



# CHILD HEALTH NOTE 2018 1ST Q

## Washington State Medical Home Partnerships Project

Promoting partnerships between primary health care providers, families, and the community to support early identification of children with special needs and comprehensive care within a primary care Medical home.

Distributed by: CLARK COUNTY PUBLIC HEALTH-Children with Special Health Care Needs

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### 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.
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- 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., & Scabhill, 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

## Resources

### Clark County:

- Children Birth through 18 years:
- Children under age three:
- Children age three and older:
- Family to Family support:

Children w/Special Health Care Needs, Public Health—360.397.8440  
Early Support for Infants and Toddlers (ESIT)—360.750.7507  
ESD112—360.750.7500  
Autism Empowerment—360.852.8369

### Regional:

- WA State Nutrition Network for CSHCN
- Families for Effective Autism Treatment (FEAT) of Washington
- Washington Autism Alliance & Advocacy

<http://depts.washington.edu/cshcnut/>  
[www.featwa.org](http://www.featwa.org)

<http://www.washingtonautismadvocacy.org>

### National Resources:

- AAP Autism Management Guidelines
- Autism Society of America
- Autism Speaks

<http://pediatrics.aappublications.org/content/120/5/1162.full>  
[www.autism-society.org](http://www.autism-society.org)  
[www.autismspeaks.org](http://www.autismspeaks.org)

## LOCAL NEWS



### Transforming Healthcare for Children



#### Did you know?

90% of practices which accept Medicaid in Washington State must have a value-based contract by January 1, 2021.

The Transforming Clinical Practice Initiative (TCPi) is a nationwide effort to help clinicians understand and prepare for the transformation of U.S. health care from a pay-for-service model to value-based care. The future of health care is whole person care, using data to inform practice performance, and the right care in the right place at the right time. Medicare is moving to pay for value and quality, and Medicaid isn't far behind.

We invite you to learn more and join our initiative at [pediatrictcpi.org](http://pediatrictcpi.org)



***Sign up for THE GREAT MINDS training and/or Adolescent and Caregiver Depression Screening training***

**Who should attend?** Anyone involved with caring for children, including family medicine physicians, pediatricians, naturopathic physicians, PAs, ARNPs, RNs, other primary care providers, medical assistants, and support staff!

### Vancouver

April 7th, 2018

9:00am-1:00PM

\*Breakfast and Lunch will be provided

#### Innovation Services NW

9414 NE Fourth Plain Road  
Vancouver, WA 98662

#### Please RSVP :

<https://www.eventbrite.com/e/great-minds-and-depression-screening-training-vancouver-tickets-42730595361>

**FREE CME**