**Healthy Sleep Healthy Kids**

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| **How much sleep do we need each day?** |
| Infants up to 2 months old: |  14 to 18 hours |
| 3 months to 3 years old: |  12 to 14 hours |
| 3-5 years old: |  11 to 13 hours |
| 5-11 years old: |  10 to 11 hours |
| 12-25 years old: | 8.5 to 9.5 hours |
| 26 years and older: |  7 to 9 hours |

**What are the effects of not getting enough sleep each night?**

Chronic sleep loss (getting just one or two hours less sleep each night) has been connected to:

* Poorer attention and poorer problem solving
* Mood swings, anxiety, depression
* Poorer impulse control and low frustration tolerance
* Increased risk-taking, increased drug use, and riskier sexual activities
* Increased school violence and bullying
* Decreased immune functioning
* Changes in hormones that regulate appetite, increased obesity
* Poorer food choices (more junk food; fewer fruits and vegetables)
* Increased insulin resistance (which increases risk of diabetes)
* Increased automobile accidents
* Poorer academic performance, increased grade failure
* Increased sports injuries

**What can we do to help support healthy sleep?**

* Follow the ABC’s of infant sleep: Alone, on their Back, in a safety-approved Crib.
* Set and enforce healthy bedtimes based on how many hours of sleep is needed.
* No electronics (screens shining in eyes), exercise, or heavy meals too close to bedtime.
* No caffeine for kids. Read labels - caffeine is in more products than we realize.
* See a doctor for suspected sleep problems, heavy snoring, or falling asleep during the day.
* Ask for developmentally appropriate bus pick-up times and school day start times.

**How do school day start times impact sleep?**

Puberty creates a later shift in sleep cycle, causing adolescents to stay up later and sleep later. School start times after 8:30am for adolescents has been endorsed by the American Academy of Pediatrics and other health and education groups. Later start times result in more sleep, which then improves overall health, improves test scores, decreases auto accidents, and reduces disciplinary problems in schools.

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This data sheet was provided by the national non-profit *Start School Later*.

Visit *www.startschoollater.net* for references and more information.





**Healthy School Start Times**

**Recommendation:** School start times after 8:30 am for 6th - 12th grades. Some experts recommend after 9:00 am.

**Sleep needs for ages 12 – 20:**

* Adolescents require 8.5 to 9.25 hours of sleep per night. (Carskadon et al, 1980; Wahlstrom, 2003)
* Less than 10% get the required sleep. Most adolescents sleep 6.75 hours on school nights. (O’Brien, 2005)
* Weekend ‘catching up’ on sleep does not work. (Bergin and Bergin, 2009)

**Puberty’s effect on sleep:**

* Puberty marks a later shift in the circadian rhythm - as measured by melatonin levels in saliva.
* Because of these biological factors adolescents have a difficult time falling asleep before 11pm.
* Therefore early bed times to compensate for early wake times do not work, and instead most teens with early school start times are chronically sleep-deprived. (Crowley et al, 2007: Wahlstrom, 2003)

**Negative effects of chronic sleep deprivation:**

* Increased automobile accidents (Danner and Philips, 2008; NCSDR, 1997)
* Poorer academic performance and grade failure/‘flunking’ a grade level (Kahn et al, 1989)
* Poorer attention and problem solving (Gibson et al, 2006; Kilgore et al, 2007)
* Mood swings, anxiety, depression, low frustration tolerance (Bates et al, 2002; Chorney et al, 2008; Gibson et al, 2006; Kahn et al 2006)
* Increased risk-taking: violence, drug use, sexual activities, unsafe behaviors (O’Brien, 2005)
* Decreased immune functioning (National Sleep Foundation, 2009)
* Obesity, including effects on hormones that regulate appetite (Mitchell et al, 2013; Must and Parisi, 2009; Taheri et al, 2004).
* Increased insulin resistance (Mathews et al, 2012)
* Increased sports injuries (Milewski et al, 2012)

**Some statistics from schools that adopted healthier start times:**

* After Minneapolis public high schools changed from 7:15am to 8:40am (Wahlstrom, 2003):
	+ 5 hours more sleep per week among students with the new later start times
	+ improved attendance, improved enrollment, decreased tardiness
	+ teachers reported less students sleeping in class, quieter hallways, and improved behavior
* In Rhode Island, after middle schools (7/8th grades) adopted later start times from 7:25am to 8:37am:
	+ students got more sleep and reported less daytime sleepiness
	+ improved grades among 7th grade females, and both genders in 8th grade (Wolfson et al, 2007)
* Fayette County, Kentucky (changed from 7:30am to 8:30am)
	+ teen auto accidents decreased 16.5% in the county, while teen auto accidents across the state increased 7.8% - for a combined comparable reduction of 24.3% (Danner and Philips, 2008)

**For further information:**

* *National Center on Sleep Disorders Research* (www.nhlbi.nih.gov/about/ncsdr) - free education materials
* *National Sleep Foundation* (www.sleepfoundation.org) – *Adolescent Sleep Needs* publication
* *Start School Later* (www.startschoollater.net) - nonprofit advocacy group
* *School Start Time* (www.schoolstarttime.org) – compilation of the clinical research

**What you can do:**

* Pass this information on to school administration in your area and ask them to look at the recommendations
* Ask your federal representatives to support a task force to study the clinical data
* Ask your state representatives to support setting healthy parameters

*(This may be copied if all data remains Contact Stacy Simera,LISW-S,SAP - ssimera@aol.com - for references.)*

**References – School Start Times**

**Stacy Simera, MSSA, LISW-S, SAP – ssimera@aol.com**

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