



## What are Parasomnias?

Parasomnias are sleep disorders which are characterized by disruptive behaviours that occur when a person is asleep. Specifically, during sleep or sleep-wake transitions, a person is able to act out complex behaviours because their autonomic nervous system, motor system, or cognitive processes are active.

Parasomnias can occur during deep sleep, REM (dreaming) sleep, or the transition period between sleep and wakefulness. Examples of such disorders include the following:

### a) Parasomnias that occur during deep sleep:

- **Somnambulism** (sleep walking), which is characterized by automatic behaviour during sleep, from getting out of bed and walking around the bedroom to more complex activities, such as walking outside or going to the kitchen and having something to eat.
- **Night Terrors**, which are characterized by fear, intense screaming, and increased heart rate during sleep. Such events are typically followed by no memory of the episode.
- **Confusional Arousals** ("sleep drunkenness"), which are characterized by confused thinking, disorientation, and agitation during sleep and at arousal.

### b) Parasomnias that occur during

#### *REM (dreaming) sleep:*

- **Sleep Paralysis**, which is characterized by an inability to move or speak when falling asleep or awakening. This can also be accompanied by vivid sights or sounds that are not actually there.
- **REM Sleep Behaviour Disorder**, which is characterized by behaviour where a person appears to be acting out their dreams. Movements can be complex, explosive, and dangerous for the person experiencing them, as well as for bed partners or anyone in the immediate area.

### c) Parasomnias that occur between sleep and wakefulness:

- **Rhythmic Movement Disorder**, which is characterized by repetitive behaviours, such as head banging or body rocking. This typically occurs just prior to falling asleep.
- **Somniloquy (sleep talking)**, which is characterized by verbalizations when falling asleep or awakening. These episodes are not typically remembered by the sleeper.

### d) Other Parasomnias:

- **Bruxism (teeth grinding)**, which is characterized by repeated grinding or crunching of the teeth, often leading to tooth wear and jaw pain.
- **Sleep Enuresis**, which is characterized by an inability to maintain urinary control during sleep.



## What Causes Parasomnias?

Parasomnias are relatively common among children and usually do not continue into adulthood. However, when these disorders do persist into the adult years, there can be a variety of possible causes. Some causes that contribute to parasomnias include: family heredity; side effects from medications, drugs, and alcohol; various psychiatric, medical, or neurological disorders; other sleep disorders; irregular or poor sleep habits; and stress.



## What is the Treatment for Parasomnias?

A person should seek help from a health care professional if they are having difficulties with their sleep and this is causing a reduction or impairment in their quality of life. For all parasomnias, the degree of distress experienced by the affected person or their loved ones will depend on the symptoms they are experiencing. Some parasomnias can be serious and dangerous if not properly diagnosed and treated, as the person experiencing them can cause significant harm to themselves or others. Therefore, it is critical that a person displaying symptoms seek help from a health care professional, as such behaviour during their sleep may be potentially threatening or harmful.

The assessment of parasomnias requires both a clinical evaluation, as well as objective testing to substantiate the diagnosis of such conditions. This requires the expertise of a health care professional, preferably a sleep specialist, as this testing can only be done in a sleep laboratory equipped with the necessary facilities. The most common diagnostic test used for the evaluation of parasomnias is the Nocturnal Polysomnogram (PSG). This test monitors a person's physiological cues, such as brain wave activity, muscle and eye movements, as well as heart and breathing rates. Such testing is also critical in excluding other sleep disorders that may be contributing to the individual's condition.

Once a diagnosis has been made, treatment plans are helpful and in certain cases, essential for some of these conditions. Examples of such treatments include:

- **Medications** – these may be prescribed to help manage and control symptoms associated with parasomnias, thereby substantially reducing an individual's risk of injury.
- **Sleep Hygiene** – includes lifestyle practices that minimize or prevent sleep difficulties, thereby reducing the occurrence of some parasomnia disorders.
- **Behaviour Modification and Relaxation** – includes interventions designed to increase safety (e.g., creating a safe sleep environment) and incorporating practices to reduce tension or stress.



## The Canadian Sleep Institute's 10 Commandments for a better sleep

If getting a better night's sleep is your goal, and underlying medical conditions are not an impediment, you may achieve success by following the Ten Commandments of Sleep Hygiene:

1. Schedule a relaxing period before going to sleep, to separate your body and mind from the day's hassles.
2. Use your bedroom primarily for sex and sleep, and not as an all-purpose activity area.
3. Your bed should be comfortable, large enough, in a quiet, dark room, and at the right temperature.
4. Keep a regular schedule, going to bed and getting up at the same time each day. Don't go to bed until you feel sleepy.
5. Be consistent about taking naps. Take one regularly or not at all.
6. Exercise regularly in the morning or early afternoon, but do not engage in strenuous activity late in the evening. A relaxing, mild physical activity might be helpful close to bedtime.
7. Assess your caffeine intake, and avoid caffeine after 2 p.m. Smoking close to bedtime or at night causes further sleep disruption.
8. Don't use alcohol or drugs, such as sedatives. While they might help you initially fall asleep, they lead to sleep disruption and deprive you of deep sleep (at times, even for years).
9. If you feel hungry in the evening, have a light snack or a glass of milk. Heavy meals close to bedtime can result in discomfort and further sleep disturbance.
10. Above all, do not try too hard. If you can't fall asleep, don't lie in bed anxious and frustrated. Leave your bedroom to read, watch T.V. or do something else to relax, going back to bed only when you feel sleepy again.

- Adam Moscovitch, MD, FRCP (C), ABSM

### The Good News:

Sleep specialists are in a position to properly differentiate, diagnose, and treat parasomnias. Patients who seek appropriate diagnosis by a qualified sleep specialist can manage their condition and greatly reduce their risk of injury for the more threatening disorders. Our specialists at the Canadian Sleep Institute are experienced and well trained in the assessment, diagnosis, and treatment of parasomnias, along with a host of other sleep disorders. If you feel that you could benefit from seeing a sleep specialist, call us for more information or have your family physician refer you to:

### Canadian Sleep Institute

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## Canadian Sleep Institute

The Canadian Sleep Institute is a leading centre of excellence in the provision of clinical care, diagnostic services, corporate consulting, clinical research, and education in the area of sleep and fatigue disorders. Our full-service, community-based sleep centre serves a patient population from across Western Canada, and is accredited by the College of Physicians and Surgeons of Alberta to assess, diagnose, and treat the full spectrum of over eighty sleep and fatigue disorders.

Our fully qualified team of clinicians, headed by a board-certified sleep physician, is focused on providing comprehensive, coordinated, inter-disciplinary care in the most convenient, accessible, and cost-effective manner available. We feature a state of the art, four-bedroom, overnight sleep diagnostic facility in a comfortable atmosphere and residential hotel-like setting. We also provide a full-service CPAP clinic and follow-up care program for those patients with sleep apnea and related conditions.



## Canadian Sleep Institute

*Better Health Through Better Sleep*

# Parasomnias

*sleepwalking,  
night tremors,  
grinding teeth,  
sleep talking*

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*Answers to Questions  
and information about  
Parasomnias and Sleep.*

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