



Sleep Toolkit

Vanderbilt University Nashville, Tennessee





Sleep Toolkit

This *Sleep Toolkit* was developed with funds from the Autism Intervention Research Network on Physical Health (AIR-P).

The *Sleep Toolkit* is designed to provide the practitioner with all of the necessary materials with which to conduct sleep education sessions. The *Sleep Toolkit* includes copies of the Autism Treatment Network (ATN) sleep intervention pamphlet, the ATN sleep log, a series of tip sheets, sample bedtime schedules, sample bedtime passes, and the materials with which to create a limited number of individualized bedtime schedules and bedtime passes. Master copies of each item are also provided. Additional copies of all materials may be downloaded from the ATN website <u>www.atninternal.org</u>

We hope you find this toolkit useful in your practice. We welcome feedback on how to make it even better. Please contact Kim Frank at <u>kim.frank@vanderbilt.edu</u> or Beth Malow at <u>beth.malow@vanderbilt.edu</u> with comments or suggestions.

Introduction:

Sleep problems-- either trouble falling asleep, staying asleep, or early morning waking, are common problems in typically developing children and in children with Autism Spectrum Disorders (ASD). There are some causes of sleep problems which need further evaluation and treatment from a sleep specialist. Many parents can help their children develop better sleep patterns by sticking to the suggestions described below. This handout includes information for you about sleep. To help your child sleep better, you may need to improve your child's 'sleep hygiene' (sleep habits). This can mean changes to your child's sleep setting and how you talk with your child at bedtime and during night waking. The steps are for children of all ages, but some of the suggestions (such as avoiding naps) are only fitting to older children who no longer need naps.

The following suggestions are based on both research and clinical experience of sleep experts. The suggestions may help your child to get a better night sleep.

- 1. The areas to consider include the following:
- 2. Providing a comfortable sleep setting
- 3. Establishing regular bedtime habits
- 4. Keeping a regular schedule
- 5. Teaching your child to fall asleep alone
- 6. Avoiding naps (in children who have outgrown the need for a daytime nap)
- 7. Encourage daytime activities that promote a better sleep/wake schedule

Providing a comfortable sleep setting

It is important to create a safe, quiet sleeping setting for your child. Wherever your child sleeps, there should be a space at night to sleep that is his/her own. This may be part of a shared bed or the child's own bed, but it should be the same each night.

The bedroom should be comfortable (not too hot and not too cold), quiet, and dark. If the room is too dark, add a dim night light to your child's bedroom and leave it on all night. If there is light coming into the room from street lights or sunlight in the morning, consider adding heavier curtains to cover the windows.

The room should be quiet at night. Some children may like a 'white noise' or background low quiet sound like a ceiling fan or air filter. It is best to avoid things like the radio, television or music when he/she is falling asleep at night. The reason for this is when noises like these stop during the night, it may wake up your child. Also, think about other noise in your house at night when you child is going to bed. There should not be noise from other siblings, or from television, computers, video games or music in nearby rooms.







Children with ASD may be more aware of noises at night that do not bother other children. Things such as water running or other household noises can affect sleep. Children with ASD may have sensory problems to things like textures of bedding and pajamas. Try to find out if these things are affecting your child; (for example, does he prefer tight or loose pajamas, or light or heavy covers?)

Establishing regular bedtime habits

Establish bedtime habits that are short, predictable, and expected. A good routine will help teach your child how to relax and get ready for sleep. The routine should include activities which are calming to your child. The stability of the routine will be calming to your child each night. Stay away from things before bedtime such as exciting television programs, movies/videos/electronic games, computers, loud music, or bright lights. It is best to avoid activities like running, jumping or rough housing.

The routine should be started 15 to 60 minutes before the set bedtime. A younger child would have a shorter routine (e.g. 15 minutes at one year of age) and this will increase as your child grows. However, the routine should not be more than 60 minutes. It is important that you, your partner and other caregivers to each follow the set routine. It may be helpful to take turns. The more regular the routine from one night to the next, the easier it will be for your child to settle at night to sleep.

