

# Staying Dry

By Amy Bentley



Dr. Antoine "Tony" Khoury  
CHOC Pediatric Urologist

Dr. Khoury is the medical director of Pediatric Urology at CHOC and a world-renowned specialist in pediatric urology. Dr. Khoury completed his residency in urology at the University of Toronto in Canada. He completed a clinical fellowship and a research fellowship in pediatric urology at the Hospital for Sick Children in Toronto, followed by a research fellowship at the University of Calgary in Alberta, Canada, in the area of biomaterial-related infections. He is recognized for his expertise in complex urological reconstruction of major birth defects.

Dr. Khoury's philosophy of care: "I take a very analytical approach to the patient's medical issues and listen to the family. With that in mind, I tailor their diagnostic studies and surgical intervention to the patient's needs without putting them at risk for under-investigation or over-investigation."

#### EDUCATION:

Ain Shams University Medical School in Cairo, Egypt

#### BOARD CERTIFICATIONS:

Urology

## CAUSES AND SOLUTIONS

Bedwetting (nocturnal enuresis) can frustrate parents and children who often feel embarrassed and anxious about this problem and suffer from low self-esteem. Bedwetting occurs more frequently in boys than in girls and Dr. Khoury says the problem typically stops once the child is motivated and ready to work on staying dry at night. "It's not the kid's being lazy or irresponsible" says Dr. Khoury. "It's not a reflection of the child's intelligence, and in fact, a majority of children with bedwetting say math is their favorite subject at school."

## CAUSES

"The problem with bedwetting is not that the kidneys produce too much urine. The issue is: is the brain waking up to the full bladder and the need to go to the bathroom when the bladder is full?" explains Dr. Khoury. "In a child with a bedwetting issue, the communication between brain and bladder is incomplete and inefficient. You need the brain and bladder talking to each other so you can be responsive and awaken to that stimulus."

# 5 million

NUMBER OF U.S. CHILDREN OVER AGE 6 AFFECTED BY PERSISTENT NIGHTTIME BEDWETTING



## BEST SOLUTION

Ideally, reducing the intake of liquid before bed will help reduce bedwetting. But training the brain to respond to the need to urinate is the goal. A wetness alarm with sensors can be placed on the child's underwear and when wetness is detected, a buzzer goes off and wakes the child. "After three to four weeks, the brain realizes it isn't keeping track of the bladder at night," says Dr. Khoury. "If your brain is now expecting a buzzer every time the bladder begins to wet, the brain begins to wake up before it wets. So you get up and go to the bathroom. The brain begins to communicate with the bladder and tells the bladder to wait, and you can sleep all night." Medication that reduces the amount of urine produced by the kidneys at night, a safe and common treatment, can also be used, Dr. Khoury says.

## WHAT IF MY CHILD ISN'T MOTIVATED TO WORK ON STAYING DRY AT NIGHT?

"If the child isn't ready, wait and when the child is ready, that will be the time to start talking to them about the alarm. It has to be used properly," says Dr. Khoury.



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[choc.org/emergency](http://choc.org/emergency)



15 PERCENTAGE OF 5-YEAR-OLDS THAT WET THE BED



# 50

PERCENT CHANCE THAT A CHILD WILL BE A BEDWETTER IF BOTH PARENTS WERE

