

10 Ways Later MIDDLE and HIGH SCHOOL Start Times Benefit Teens and the Community

1. Healthy School Hours Reduce the Achievement Gap "[D]elaying school start times by one hour, from roughly 7:30 to 8:30, increases standardized test scores by at least 2 percentile points in math and 1 percentile point in reading. The effect is largest for students with below-average test scores, suggesting that later start times would narrow gaps in student achievement."

2. Healthy School Hours Lower Juvenile Crime Rates Juvenile Crime peaks nationwide at 3 p.m., a time that's between the end of school and when parents get home. Police support limiting unsupervised situations at this crucial time. Also, sleep deprived teens are more likely to commit crime due to low self-control. The Maryland Department of Juvenile Services supports later start and release times.

3. Healthy School Hours Help Prevent Car Crashes Drowsy driving is responsible for a significant number of fatal teen crashes. School districts with later morning start times see the teen crash rates decline.

4. Healthy School Hours Reduce Drop-Out Rates School attendance improves, tardiness decreases and graduation rates increase, which helps raise tax revenues and reduce crime and gang activity. When comparing attendance and graduation rates before and after the schools implemented a delayed starting time, the average graduation rate jumped from 79% to 88%, and the average attendance rate went from 90% to 94%.

5. Healthy School Hours Improve Health

Sleep loss has wide-ranging consequences, including obesity, diabetes, cardiovascular disease and hypertension. Sleep deprivation reduces the immune system. With later, healthier school start times, teens experience fewer sports injuries and miss fewer days of school due to illness.

6. Healthy School Hours Are Better for Mental Health Inadequate sleep is linked to depressed mood, anxiety, behavioral problems, alcohol and drug use, risky behaviors and suicidal thoughts.

The Maryland Youth Risk Behavior Survey 2016 (YRBS) shows that 19.5% of Anne Arundel County high school students seriously considered suicide and

16.5% made a plan to do so. The county's numbers are higher than the Maryland average. When able to sleep more:

- Teen attitudes and behavior improve
- Teens report less depression
- Teenage needs for medication decreases

(A cost-benefit analysis prepared for Fairfax County, Virginia, estimates that later start times could save the community \$1.7 million a year in mental health treatment costs.)

7. Healthy School Hours Help Prevent Substance Abuse Increased and adequate sleep decreases risk taking behaviors such alcohol and drug use. The Maryland Youth Risk Behavior Survey 2013 shows that Anne Arundel County high school students have higher rates of substance abuse than the Maryland average across nearly all categories queried.

8. Healthy School Hours Make Streets Safer

With early school start times, many students who are eligible for school bus service opt out and instead drive to school (or are driven by family members), which leads to more cars on the road during morning rush hours. In addition, children walking to schools and bus stops in the predawn darkness are a serious safety risk for both pedestrians and drivers.

9. Healthy School Hours Are Family-Friendly

A year after the city of Minneapolis implemented later start times, students were getting an hour more of sleep per school night, 92 percent of parents were happy with the change, and parents reported improved relationships with their children.

10. Healthy School Hours Benefit the Economy

The potential costs of schools starting after 8:30 a.m. can be recouped in as little as 2-3 years, based on improved academic outcomes (thus increased lifetime earnings) and a reduction in teen drowsy driving accidents.

SOURCES: (1) <http://educationnext.org/do-schools-begin-too-early/> and http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/092011_organize_jacob_rockoff_brief.pdf
(2) www.ncbi.nlm.nih.gov/pubmed/24085558 and <http://www.delmarvanow.com/story/news/local/maryland/2018/02/09/md-juvenile-agency-later-school-hours-crime/323781002/>
(3) www.geico.com/information/autosafety/safety---library/ and <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2603528/pdf/jcsm.4.6.533.pdf>
(4) http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/092011_organize_jacob_rockoff_brief.pdf and [http://www.sleephealthjournal.org/article/S2352-7218\(17\)30002-5/fulltext](http://www.sleephealthjournal.org/article/S2352-7218(17)30002-5/fulltext) McKeever, PM and Clark, L. Delayed high school start times than 8:30 and impact on graduation rates and attendance. *Sleep Health: Journal of the National Sleep Foundation*, 2017;3(2), 119-125.
(5) http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a1.htm?s_cid=mm6430a1_e and <http://www.ncbi.nlm.nih.gov/pubmed/25028798>
(6) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2656315/> Bernert RA, Joiner TE. Sleep disturbances and suicide risk: A review of the literature. *Neuropsychiatric Disease and Treatment*. 2007;3(6):735--743 and <https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx#AnneArundel>
(7) <https://nccd.cdc.gov/youthonline/app/Results.aspx?LID=MD> and <https://www.ncbi.nlm.nih.gov/pubmed/25178930>
(8) <http://startschoolater.pbworks.com/w/page/60412558/Sleep%20Loss%20and%20Accidents%20or%20Injury>
(9) <http://conservancy.umn.edu/bitstream/handle/11299/162769/Impact%20of%20Later%20start%20Time%20Final%20Report.pdf?sequence=1.pdf>
(10) https://www.rand.org/pubs/research_reports/RR2109.html *Maryland specific data unavailable.

