• We will be using Facebook Live

• Please communicate with us through Facebook Comments

• We will be monitoring comments for questions to answer at the end of the presentation
If your child with ASD is experiencing sleep problems, talk with your provider.

Hopefully, this discussion can help guide that conversation
Importance of Sleep

- Recharging and resetting for the next day
- Reorganizing memories and new information
- “Deleting” unnecessary information
- Release of growth hormone (growing and repairing)
Poor sleep associated with -

- Poor emotional regulation
- Inattention/Hyperactivity
- Problems with memory
- Immune system dysfunction
- Increased risk-taking behavior
- Social delays
- Delayed nonverbal skills
Circadian Rhythm

• “Master clock” keeping track of all our mental and physical processes. Sleep is one process.

• Typically:
  • Morning sunlight triggers the brain to release chemicals which promote alertness (e.g. histamine)
  • Sunset signals the brain to shut down alertness centers and release melatonin, a hormone which promotes sleep
  • Melatonin levels drop in the early morning, signaling the brain to wake up, and remain low throughout the day.
  • Sleep rhythm can be disrupted by medications, light exposure or deprivation, or travel as well as by several other factors.
Sleep Problems in ASD

• 70%–75% of children with ASD compared with 45%–50% of children without ASD
• More chronic in nature than in children without ASD
• Suggested to be result of genetic factors affecting internal clock and melatonin levels
• Likely combination of biological, psychological, medical, social, and environmental factors
Common Concerns

- Trouble falling asleep
- Delayed sleep phase
- Waking in the night*
- Resisting bedtime

- Trouble waking in the morning
- Waking early in the morning
- Restless sleep
Night Waking

Night waking is just as common in children with ASD as it is in typically developing children; however, children with ASD tend to have more behaviors associated with their night wakings.

- Laughing/talking to self
- Playing with toys/objects
- Screaming
- Wandering
- Attempting to access food/devices
Causes of Sleep Problems

• Medical

• Environmental

• Behavioral
Medical Factors

- Restless leg syndrome
- Sleep apnea or other breathing problems like asthma
- Illness
- Pain/discomfort (headache, toothache, itching, belly pain/constipation, reflux)
- Anxiety or depression
- Seizures
Some medical causes are easy to identify and address. Others may require a specialist or lab testing.
Environmental Factors

- Temperature
- Light
- Sound
- Texture
- Smells
- Objects/activities
- People
Behavioral Factors

- Bedtime routines*
- Screen time
- Balanced activity during the day
- Diet
- Naps during the day, Time in bed
- Habits formed through accidental reinforcement
What medical, environmental, or behavioral factors might be contributing to your child’s sleep problem?
How do I start?

- Identify the specific concern (waking at night, trouble falling asleep... etc.)
- Establish realistic expectations and goals
- Consider keeping a sleep journal to identify patterns
- Practice good sleep hygiene*
Sleep Hygiene
The practices and habits that enable good sleep

• Early morning sunlight
• Exercise
• Limit caffeine and sugar
• Avoid screens for 60 minutes before bed
• Bedtime routine with calming activities before bed*
• Same bedtime and wake time every day
• Consider sensory needs
Behavior Strategies

- Visual schedule
- Bedtime pass
- Morning reward for staying in bed
- Checking in
- Slow transitioning to own room
- Delayed bedtime with gradual adjustment (15 min)
- “Brief and Boring” nighttime interactions
- Expect “post-extinction burst”
- Consistency
Example of a Bedtime Routine

- Take a bath
- Put on pj's
- Brush teeth
- Read a book
- Go to bed
Bedtime Pass

Exchange once for:

- 1 visit from parent
- 1 drink of water
- 1 nighttime hug
- 1 nighttime kiss

Autism Speaks, Sleep Toolkit, [www.autismspeaks.org](http://www.autismspeaks.org)
# Sleep Log

## Pediatric Sleep Log

**Your child's name:**

**Date of birth:**

### Instructions:
- Do the best you can tracking your child's sleep over the next 2 weeks, it doesn't have to be perfect.
- Use up and down arrows only at bedtime. Use : to mark when your child went to bed. Use . to mark times that your child woke up in the morning.
- Only shade in the periods when your child was actually asleep.
- In the comments section indicate time of any medicines given and time/amount of any caffeine they had.

### Example:
- Day 1: Went to bed at 9 p.m., fell asleep at 9 p.m., woke up at 1 a.m., fell back asleep at 2 a.m., then woke up at 6 a.m. Took a nap from 1 p.m. to 3 p.m.
- Day 2: Went to bed at 10 p.m., but didn't fall asleep until 11 p.m., no nighttime awakenings, woke up at 5 a.m., nap from 1 p.m. to 3 p.m.

| Date | Day | 6 p.m. | 8 p.m. | 10 p.m. | 12 a.m. | 2 a.m. | 4 a.m. | 6 a.m. | 8 a.m. | 10 a.m. | 12 p.m. | 2 p.m. | 4 p.m. | Comments (Meds/Caffeine) |
|------|-----|--------|--------|---------|---------|--------|--------|--------|--------|---------|---------|--------|-------------------------|
| 1    |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 2    |     |        |        |         |         |        |        |        |        |         |         |        |                          |

### Your log

| Date | Day | 6 p.m. | 8 p.m. | 10 p.m. | 12 a.m. | 2 a.m. | 4 a.m. | 6 a.m. | 8 a.m. | 10 a.m. | 12 p.m. | 2 p.m. | 4 p.m. | Comments (Meds/Caffeine) |
|------|-----|--------|--------|---------|---------|--------|--------|--------|--------|---------|---------|--------|-------------------------|
| 1    |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 2    |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 3    |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 4    |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 5    |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 6    |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 7    |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 8    |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 9    |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 10   |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 11   |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 12   |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 13   |     |        |        |         |         |        |        |        |        |         |         |        |                          |
| 14   |     |        |        |         |         |        |        |        |        |         |         |        |                          |

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*Seattle Children's Hospital Research Foundation*

**Sleep Disorders Program**
Do not expect to do everything at once! Pick one strategy at a time.
Medications

- Melatonin
- Clonidine
- Guanfacine
- Trazodone
- Gabapentin
- Medications for anxiety/depression
- Medications for other health problems
Any Questions?
References


