## Developmental/Medical History Pediatric Sleep Apnea Screening Questionnaire

Sleep problems have been shown to interfere with children's ability to learn. Poor quality sleep can also affect behavior. Obstructive sleep apnea and restless legs syndrome are two relatively common sleep disorders. The questions below are designed to help identify children who may have one or both of these conditions. If you answer yes to one or more of the following questions, this issue should be discussed with your doctor, a sleep medicine doctor, or an ENT physician.

	e statement if you have noticed this about your child. Please see the ons page 2.
1.	Loud snoring, loud breathing, pauses in breathing, snorting or choking sounds
2.	Restless sleep
3.	Overweight
4.	Nasal obstruction, allergies, mouth breathing day and/or night, large tonsils
	Chin thrust upward during sleep, always sleeps on stomach, or sleeps in unusual ositions
	Difficult to get out of bed in morning, more tired than other children, tired or oody in the afternoon or evening
7.	Poor attention span, difficult to focus in school, hyperactive
8.	Teeth clenching/grinding, morning headache, short chin
9. growing p	Frequent movement of legs in the evening and restless sleep (often mistaken for pains)

See reverse side for checklist explanation.

## Checklist Explanation:

- 1. Obstructive sleep apnea—most parents of children with sleep apnea will not observe apneas or pauses in breathing. Loud snoring or breathing indicates that there is at least a partial breathing obstruction and is associated with sleep apnea. However, sleep apnea can also be present in children who do not snore.
- 2. Restless sleep—children with sleep apnea often move after their airway obstructs, so restless sleep is strongly associated with sleep apnea. (Restless sleep can also indicate restless legs—see #9).
- 3 and 4. Children, who are overweight, have chronic nasal obstruction due to allergies, large adenoids, and/or deviated nasal septums are much more likely to have sleep apnea.
- 5. Children with sleep apnea often sleep in odd positions to help hold their airway open. Sleeping with the chin thrust upward is most common (similar to the chin lift performed during CPR). Sleeping on the stomach allows the tongue to fall forward and may help keep the airway open. Some children will sleep propped up on pillows or with their neck contorted to help keep their airway open.
- 6. Sleepiness—many children with sleep disorders don't seem tired. Children often become hyperactive or moody when tired. Hyperactivity and being moody later in the day seem to be better predictors of sleep problems than daytime sleepiness.

Daytime sleepiness, if present after a normal amount of sleep, does indicate that there is a problem. However, the absence of daytime sleepiness doesn't rule out sleep problems.

- 7. Hyperactivity, attention issues: Many children with attention issues or hyperactivity issues have undiagnosed sleep problems.
- 8. Sleep apnea is associated with excessive teeth clenching and grinding and morning headaches. In addition, children with shorter chins (upper teeth project farther than lower teeth) have smaller throats and are more prone to develop sleep apnea.

Question 9—Restless legs

Restless legs definition: Urge to move legs and urge is relieved by moving them. Symptoms are worse at rest and in the evening.

Children with restless legs often sleep restlessly, which causes disrupted sleep and symptoms similar to obstructive sleep apnea.

Restless legs are often caused by iron deficiency. This may not present as anemia, so normal hemoglobin is not helpful. The blood level of serum ferritin should be checked. If the level is <50 (which is still low normal) treatment with supplemental iron will usually improve restless legs symptoms within 3-4 months.

Checklist and information prepared for ISD 192 by Dr. Gerard O'Halloran, ENT; subspecialty certification in Sleep Medicine Lakeville Family Health Medical Clinic, Northfield Hospital American Board of Otolaryngology-Head and Neck Surgery