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# Wetting in Children and Adolescents

A Practical Guide for Parents,  
Teachers, and Caregivers

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## Aims of this guide

The aim of this guide is to provide information on the different types of wetting and their causes as well as on how to assess and treat them effectively. The information is intended mainly for parents but may be useful for teachers, educators, caregivers, as well as older children and adolescents. The objective of this guide is to give short and precise advice on the most important forms of wetting that might affect children and adolescents during the day and/or during sleep. This guide provides practical advice, step-by-step instructions, and concrete recommendations on how to achieve dryness. To make it more understandable, everyday terms such as *bedwetting*, *daytime wetting*, and *soiling* are used throughout the book instead of the scientific terms. Please feel free to copy the charts and materials included in the appendix and use them for your child.

This guide was first published in 2004 and received positive feedback from many parents, leading to the publication of a revised edition in 2012. As there are no comparable guidebooks in the English language, the time had come to make this information available for parents all over the world. Due to the many new developments, the book was not just translated but was brought up to date with many innovative aspects. All recommendations are based on current scientific studies and international guidelines. We considered both European and North American practice parameters and specifically followed the recommendations of the International Children's Continence Society (ICCS). The ICCS is a multi-professional, international organization that has set out to standardize the

treatment of incontinence in children based on the newest scientific evidence. Following ICCS recommendations is the best way to ensure the welfare of children being treated for incontinence.

As many children not only wet but are also affected by soiling, a separate companion guide is available for this type of incontinence (*Soiling in children and adolescents: A practical guide for parents, teachers, and caregivers*; Hogrefe Publishing, 2017).

I would like to thank Hogrefe, and especially Mr. Robert Dimbleby and Ms. Juliane Munson, for their enthusiasm and support of this project. I hope very much that this guide will be of help to many families to achieve continence.

Saarbrücken, Germany, June 2016

Alexander von Gontard

## How should I use this guide?

The aim of this guide is to provide the reader with information that is organized as logically and explained as simply as possible. Although the topic of this book is wetting, Chapter 2 deals with soiling. The reason for this is that many children, unfortunately, are affected by wetting and soiling with or without constipation. If this is the case, it is necessary to deal with the child's soiling/constipation first. Because of possible complications and less favorable outcomes, bedwetting should be treated after the child has stopped wetting during the day.

Answer the following questions to find out how to best use this guide:

- Does my child soil or is he or she constipated? If yes, begin with Chapter 2.
- Does my child wet during the day – no soiling or constipation present? Then you can skip Chapter 2 and go straight to Chapter 3.
- Does my child wet at night – no daytime wetting, no soiling or constipation present? Then you can skip Chapters 2 and 3 and start with Chapter 4.
- Does my child have other psychological problems or disorders which cause him or her more than just distress? In this case, it would be useful to read all relevant chapters and to follow the recommendations given there. Make sure to carefully read Chapter 5 and to find out whether additional mental health treatment might be needed.

The aim of this guide is to provide you with practical information on wetting. However, it is important that you

seek professional help. Because medical causes of wetting have to be identified – or ruled out – before treatment can begin, every child or adolescent needs to be examined by a pediatrician or general practitioner. For good assessment, it can be of great help to fill out the Enuresis Questionnaire (Appendix 1) and the 48-Hour Toilet Chart (Appendix 2) before consulting your physician. Please discuss the charts and any questions you might have with your physician or therapist.

The remaining charts and materials in the appendix can be useful later during treatment. The Drinking Chart in Appendix 3 documents the drinking habits of your child with the aim of increasing the amount your child drinks. The charts in Appendix 4 and 5 are used in the treatment of daytime wetting, those in Appendix 6, 7, and 8 in the treatment of bedwetting. All charts and materials are discussed in detail in the respective chapters. Please feel free to copy them and use them for your child.

It is the hope and wish of the author that you and your child will benefit from the suggestions and recommendations given in this book, and that you will achieve dryness soon so that you can put the book aside – or recommend it to friends.

