



# Sleep Problems in ASD

The prevalence of sleep problems in children is common. Up to 30% of infants, toddlers and young children will have some sleep issue as they grow. This is quite normal and can often be resolved. The types of sleep disorders include:

- Difficulty falling asleep
- Night time waking
- Nightmares
- Night terrors
- Sleep walking
- Obstructive sleep apnoea



Up to 80% of ASD children have sleep problems. Sleep problems seem to be similar across cognitive abilities and different subtypes of autism. Higher functioning ASD children may have more sleep issues than lower functioning children.

***Sleep problems seem to be correlated with a higher incidence of aggression , anxiety and developmental delay.***

## Impact of Sleep Problems in ASD

- Any sleep disturbances contribute to stress and parental sleep deprivation
- In children sleep problems are closely associated with behavioural issues, inattention and hyperactivity
- In ASD, sleep problems seem to be correlated with increased repetitive behaviours and insistence on sameness
- Short sleep duration is associated with higher social skills deficits

## Types of Sleep Disorders in ASD

- Difficulty falling asleep
- Increased night time waking
- Decreased efficiency of sleep (sleep wake cycle disorders)
- Medical conditions such as epilepsy and gastrointestinal issues (gastrointestinal reflux, constipation, abdominal pain, etc.)
- Medications (antiepileptics, psychotropics) may play a role, especially as the medication wears off and there is rebound high activity level
- Some antidepressants may also affect sleep
- Obstructive sleep apnoea may cause airway obstruction and result in disordered breathing during sleep. Characterised by loud snoring may be due to enlarged tonsils or adenoids, obesity or low muscle tone
- Non-rapid eye movement arousal disorders (parasomnias), include night terrors, sleep walking and confusional arousals
- Restless Legs Syndrome, characterised by the urge to move legs prior to falling asleep
- Periodic Limb Movements, characterised by repetitive stereotypic movements of the limbs during sleep



**Having your child assessed for underlying medical co morbidities, dietary issues, as well as nutritional deficiencies, can significantly improve your child's sleep and your stress levels.**

## Sleep History

A sleep history can help to detect underlying issues or other co-morbid conditions that may be contributing to the poor sleep patterns. Also a family sleep pattern can be useful. A sleep history can include:

- Time of sleep onset
- Total sleep time
- Energy and mood level on waking (do they need to be dragged out of bed in the morning?)
- Daytime napping, attention, mood
- Electronic devices available in the child's room
- Medications
- Anxiety or depression
- If wakes during the night, able to fall asleep?
- Has there been a change in sleep pattern (may be due to a medical or emotional issue)



## Medical Treatment Considerations

Medical treatment may be necessary if there are underlying co-morbid conditions that are disrupting sleep. These may include:

- Restless Legs Syndrome, needs evaluation of mineral deficiencies
- Obstructive Sleep Apnoea, may need evaluation by a ear, nose and throat (ENT) specialist
- Epilepsy needs assessment by a neurologist
- Gastrointestinal issues, may need to be assessed by a paediatric gastroenterologist. An abdominal x-ray (KUB) can determine if faecal compaction is a contributing factor. A comprehensive Digestive Stool Analysis may identify issues with pathogenic bacteria, parasites or inflammation causing discomfort
- Dental problems should not be overlooked
- Asthma, eczema may be affecting sleep with coughing or scratching at night
- Anxiety issues (a child that is fearful will have more problems falling asleep)

## Non-Medical Interventions

- Implementation of an appropriate sleep pattern (if sleep pattern is irregular, establish a regular sleep pattern, and if sleep onset is later in the night, gradually bring it forward)
- Daytime habits: attention to the amount of and timing of exercise, light exposure, dietary choices, naps in the afternoon, bedroom use (sleep only NOT for play)
- Evening habits: "wind-down" routine, minimising light exposure, consistency of time to bed
- No wrestling or vigorous activity before bed
- Have background "white noise"
- Night light for fearful children
- No electronic gadgets in child's room as they can be highly motivating for the child
- Light snack to help with blood sugar control
- Weighted blanket, although studies haven't shown them to be beneficial, parents do feel that they help sometimes
- Use a visual schedule for each step of the bed time routine
- Social stories about bedtime routine and sleep are available



## Medications and Supplements

- Melatonin is safe and effective for short term use. Studies have shown improvement in sleep onset with minimal side effects.
- Pharmaceutical medications that have been prescribed include atypical antipsychotics, antidepressants and antihypertensives
- Supplements to help control blood sugar levels can help with night waking
- Magnesium is calming and Epsom salt baths before bed time and as part of a night time routine can be helpful
- 5-hydroxytryptophan (5-HTP) may be useful to boost serotonin levels. **Caution:** 5-HTP can exacerbate gut dysbiosis, seek professional advice first
- Herbs such as chamomile, passion flower or skullcap, can help with sleep onset and sleep maintenance. **Caution:** there is a lot of substitution and poor quality products on the market. Only source products from reputable suppliers or practitioners.

### How Much Sleep Do You Really Need?

Age	Sleep Needs
Newborns (0-2 months)	12-18 hours
Infants (3 to 11 months)	14 to 15 hours
Toddlers (1-3 years)	12 to 14 hours
Preschoolers (3-5 years)	11 to 13 hours
School-age children (5-10 years)	10 to 11 hours
Teens (10-17)	8.5-9.25 hours
Adults	7-9 hours

Source: National Sleep Foundation