

SLEEP SOLUTIONS

Understanding Sleep Problems

Children with autism spectrum disorder (ASD) are at higher risk to have sleep problems. More research is needed in this area to better understand the nature of these problems.



Types of sleep problems:

These first two problems also occur in the general (typical) childhood population.

- Delayed Onset - difficulty falling asleep. This may be related to inconsistent bedtimes, inconsistent bedtime routines, bedtime fears, or naps.
- Night Wakings - difficulty maintaining sleep or falling back to sleep at night. This may be related to behavioural insomnia, non-adaptive sleep (if the conditions in which the child fell asleep are not the same as when they wake up, the child will remain awake), poor limit setting or irregular sleep patterns.

The following occur more specifically for children with ASD.

- Reduced Melatonin production - some children with ASD have reduced Melatonin production. There has also been research to support that children with decreased Melatonin may also have more severe behaviour and difficulties with language.
- Sleep is regulated by the two processes of 1) homeostasis - daily physical routines and predictability of daily events - meals, etc. and 2) circadian rhythm - response to light and dark signals of day and night. It is possible that children with ASD do not sense the social and biological cues around them.
- Children with ASD may exhibit increased arousal levels and anxiety which may affect their sleep.
- Children with ASD may have different “sleep architecture” - their cycles of light sleep and deep sleep may be different. Typically, the first couple hours of sleep are felt to be the most restorative.
- Children with ASD may have more movements in sleep.
- Restless leg syndrome (RLS) is more common in children with ASD. This is a neurological disorder in which the leg feels uncomfortable and the child has the urge to move it. This may affect the ability to fall to sleep. Reduced iron may be the cause of RLS. Children with ASD often have low iron. This should be discussed with a physician.

Creating Healthy Sleep Habits



It is important to address sleep disturbances because when a child does not sleep well, it leads to family stress, parent sleep deprivation and does not allow the child to function as effectively in their day.

It is also important to consult the child's physician. If possible, optimize sleep hygiene before using medications. Melatonin can help some children regulate their circadian rhythms and reset their biological clock. Discuss this with the physician.

The following evidenced-based treatment of sleep disorders for Behavioural Insomnia of Childhood can often be effective in helping children with ASD establish healthy sleeping habits.

Daily Routines:

- Establish a consistent bedtime and wake time each day (within an hour, even on weekends)
- Establish regular meal times - important homeostasis/circadian cue
- Provide regular physical activity
- Provide outdoor time every day

Before Bedtime Routine:

- Calm activities 1 hour before bed time
- No TV, computer, or video games 1 hour before bed time
- No caffeine for 6 hour before bedtime
- No active play before bed

Bedtime Routine:

- Same each night - predictable
- Routine should last 30-45 minutes
- 3-4 relaxing activities
- End with a favourite activity in bed
- Use a visual chart or visual schedule for the bedtime routine

Sleep Environment:

- Comfortable, cool, quiet
- The same all night
- Use bed only for sleeping (not for playing at other times of the day)
- No electronics in the bedroom

Saying Goodnight:

- Use the same phrase each night
- Tell the child he needs to go to sleep
- Holding a comfort object - transition object might help
- Sensory strategies may help - ask your OT for specific advice
 - Weighted blanket
 - White noise (fan, humidifier)
 - Tuck blankets around child snugly
 - Use a body pillow against the child on one or both sides of body
 - Provide firm pressure touch, massage, firm but gentle squeezes, or pillow squeezes to the child's arms, legs and body (Proprioceptive input is calming to the nervous system and can help to prepare a child for sleep)
 - Teach taking deep breaths, breathe slowly and deeply together
 - Create a cozy space - some parents have placed tents or canopies over the bed or tucked the bed into a corner of the room or even placed the head of the bed in a closet.