# 1 General Information on Wetting

## 1.1 Does this sound familiar to you?

*Our son wets during the day or night. He's unhappy, distressed, and tries to hide it when he wets his pants. He avoids playing with other children and wonders why this is happening to him. I feel distressed when my son wets. I'm worried about his development and the possible effects of the bullying and teasing that he sometimes experiences at school. Sometimes I wonder whether we've done something wrong that contributes to the wetting or has maybe even caused it. We've tried many different things and feel frustrated, even angry, about the piles of laundry every week.*



The following examples of John and Anna illustrate how stressful wetting can be for parents and children:

John is seven years old and wets his bed every night with a large amount of urine. He has never been dry. His parents have observed that he sleeps deeply and is very difficult to wake. He wears diapers to reduce the amount of laundry. He is very unhappy, feels like a baby, and does not want to sleep over with friends. He has no problems in school. He is very popular with other children, has many interests, and engages in many different activities. His mother blames herself because she went back to work when John was still a small baby. She and her brother wet their beds when they were children.

Anna is nine years old and wets at least three times a day. The amount of urine is small every time but her underwear is always damp. She has already had two urinary tract infections. Her mother reports that Anna has the sudden urge to pass urine about 10 times a day and has to run to the toilet immediately. When they travel by car, they have to stop several times for Anna to use the restroom. When she feels the urge to pass urine, she presses her thighs together or she sits on her heel. Anna's mother is very upset that things aren't improving while Anna seems to have gotten used to it.

Do these or similar descriptions sound familiar to you? If yes, then this guide will be able to help you. Despite all the stress and worries induced by wetting, we can assure you: This distress will become less or even disappear when your child has become dry. You will see that everyone in the family will feel better and that many worries will have passed when your child no longer wets. The aim of this guide is to provide you with practical guidance on how to achieve this goal without any detours. But first, we will give you some general information.



## 1.2 What is the definition of wetting?

Wetting is defined as the repeated, involuntary, intermittent passing of urine into clothes or the bed. The child has to be at least five years old and medical causes have to be ruled out. This short definition includes all important aspects of wetting.

For wetting to be considered a condition or disorder it has to occur repeatedly. If your child wets once at night, for example after moving home or after an exciting birthday party, this is nothing to worry about. Many children experience this. However, if a child wets for at least three months in a row with at least one incident per month, the wetting can be considered a condition. Of course, less frequent wetting can be distressing and it can be treated. Occasional wetting is a common problem for many children. Wetting that occurs once a month or even several times per week is more worrisome and should be addressed.



Wetting should only be considered a disorder or a condition when the child has reached his or her fifth birthday. Why is this age definition so important? The answer is that a quarter of all four-year-old children still wet their bed. Something that happens so frequently is not a disorder but part of natural maturation. Treatment of four-year-old children is only considered in very exceptional cases, for example, if they are distressed by daytime wetting and are teased by other children. Many parents are astonished by the age definition of five years, as they often expect their child to be dry by the age of two, at the very latest by the time they enter preschool. This view is still widespread and voiced by relatives and some preschool teachers. But don't be worried: Your child has time to become dry up to the age of five years.

Before the treatment of wetting can begin, medical causes have to be ruled out. Fortunately, most children wet intermittently. This means that they experience dry periods between wetting incidents. Most cases of intermittent wetting are functional, i.e., are not caused by organic factors. In contrast, medical causes are more common in children who wet continuously.

### **1.3 What common types of wetting are there?**

The types of wetting can be differentiated by the time of day they occur. Many children wet at night, some during the day, and some both at night and during the day. New studies have shown, however, that this basic differentiation is not sufficient.

### 1.3.1 Nighttime wetting

Among children with bedwetting, there are those who have never been dry before and those who have relapsed after a period of dryness. If your child has never been dry for more than six months in a row, this is termed *primary bedwetting* (the scientific term is primary nocturnal enuresis) – John’s story at the beginning of this chapter is an example of this type of bedwetting. In contrast, if your child has had dry periods of six months or longer, this is called *secondary bedwetting* (the scientific term is secondary nocturnal enuresis). Children with secondary bedwetting are more likely to have additional psychological problems (see Chapter 5). Apart from this, primary and secondary bedwetting are treated in exactly the same way.

