of the hormone which slows urine production at night (antidiuretic hormone). This results in more urine production than is really normal or necessary
- Diurnal enuresis  
Some children who have nocturnal enuresis will also have daytime urine accidents. Causes for this may include urinary tract infections, abnormalities of the urinary tract, problems with bathroom habits, or problems with the nerve control of the bladder.
- Other causes  
Other possible causes of nocturnal enuresis include hormonal factors, dietary factors, the effects of certain medications, timing of daytime fluid intake, and emotional factors. Often, nocturnal enuresis is found to run in families.

The cause of bed-wetting may not always be apparent, but a complete evaluation by the doctor can usually point to which of these causes is most likely.

HOW COMMON IS BED-WETTING?

Fifteen percent of five year old children and three percent of ten year olds wet the bed. As many as one percent of eighteen year olds may wet the bed. It tends to be more common in boys.

Bedwetting is very common, and can be considered **normal** in most children until age 7 or 8. It is **not** a behavior problem.

## HOW CAN BED-WETTING BE OVERCOME?

Almost all children with bed-wetting will improve with time. It is important to tell your child that it is a temporary condition. Many children who wet the bed do not feel very good about themselves. Sometimes parents can place blame on their children who bed-wet, either knowingly or unknowingly. It is important to be patient with a child who bed-wets. A child does not wet the bed on purpose.

Several simple measures exist in order to help a child overcome bed-wetting. These are:

1. Encourage intake of the majority of liquids during the early part of the day.
2. Avoiding dietary bladder irritants such as citrus products (oranges, lemons, pineapples, grapefruits, limes, tomatoes), carbonation, caffeine, and chocolate.
3. Complete unhurried bladder emptying at bedtime.
4. Awakening and taking the child to the bathroom when the parents go to bed (about 2-3 hours after the child's bedtime).
5. Making sure the child is not overtired. If a child is overtired, bed-wetting is more likely to occur. If a child is not well rested in the morning, an earlier bedtime may be worth a try.

For children in whom the above steps have not worked, other treatments may be useful. Such treatment is most effective if it is directed toward the underlying cause described above. These treatment options include **bladder exercises** and **alarm devices** for children with small or spasmodic bladders, and **medications** for children with abnormal sleep patterns or hormonal fluctuations.

## WHEN SHOULD A CHILD SEE A DOCTOR FOR BED-WETTING?

When a boy reaches the age of six to eight, or a girl reaches the age of five to seven, still bed-wets, and wants to do something about it, it is time to seek help. Either a pediatrician or a family doctor can evaluate the child. The child should have a history taken and physical exam done. A urinalysis and urine culture to screen for infection should be done. In unusual or problematic cases, your child's doctor may wish to consult a pediatric urologist. Further testing may need to be done to help find the reason for your child's problem. This is especially true if your child wets or leaks during the day, has had one or more urinary tract infections, or has other urination problems.

If your child is bothered by a wetting problem, professional help should be sought. A child's self esteem can be severely affected by such a seemingly minor problem. Children who are helped to overcome their wetting often have a much brighter outlook on life. They develop a greater sense of self confidence and flourish in other aspects of their lives. Seeking treatment for bed-wetting should not be avoided because of shame or embarrassment.