

## NORTHWESTERN EXECUTIVE HEALTH

### SLEEPLESS NIGHTS ACROSS THE LIFESPAN



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*For more information about insomnia, sleep disorders or their treatment, please visit [www.sleepmedcenter.com](http://www.sleepmedcenter.com); or call 708-364-0261 to schedule an appointment with a sleep specialist.*

*A consultation with a sleep specialist may also be integrated into your executive physical at the Center for Partnership Medicine. For*

Sleep is a core biological function, an inherent process that is both physiological and psychological, and one that affects us over our entire lifespan. Most of us will sleep for some period just about every day from the day we are born until the day we die. As a biological process influenced by our circadian rhythm, it connects us to the very movement of our planet. It plays a vital role in alertness, learning, memory, concentration, mood and health. We all have a genetic propensity to sleep, yet because it is so inherent, and because most of us do it every night, its effects may be subtle and unremarkable in our everyday life, until we cannot get it.

When sleep is disordered - when we can't sleep, or when we wake feeling unrestored - the effects of good sleep are envied and the impairment we experience is pronounced. Poor sleep even for a night or two can be associated with impaired psychomotor functioning, memory or learning difficulties, concentration deficits and mood impairment. Longer-term sleep difficulties can widely affect our health - from cardio metabolic disorders such as diabetes, hypertension and congestive heart failure to psychiatric disorders including depression and anxiety. Sleep disorders also have a widespread social impact. With poor sleep we are likely to become more isolated. Our intimate relationships may falter, and work productivity suffers.

There are over 80 different types of sleep disorders, but by far the most common is insomnia. Insomnia consists of difficulty initiating sleep, difficulty staying asleep or reinitiating sleep after awakening. Individuals frequently experience more than one of these symptoms. Insomnia can emerge at any point in our lifespan. Virtually everyone will have a difficult night occasionally; however, up to 15% of the adult American population suffers from chronic insomnia lasting 4 weeks or longer.

Insomnia may have a medical basis – hormonal changes or impaired endocrine functioning such as hyper- or hypothyroidism, for example, can lead to sleep difficulties. For the vast majority of individuals suffering insomnia, however, insomnia is nearly always “psycho physiological” in nature – a product of the interplay between the physiology of sleep and psychological and behavioral factors which may counteract this by affecting physiological arousal. Psychological factors, such as stress often precipitate initial sleepless nights. Other factors also considered to be psychological – behaviors, conditioning, mental activity, anxiety and sleep phase variability – are associated with perpetuating insomnia over time.

Insomnia may emerge in infancy or childhood. While medical conditions may lead to sleep difficulties, more typically such early insomnia emphasizes the role

*additional information, please speak with your Center for Partnership Medicine physician about sleep concerns during your pre-visit telephone consultation or contact us at 312-926-1300.*

of learning in sleep patterns. As children reach adolescence, they are likely to experience a delay in their sleep phase due to hormonal changes and emerging social behaviors, . In young adults, insomnia may occur as they enter the work world but continue to exist on a “college” schedule – staying out late on the weekend and sleeping in the next morning.

For parents, family stressors go hand-in-hand for the adult with insomnia. Infants and their disrupted sleep, or children and their sleep schedules can wreak havoc. For women, insomnia often emerges either around childbirth or during or after menopause. For the adult insomnia sufferer, anxiety - reflecting increased physiological arousal, cognitive activity, and sleep schedule variability have a dramatic effect on functioning. Insomnia worsens emotional regulation; reflecting depressed mood but also impairment in social interactions. Conflict, poor communication and mood impairment – hallmarks of feeling “crabby” after a difficult night – in the long term become stressors unto themselves, which feed a vicious cycle between poor sleep and relationship difficulties.

Individuals vary in the amount of sleep they need. The average person requires 8 hours of sleep but there is actually substantial variability between individuals. Sleep partners may often not be well-matched in this regard. If one individual requires only 7 hours of sleep and the other 9, the shorter sleeper is often left tossing and turning in bed.

In adults who can't sleep, worries about work and functioning are common. With little doubt, insomnia in adulthood affects work. The cost of insomnia for the employer and our nation's productivity is high. Lost productivity occurs both from days where individuals miss work (“absenteeism”), but also when individuals are present but less productive (“presenteeism”). A study recently published in SLEEP, the journal of the American Academy of Sleep Medicine, analyzed results from the American Insomnia Survey to evaluate the impact of insomnia on the work place. It found a 23% prevalence of insomnia among employees. Insomnia rates were lower for those over 65, males and with college degrees. For this large sample across employers, insomnia was associated with 7.8 days of lost productivity. The authors estimate the cost in human capital to be \$2,280 annually per person. For a large company with 50,000 employees, this productivity loss translates into a cost of over \$26 million dollars annually. For a smaller company with 1,000 employees, this would reflect a cost of \$524,400.

Most adults will continue to require 7- 9 hours or sleep a night as they age. Although we do experience changes in physiological sleep need as we age in adulthood, most insomnia in older adults is associated with medical conditions – pain in particular - and medications rather than lost sleep need. Interestingly, it is also not uncommon for the retiree to expect longer sleep periods upon retirement. Unfortunately, sleep need doesn't increase simply because we now have time to sleep in. In some older adults, efforts to sleep longer lead to overexpansion of sleep opportunity in relation to physiological sleep need. This can lead to frustration and mental activity as individuals lay in bed hoping to sleep, further fueling insomnia.

Fortunately, insomnia is a very treatable condition at any age. The most durable and effective treatment does not require medication. Cognitive Behavioral Treatment for Insomnia (CBTi) builds on basic behavioral techniques and incorporates interventions directed at reducing sleep anxiety, cognitive activity (“racing thoughts”) and sleep schedule modification. A behavioral sleep

medicine specialist can provide this brief treatment. Multiple studies comparing this treatment approach to use of prescription sleep medications show both cost efficiency and more lasting durable treatment of insomnia with CBTi. Certainly, there is also no shortage of over-the-counter sleep medications and an expanding number of prescription sleep medications are also available. While medications may be effective, sleep medications are most intended for acute, short-term bouts of sleep difficulty. For the chronic insomnia suffered, these medications may actually foster greater difficulty over time. Individuals may develop a psychological dependence on the medications and when medications are stopped, anxiety and rebound insomnia are likely to occur. To evaluate the best treatment option for insomnia, speak with your primary care physician or contact a comprehensive, accredited sleep disorder treatment center.

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