The following are some simple tips about the bedtime routine:

- 1. It should be in the child's bedroom where it is quiet (other than bathing/teeth brushing activities).
- 2. When the routine is done in the same order each night, your child will be calmed with the same routine each night.
- 3. The routine can include: taking a bath, getting into pajamas, brushing teeth, reading a book, singing a song, listening to soft and calming music.
- 4. Young children or children with ASD may benefit from a visual schedule or "to-do list" (for example, pictures, words, or both of the routine in order) to help remind them of each step. This will help your child see that each night his/her bedtime routine will be in the same events in the same order each night. A visual schedule will also assist other family members and caregivers of the order of the routine.
- 5. Determine which events are calming and which events are stimulating for your child. Those events that are calming for your child should be part of the bedtime routine habit. Events that are stimulating should be moved to an earlier time in the evening. For example, if your child finds bathing stimulating rather than relaxing, move this event to an earlier time in the evening.

Keeping a regular schedule

As much as possible (given the changes that go along with daily life), your child should have a bedtime and wake time that is the same 7 days per week. Pick a bedtime that works for your child's age. The



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bedtime should be one that works well with your own evening schedule to help with a constant routine each night. In many children (and adults), we tend to get a "second wind" in the hour before bedtime, and may have trouble falling asleep if we go to bed too early. If your child takes more than an hour to fall asleep, think about putting off bedtime by 30 minutes to 1 hour to try to help with sleep.

Bedtime will become later as your child grows, but it should always be set to allow enough sleep each day. Older children will also begin to stay up later and sleep later on weekends. Try to keep their schedule no more than one hour later for bedtime and one hour later for waking on weekends. Even if your child goes to sleep late at times, keep the same wake time and not more than one hour later than the normal wake time. Although it may seem better to let your child 'sleep in' and catch up on sleep, the more regular the wake time, the better sleep will be.

If your child is younger and has a daytime nap, keep the nap times on a regular schedule. When possible, the nap should be in the child's bedroom. Wake your child by 4 pm from afternoon naps or it will be hard for him to fall asleep at bedtime.

Additional key points for setting a routine for your child are the time meals are served and exposure to sunlight. Your child should eat breakfast each morning at around the same time, both on weekdays and weekend days. At the end of the day, you should not give your child heavy meals or large snacks late at night. However, a light snack with carbohydrates (for example, cheese and crackers, or fruit) may help your child fall asleep more easily.

Exposure to sunlight in the morning, and keeping the room dark at night also helps keep a regular schedule. When your child wakes up in the morning, open the curtains and let natural sunlight come into the home. At night, if your child goes to sleep while it is daylight, make sure the areas for bedtime routine and bedroom are dark.

Teaching your child to fall asleep alone

Your child should learn to fall asleep alone in his own bed without you being present. This is because both children and adults naturally wake up several times each night. Each time we wake up, we briefly check out our sleep environment and then quickly go back to sleep. These waking are so brief, that we are not aware in the morning that we woke at all. However, if your child can't fall asleep alone, then each time he/she wakes up, it is hard to fall back asleep without your help. If your child learns to fall asleep alone, then he/she will also be able to learn to fall back asleep at times of natural night waking, and wake more rested in the morning.

If your child is not able to fall asleep alone, you need to slowly teach him/her to do this. You will find may find techniques in parenting books about sleep. The idea of these techniques is that over time (usually 1-3 weeks) you give your child the message that you are still present but reducing your contact at bedtime. An example of how you might do this is the following. If you usually lie down with your child at night at bedtime, you could change your pattern by sitting on the bed for a few nights and then in a chair beside the bed. Continue sitting in the chair but moving it farther from the bed each night until you are out of the room and out of visual contact with your child and out of the bedroom. While



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you are making these changes, reduce the amount of attention you pay to your child such as talking, facial expressions, or eye contact.

Once you are out of your child's bedroom, if he/she is upset and not sleeping, you can wait a few minutes, and then go back into the room to check. When you go into the room, make it a brief visit (less than a minute) and only give limited physical or verbal contact (for example,. a quick hug). Gently but firmly say something like "It is time for bed. You are OK. Good night." and then leave the room. If you need to go back into the room, wait longer each time and make each visit with your child brief. Once your child is able to fall asleep alone, then you can use the same techniques you used to teach him to fall asleep, if he/she wakes in the night, or before wake time in the morning.

