

MARCH 2018

SNOHOMISH COUNTY CHILD HEALTH NOTES

Promoting early identification and partnerships between families, primary health care providers & the community

Distributed by: Children with Special Health Care Needs

Contributors: Washington State Department of Health and UW Center on Human Development & Disability. Contributing content editor: Cara Pierson, MN, ARNP, Seattle Children's Autism Center. Issue & Content editor: Sophie Lu, MN, ARNP, UW CHDD. Reviewers: Appalachia Martine, RN, BSN, Community Health Nurse II, Thurston County Public Health & Social Services; Bonnie Peterson, RN, CSHCN Coordinator for Thurston County; Ellen Silverman, RN & PhD, Nurse Consultant, Public Health, Healthy Starts & Transitions including CSHCN; Sharon Feucht, MA, RDN, CD, UW CHDD and editor of Nutrition Focus Newsletter.

Health Management of Children with Autism Spectrum Disorder: Co-Occurring Gastrointestinal Problems and Sleep Disorders

Primary care providers have an important role in the management of health problems associated with autism spectrum disorder (ASD). GI and sleep issues are two of the most common health concerns reported by parents of children with ASD, and they often co-occur together. Children with ASD are 3 times more likely to suffer one or more chronic gastrointestinal (GI) problems and over 50% have one or more chronic sleep disturbances. It is recommended that GI and sleep problems be included in the review of systems at each primary care appointment.



Gastrointestinal Problems and ASD

Problem: Gastrointestinal (GI) disorders rank among the most common medical conditions associated with autism. The relationship between GI problems and ASD is not fully clear at this time, however, recent research found higher levels of *Clostridia* in children with ASD compared to children without ASD. There is a higher incidence of GI issues in children with ASD compared to other children. They also appear to be associated with increased psychiatric co-morbidity and greater intensity of behavioral symptoms among children with ASD. Many

children with ASD (including those who are verbal) cannot clearly communicate their symptoms or discomfort, and may express their distress in exaggerated behaviors and irritability. This causes stress for the entire family.

Common Presenting Concerns: Chronic constipation is the most commonly reported GI concern, followed by chronic diarrhea, painful stooling, gastroesophageal reflux, vomiting, bloating, and abdominal pain.

Management Considerations:

- Evaluate as any other child with a targeted history, physical examination, and further work-up as needed.
- Elicit toilet training history and dietary intake to detect toilet training resistance or feeding problems. (These issues may trigger GI problems *and/or* be exacerbated by them.)
- Chronic constipation may require aggressive treatment including home-based “clean-outs.”
- Signs that a non- or minimally verbal child may have GI discomfort are bruxism, back arching, and pressing on the abdomen. There may also be an increase of self-soothing repetitive behaviors or more aggressive or challenging behaviors.

Consider Referral:

- To a pediatric gastroenterologist for consultation or evaluation for unresponsive chronic GI symptoms.
- To a pediatric nutritionist and/or feeding therapist for consultation regarding the child's diet, nutrition, and eating behavior.

Practice Pearls:

- Some families choose a gluten- and casein-free (or “GF/CF”) diet as a complementary or alternative autism treatment for their child. Current research studies have found little evidence supporting this treatment as efficacious for reducing the symptoms of ASD. Testing can be helpful to clarify whether a true food intolerance is present.
- Some psychotropic medications are associated with GI side effects and/or weight gain.

Sleep Problems and ASD



Problem: Sleep disorders are prevalent among children with ASD and are associated with poorer behavioral and functional outcomes in this population. Recent research suggests that there is a biological component to the sleep difficulties including gene mutations in genes that regulate circadian rhythms, possible decreased REM sleep cycle duration compared to peers without ASD, and possible lower levels of melatonin production compared to peers without ASD. Secondary consequences of poor child sleep include parental exhaustion, disruption of family life, and reduced daytime functional and behavioral performance of all family members.

Common Presenting Concerns: Difficulty with sleep onset and/or maintenance are frequently reported. Other concerns include irregular sleep-wake patterns, early morning awakenings, and poor sleep routines.

Management Considerations:

- Inquire about the adequacy of sleep for all family members at each primary health care appointment.
- Take a complete history of bedtime routine, sleep latency, nighttime awakenings, and caregiver responses. Consider asking family to keep a 1- to 2-week sleep diary.
- Rule out medical contributors to poor sleep, including obstructive sleep apnea, gastroesophageal reflux, and medication side effects.
- Behavioral interventions should always be considered for addressing child sleep disturbances. Discuss good sleep hygiene practices: consistent bedtime, soothing and predictable bedtime routines, bedroom conducive to sleep, avoiding screen time prior to bed, and bed not used for non-sleep activity such as play or time-out. Help the family establish strategies for responding to child's bedtime and nighttime waking behavior and monitor implementation.
- Medication for sleep may also need to be considered.

