

# Oral Health Fact Sheet for Dental Professionals

## Children with Attention Deficit Hyperactivity Disorder

*Attention deficit hyperactivity disorder is a behavior disorder with developmentally inappropriate inattention, impulsivity, and hyperactivity. (ICD 9 code 314.01)*

### Prevalence

- Reports are variable 2-18%; school based studies using DSM-IV criteria shows 11-16%; most commonly cited range is 8-10%. ADHD is the most common neurobehavioral disorder of childhood.
- 4:1 boys.
- Diagnosed on the presence of observed behaviors in multiple settings.

### Manifestations

#### Clinical

- Presentation is variable: inattentive, hyperactive, or inattentive/hyperactive types.
- Impulsivity, cognitive inflexibility, hyperactivity, short attention span, aggression, and difficulty with listening, compliance, task completion, work accuracy, and socializing.

#### Oral

- Decreased attention span → poor oral hygiene → potential for increased caries
- Bruxism
- High risk for dental/oral trauma

#### Other Potential Disorders/Concerns

- Oppositional defiant
- Obsessive-compulsive
- Anxiety
- Conduct
- Tic
- Mood (anxiety, depression, bipolar)

### Management

#### Medication

- Prescribed based on symptoms for their intended purpose or used off label for associated conditions.
- Some children will go on medication “holidays” during times when they are not in school. Ask if the child has taken medication, and avoid treatment during periods when child is off normal meds.

#### Hyperactivity

SYMPTOM	MEDICATION	SIDE EFFECTS
Generalized	<i>Stimulants (Ritalin, Adderall) Atomoxetine (Strattera)</i>	Xerostomia, dysgeusia, bruxism Xerostomia
Repetitive Behaviors	<i>Antidepressants (Wellbutrin, Tofranil)</i>	Xerostomia, dysgeusia, stomatitis, gingivitis, glossitis, sialadenitis, bruxism, dysphagia, discolored tongue, and oral edema
Hyperactivity	<i>Antihypertensive (Clonidine, Tenex)</i>	Xerostomia, dysphagia, sialadenitis, dysgeusia

# Children with Attention Deficit Hyperactivity Disorder continued

## Behavioral

Children with ADHD typically have significantly increased incidence in behavior management problems in the dental office.

### Guidance:

- Schedule appointments in the morning or at a time of day when child is least fatigued, most attentive, and best able to remain seated in dental chair.
- Give short, clear instructions directly to child. Give only one instruction at a time.
- Use Tell-Show-Do approach when introducing new procedures.
- Tell child what is expected of him/her during the visit.
- Consider small rewards for appropriate behavior (stickers, etc). Positive reinforcement may be helpful in obtaining compliance.
- Discuss appropriate behavioral interventions with parent. Determine if breaks are necessary during treatment.
- Consider use of nitrous oxide during treatment to manage behavior.

## Dental Treatment and Prevention

- Monitor caries development, bruxism, and dental/oral trauma carefully.

Look for signs of physical abuse during the examination. Note findings in chart and report any suspected abuse to Child Protective Services, as required by law. Abuse is more common in children with developmental disabilities and often manifests in oral trauma.

**Additional information:** [Special Needs Fact Sheets for Providers and Caregivers](#)

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## References

- Bimstein, E., Wilson, J., Guelmann, M., Primosch, R. (2008) Oral characteristics of children with attention-deficit hyperactivity disorder. *Special Care Dentistry*, 28(3): 107-110
- Blomqvist, M., Holmberg, K., Fernell, E., Ek, U., Dahllof, G. (2006) Oral health, dental anxiety, and behavior management problems in children with attention deficit hyperactivity disorder. *European Journal of Oral Sciences*, 114(5): 385-390.
- Clinical practice guideline: diagnosis and evaluation of the child with attention-deficit/hyperactivity disorder. American Academy of Pediatrics. *Pediatrics* 2000; 105:1158-1170.

## Additional Resources

- [NIH Institute for Attention Deficit Hyperactivity Disorder](#)
- [Special Care: an Oral Health Professionals Guide to Serving Young Children with Special Health Care Needs](#)
- [Bright Futures Oral Health Pocket Guide](#)
- [American Academy of Pediatric Dentistry: 2011–2012 Definitions, Oral Health Policies and Clinical Guidelines](#)
- [MCH Resource Center](#)
- [ASTDD-Special Needs](#)
- [Block Oral Disease, MA](#)
- [NOHIC-NIDCR publications](#)
- Free of charge CDE courses: [MCH Oral Health CDE](#) (4 CDE hours); [NIDCR CDE](#) (2 CDE hours)