With older children who wake up many times, you can use a bedtime pass. This can be a card that your child can present to you if he/she wakes at night. It can be traded for something brief, such as a quick hug or a drink of water. Your child should be taught that they may only use the pass one time during the night, and that once the pass is used, it will be given to you. You will return the pass to the child the following night to use again for one time during the night. Your child should also be taught that if the pass isn't used all night, it can be used for a morning present. You can also give the child a sticker that can be used for a present once a certain number of stickers (e.g. five) have been earned. The presents can be dollar-store items or a special outing with you.

Avoiding naps

Avoid naps during the day. There will be special times (for example, if your child is ill) that he/she needs a nap. However, in general, if your child is older and has outgrown the need for a daytime nap, sleeping during the day will make it harder to keep the bedtime sleep routine at night.

Encourage daytime activities that promote a better sleep/wake schedule

Remember that your child's sleep at night will be also affected by daytime activities and caffeinated foods and beverages.

Activities: Exercise during the day helps your child sleep better at night. Children and adults who exercise find it easier to fall asleep at night and have deeper sleep. If your child does not get regular exercise at school, try to schedule this at home. Make sure the time for exercise is early in the day, as stimulating exercise, close to bedtime may make it harder to fall asleep. Be sure all hard or tiring activity ends two to three hours prior to bedtime.

Caffeinated foods and beverages: Caffeine is a stimulant which can cause an 'alerting effect' and keep your child awake at night. If your child has caffeinated foods or beverages (e.g. chocolate, coffee, tea, and coca-cola products) in the afternoon or evening, the effect of caffeine stays in the body for 3 to 5 hours and up to 12 hours. Some children sleep best by taking these products completely out of their diet. Your child may be able to sleep as long as he avoids caffeinated foods or beverages several hours before bedtime.







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Conclusion

Sleep problems are common in children with ASD. Many children with ASD, similar to typically developing children, will respond to changes in sleep 'hygiene' as described above. In fact, children with ASD may respond to some of these suggestions easier than typically developing children, because of their need for routines and rituals. If you cannot stick to these steps or his/her sleep remains disturbed, you should talk to your child's doctor to find out if a meeting with a sleep specialist is needed.

Acknowledgement:

This document was developed by Shelly K. Weiss, MD, FRCPC, Child Neurologist at the Hospital for Sick Children (SickKids), University of Toronto, Toronto, Ontario, Canada and Beth Ann Malow, MD, MS, Neurologist and Director of the Sleep Disorders Program of Vanderbilt University, Nashville Tennessee, as a product of the Autism Treatment Network (ATN), a program of Autism Speaks. The valuable assistance of the members of the ATN Sleep Disorders Subcommittee in reviewing. This document is gratefully acknowledged. (July 2008) The bedtime pass concept was developed by Dr. Patrick Friman.







Teaching a Schedule for a Bedtime Routine

Resources for Materials

- Personal photographs
- Generic photographs
 O Picture This (www.silverliningmm.com)
- Line Drawings
 - Boardmaker (www.mayerjohnson.com)
 www.kidaccess.com
- Objects (actual toothbrush, wash cloth, etc)
- Create a visual bedtime schedule that the child will understand. Some children understand checklists; others need pictures or photographs.
- Limit the number of activities included within the routine. The routine should generally take about 30 minutes or less for the child to complete. Examples are provided below.
- Place stimulating and/or difficult activities early in the evening before the bedtime routine begins. Examples include videos (while enjoyable, they stimulate children), computer/ video games...etc.
- Place relaxing and enjoyable activities at the end of the routine, closer to bedtime. Examples include reading a book, listening to quiet music, etc. Keep in mind, some activities are stimulating for some people and not for others.

- Place the schedule in the area where the routine is performed and at a height that will enable the child to reach each item.
- Choose one cue to let the child know it is time to check his/her schedule, and use this cue consistently. Examples of cues include: "Time for bed." "What's next?"
- Initially, the child may need to be prompted to use the schedule. Stand behind the child and physically guide the child to the schedule. Limit verbal instructions. Use the visual schedule to communicate the sequence of activities.
- Only the child should manipulate the schedule. Guide the child's hand to the schedule, so that the child, not the adult, checks items off the checklist or moves pictures on the schedule.
- Use the same icon consistently to represent the same activity. For example, use only one bath icon to represent "bath time," only one bed icon to represent "going to bed"...etc.
- Reward the child for following his/her schedule appropriately. Rewards can be provided while following the schedule ("Thank you for using your schedule," paired with back rubs, small snack, etc.) and when arriving at the correct location ("You are doing a great job using your schedule," paired with tickles, preferred toy/snack, etc).