Consider Referral:

- To appropriate pediatric specialists for consultation or evaluation if medical contributions are suspected.
- To a developmental pediatrician, developmental pediatric advanced practice provider, or pediatric psychologist experienced in working with children with ASD and implementation of practical behavioral strategies.

Practice Pearl:

- Consider screening for other conditions that commonly co-occur with ASD and may play a role in sleep problems: seizures, atopic conditions, anxiety, inattention/impulsivity, and sensory processing difficulties.

References

- Autism Speaks. (2017). [Autism and Health: A Special Report](#) By Autism Speaks, Advances in Understanding and Treating the Health Conditions that Frequently Accompany Autism.
- Chaidez V, Hansen RL, Hertz-Picciotto I. Gastrointestinal problems in children with autism, developmental delays or typical development. *Journal of autism and developmental disorders*. 2014;44 (5):1117-1127. doi:10.1007/s10803-013-1973-x.
- McElhanon, B. O., McCracken, C., Karpen, S., & Sharp, W. G. (2014). [Gastrointestinal Symptoms in Autism Spectrum Disorder: A Meta-analysis](#). *Pediatrics*, 133(5), 872-883. doi:10.1542/pedS.2013-3995
- Moore, M., Evans, V., Hanvey, G., & Johnson, C. (2017). [Assessment of Sleep in Children with Autism Spectrum Disorder](#). *Children*, 4(8), 72. doi:10.3390/children4080072
- Nikolov, R., Bearss, K., Lettinga, J., Erickson, C., Rodowski, M., Aman, M., & Scahill, L. (2009). Gastrointestinal symptoms in a sample of children with pervasive developmental disorders. *Journal of Autism & Developmental Disorders*, 39(3), 405-413. doi:10.1007/s10803-008-0637-8

Snohomish County Special Needs Information and Resources

WithinReach Family Health Hotline:

Developmental screening, community resources, and child development referrals

1.800.322.2588, 1.800.833.6388 TTD
English/Spanish and telephonic interpretation languages available
www.parenthelp123.org

ARC, Parent to Parent:

Family Support

425.258.2459, ext 111

Children and Youth with Special Health Care Needs:

Serves children birth to age 18. Public Health Nurses help families access healthcare and other services

425.339.8652

For children birth to three contact:

Snohomish County Early Intervention Program
Child development assessments and referrals to specialists

425.388.7402
EarlyInterventionProgram@snoco.org

For children 3 and over contact the local school district:

Child development assessments and referrals to specialists

<i>District:</i>	<i>Contact</i>	<i>Phone</i>	<i>District:</i>	<i>Contact</i>	<i>Phone</i>
Arlington	Susan Queirolo	360.618.6266	Darrington	Val Cook	360.436.2150
Edmonds	Debbie Rothfus	425.431.7555	Everett	Laurie Cwikla	425.385.5264
Granite Falls	Nancie Wilder	360.283.4311	Index	Linda Tate	360.793.1330
Lake Stevens	Janet Rich	425.335.1520	Lakewood	Jim Roan	360.652.4501 x3029
Marysville	Cathy Fridrich	360.653.0825	Monroe	Heidi Dalton	360.804.2600
Mukilteo	Belinda Kelly	425.356.1204	Northshore	Shelly Fields	425.408.5594
Snohomish	Marian Sherwood	360.563.7310	Stanwood	Lynn Currey	360.629.1250
Sultan	Cyd Leahy	360.793-9801 x125			

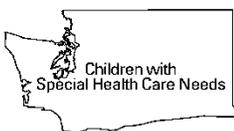
ASD RESOURCES

Regional

- ◆ WA State Nutrition Network for CSHCN <http://depts.washington.edu/cshcnnet/>
- ◆ Families for Effective Autism Treatment (FEAT) of Washington.....www.featwa.org
- ◆ Washington Autism Alliance & Advocacy..... <http://www.washingtonautismadvocacy.org>

National

- ◆ AAP Autism Management Guidelines<http://pediatrics.aappublications.org/content/120/5/1162.full>
- ◆ Autism Society of America.....www.autism-society.org
- ◆ Autism Speaks.....www.autismspeaks.org



**Snohomish County
Early Intervention
Program**



**SNOHOMISH
HEALTH DISTRICT**
WWW.SNOHD.ORG

