

Adolescent Sleep & Secondary Start Times

**Curriculum/Technology/Student Service Committee
Meeting
Monday, March 18, 2019**



A Change in Start Time at Any Level Affect all Upper Merion Area Parents.

The Upper Merion Area School District Sleep and School Start Time Advisory Committee have four main purposes:

- understand the identified national public health issue of chronic sleep deprivation in adolescents and the contributing factors and consequences;
- educate the community on the topic;
- evaluate the impact on UMASD; and
- present a report and initial recommendation to district administration and, ultimately, the School Board.



Variables to Consider...

Unknown personal impact on families and staff members

Transportation

Extra Curricular Activities

School End Times

Professional Staffing

Instructional Day

Financial – Could have an effect on other programs



What We Have Learned So Far...

Research on Adolescent Sleep



The Problem with Secondary School Start Time

American Academy of Pediatrics (2014) recommends adolescents get 8.5 - 9.5 hours of sleep each night and that HS and MS start no earlier than 8:30 AM

Studies by University of Minnesota (2015), Governors Highway Safety Association (2016), University of Washington (2018) document later school start time result in better school attendance, fewer symptoms of depression, reduction of teen driver automobile crashes, memory consolidation, among other positive effects on adolescent health

“Don’t let the perfect [start time] be the enemy of the good.”

Unionville-Chadds Ford, PASA-PSBA conference, 2018



The Science of Sleep for adolescents

Judith Owens, M.D., presenting at Radnor HS, 2019:

Both sleep time (number of hours) and sleep timing (which hours) are “biological imperatives.” Mature adults should have 8 hours of sleep, while adolescents need roughly 9 hours. Adolescents’ circadian clock is roughly one hour later than a mature adult’s circadian clock, with natural bedtime of 11 PM compared to mature adult at 10 PM.

Ideal sleep time and sleep timing:

Mature Adult = 10 PM - 6 AM

Adolescent = 11 PM - 8 AM



Cost of chronic sleep deprivation in adolescents

Adolescents who do not get enough sleep are more likely to:

- Be overweight
- Not engage in daily physical activity
- Suffer from depressive symptoms
- Engage in unhealthy risk behaviors such as drinking, smoking tobacco, and using illicit drugs
- Perform poorly in school

Centers for Disease Control (CDC), Morbidity and Mortality (2015)



Chronic sleep deprivation = public health crisis

According to the American Academy of Pediatrics (2014):

“Chronic sleep loss in children and adolescents is of the most common - and easily fixable - public health issues in the U.S. today... The research is clear that adolescents who get enough sleep have a reduced risk of being overweight or suffering depression; are less likely to be involved in automobile accidents; and have better grades, higher standardized test scores and an overall better quality of life.”



Timeline...

Step #1 - Feasibility Study

Step #2 - Planning

Step #3 -
Communication

Step #4 -
Implementation

Step #1: Feasibility Study

- Form District Advisory Committee and schedule meetings
- Sleep Study
- Schedule Forums and Panel Discussions



Sources

American Academy of Pediatrics (2014). Policy statement: School start times for adolescents.

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Centers for Disease Control and Prevention (2015). Wheaton, A.G., Ferro, G.A., Croft, J.B. Morbidity and Mortality Weekly Report, August 7, 2015. "School Start Times for Middle School and High School Students -- United States, 2011-12 School Year."

Owens, J., M.D. (2019). Public presentation at Radnor Township School District, Feb. 7, 2019.

University of Washington. Dunster, G.P., et. al. in Science Advances (2018). [Advances.sciencemag.org](https://advances.sciencemag.org). "Sleepmore in Seattle: Later school start times are associated with more sleep and better performance in high school students."

University of Minnesota College of Education + Human Development (2014). "Students' grades and health improve with later high school start times."