QUICK TIPS

Bedtime Pass

Some children have a difficult time staying in bed. The parent puts the child to bed and, before you know it, the child is crying out or up again. One effective tool to help children learn to stay in bed is the **bedtime pass**¹ (Friman, Hoff, Schnoes, Freeman, Woods, & Blum, 1999). A bedtime pass is a card that is given to the child at bedtime that may be exchanged for one "free" trip out of bed or one parent visit. If the child does not use the card during the night, he/she may exchange the card for a special reward in the morning. If the child gets out of bed after surrendering the bedtime pass, the parent is instructed to take the child back to bed with as little attention as possible. The goal of the bedtime pass is to teach the child to stay in bed.

¹Friman, P., Hoff, K., Schnoes, C., Freeman, K., Woods, D., & Blum, N. (1999). The bedtime pass: An approach to bedtime crying and leaving the room. *Archives of Pediatric and Adolescent Medicine*, *153*, *1027-1029*.

How Do I Use the Pass?

- 1. Show your child the bedtime pass and explain how it works (or read sample story provided with your child).
- 2. Involve your child in identifying possible rewards that may be earned by holding onto the pass.
- 3. At bedtime, give the child the pass. You may need to remind him/her how it works and/or reread the story.
- 4. If the child gets out of bed or requests a parent visit, calmly respond to his/her needs and take the pass.
- 5. If child gets out of bed after surrendering the pass, take the child back to bed with as little attention as possible.
- 6. When the child keeps the pass all night, provide a reward first thing in the morning. Always pair rewards with lots of praise. As the child experiences success keeping the pass, it may be possible to reward the child with stickers (on a sticker chart) or checks (on a point system) and gradually delay big rewards.

Sample Story to Support Bedtime Pass

People need sleep. Sleep helps people feel rested and have more energy. Sleep helps people stay calm during the day. Sleep helps people do better in school.

My parents want to help me get a good night sleep. They want me to be rested, calm, and do well in school. My parents have made a bedtime pass to help me. They will give me the bedtime pass when I go to bed. The bedtime pass is like a ticket. If I need anything extra, I have to trade the bedtime pass. If I ask for a drink of water or get out of bed, I have to give my parent the bedtime pass. When I stay in bed all night, I get to keep the pass. This is a good thing! In the morning I can trade the bedtime pass for something really special.

A good night sleep will help me be rested, feel better, and do well in school. My parents like it when I get a good night sleep.

Sample Visual Bedtime Pass







Bedtime Routine

- Take a shower
- Wash hair
- Put on pajamas
- Get a drink
- □ Go to the bathroom
- Brush teeth
- Read with Mom
- □ Go to bed
- □ Go to sleep



Sample Visual Bedtime Routine













Lotion	Massage	Rocking chair
	All	
Brush	Press button on watch	Bedtime pass
	C 9:00 1	
Hug & kiss goodnight	Lights off	Weighted blanket
	OFF Ø	





Choices	Listen to music	Sing songs
Draw	Puzzle	Read a book

















ATN SLEEP LOG

TWO WEEK SLEEP DIARY FOR (Name) _

1. Answer the questions in the shaded areas.

2. Draw a line through the times your child was asleep (include naps). Each box represents one hour.

3. Put down arrow (\downarrow) at the times your child went to bed and up arrow (\uparrow) at times your child got out of bed.

Example:

Date Day	Day 1									1				\mathbf{T}					$\overline{\Lambda}$		
Date	Date Day 1				+																
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Date	Day 2																				
Date	Date Day 2								_												
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Rating Scale:

1=Poor 2=Fair 3=Good

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Date	Day	6:00 pm	7:00 pm	8:00 pm	9:00 pm	10:00 pm	11:00 pm	12:00 am	1:00 am	2:00 am	3:00 am	4:00 am	5:00 am	6:00 am	7:00 am	8:00 am	9:00 am	10:00 am	11:00 am	12:00 pm	1:00 pm	2:00 pm	3:00 pm	4:00 pm	5:00 pm	Rate your child's quality of sleep	Rate your child's level of quality of alertness	Rate your child's mood on awakening
	Day 1																											
	Day 2																											
	Day 3																											
	Day 4																											
	Day 5																											
	Day 6																											
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	Day 14																											

COMMENTS:





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