The other possible differentiation of wetting is much more important but a bit more difficult to understand. Children with *monosymptomatic enuresis* (or simple bedwetting) wet at night but have a bladder that functions normally. Children with *non-monosymptomatic enuresis*, on the other hand, also wet at night but have a dysfunctioning bladder (quite like children with daytime wetting). In these cases, the bladder dysfunction must be treated first to achieve dryness quickly.

Based on these definitions, there are four different types of bedwetting: primary monosymptomatic, primary non-monosymptomatic, secondary monosymptomatic, and secondary non-monosymptomatic enuresis.

	Monosymptomatic	Non-monosymptomatic
Primary	Never been dry for more than 6 months Normal bladder function	Has been dry for more than 6 months Bladder dysfunction
Secondary	Never been dry for more than 6 months Normal bladder function	Has been dry for more than 6 months Bladder dysfunction

This may seem a bit complicated but is really quite logical. The good news is that most cases of enuresis are non-organic, i.e., are not caused by medical factors.

### 1.3.2 Daytime wetting

In general one can say that daytime wetting is much more complicated to treat than nighttime wetting. Because medical complications are more common, a child with daytime wetting needs to be examined more closely. If there is a medical cause, this condition is called *organic* or *somatic incontinence*. Medical causes of wetting are very rare. These could be malformations of the kidneys and/or the entire urinary tract, such as stenosis (strictures) or valves (flaps) in the urethra. In rare cases, malformations of the central nervous system or the spinal cord as well as diseases, such as diabetes, can be associated with wetting. Wetting with medical/organic causes is not considered a functional, or nonorganic, type of incontinence (or enuresis). This guide deals exclusively with the common, nonorganic forms of wetting, for which medical causes have been ruled out.

Medical complications common among children with daytime wetting are recurring urinary tract infections and reflux (backflow of urine) from the bladder to the kidneys. As both require additional medical care, it is important that children with daytime wetting are examined closely. In some countries, general pediatricians are the first doctors to contact, in others general practitioners. Both can refer to specialists, such as pediatric urologists, if this is required. As outlined before, most types of daytime wetting do not have medical causes – and do not require a highly specialized care.

If organic causes and medical complications are ruled out, three common forms of daytime wetting can be differentiated:

1. Children who have to run to the toilet very often and try desperately to suppress the urge by pressing their thighs together or sitting on their heels. This is called *urge incontinence* or *overactive bladder* – see the example of Anna at the beginning of this chapter.
2. In contrast, some children rarely go to the toilet – sometimes only two or three times a day. These children also try to avoid going to the toilet by pressing their thighs together, crossing their legs, fidgeting, holding on to their belly, or using other so-called holding maneuvers. They do this habitually in school, while watching TV, while playing computer games, or while playing with



other children. This type of daytime wetting with habitual deferral of micturition is called *voiding postponement*.

3. Finally, some children can only empty their bladder by straining and exerting pressure. The urine flow is often interrupted. This type of daytime wetting is caused by a lack of coordination between the detrusor muscle and the closing muscle of the bladder (sphincter). The name of this condition is *dysfunctional voiding*.

These three subtypes of daytime wetting are discussed in detail in Chapter 3.

## 1.4 How common is wetting?

Many parents are surprised to hear how common bedwetting is: 10% of seven-year-old children, 1–2% of adolescents, and less than 1% of adults wet during the night. This shows that bedwetting has a natural tendency to decrease as the child gets older. However, the spontaneous remission rate (the ceasing of the condition without treatment) is only 15% per year. At a young age and in individual cases it can be sensible to wait and see whether the child becomes dry spontaneously, especially if he or she is only five years old. For older children and adolescents, these 15% per year are too low to justify waiting. They want and need practical help immediately – and not in a few years' time.

Daytime wetting is less common than bedwetting: 2–3% of seven-year-old children and less than 1% of adolescents wet during the day. There is also a slight chance for