

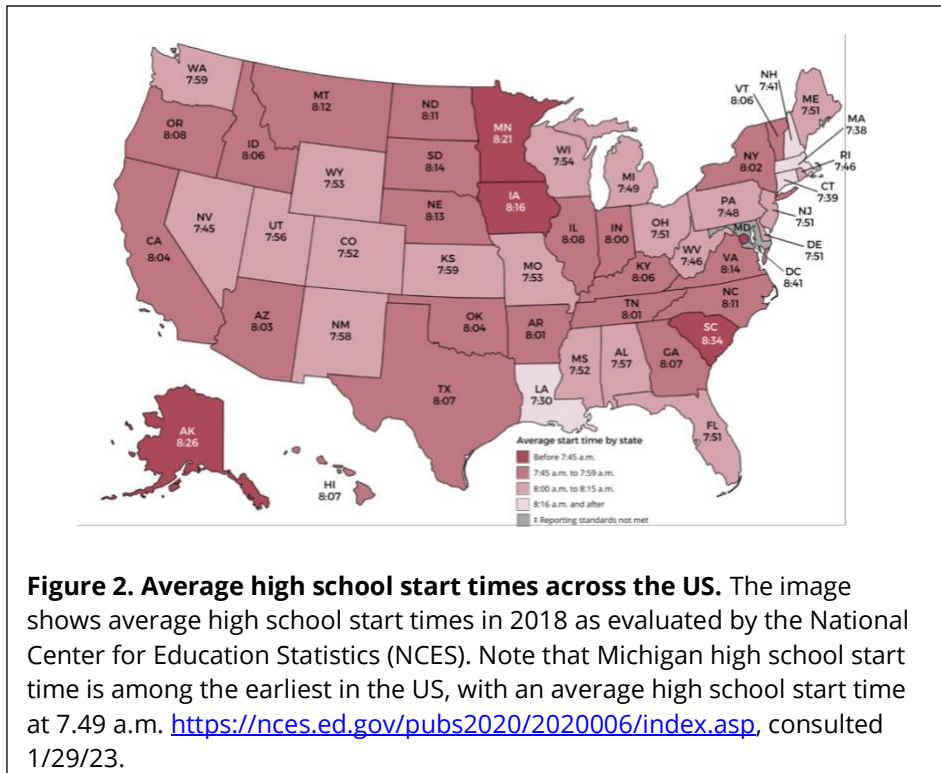
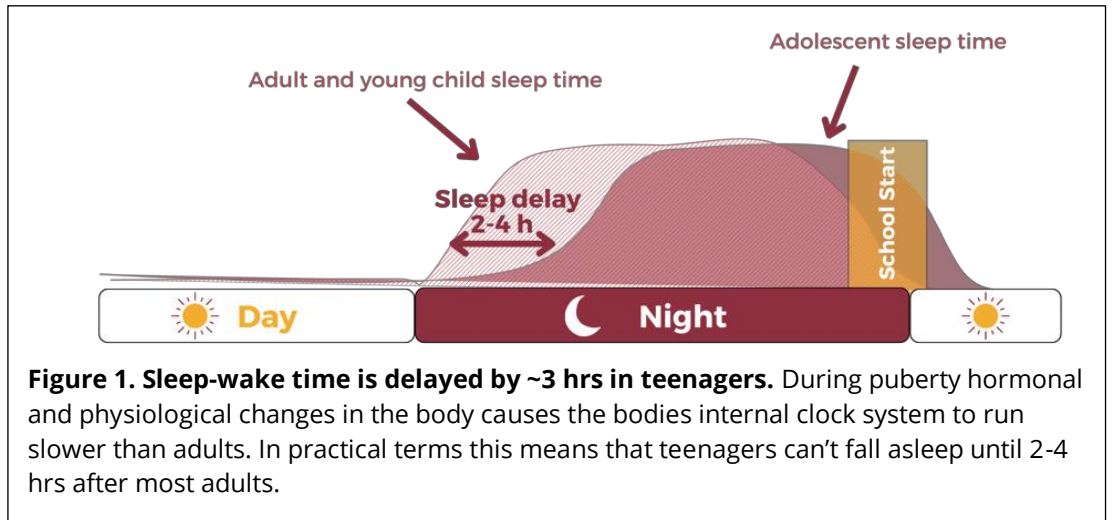
How School Start Times Impact Students' Wellbeing

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Straight forward changes in our society, such as delaying middle and high school start time, would improve teen mental health, reduce accidents, reduce aggression and improve academic outcomes. Michigan high schools' current school start times do not take into account the health and wellbeing of teens.

How are Students Impacted by the Current School Start Time?

Due to natural changes in the body of teens during puberty, their internal clocks run slower than adults (Figure 1). This leads to an incapacity of teens to fall asleep in the early evening. Most teens can fall asleep around midnight.



However, with school start time before 8 a.m. in most Michigan high schools (Figure 2), teens do not get the required 8-10 hrs of sleep per night. Due to the natural delay in the teens internal clocks, for them starting school at 8 a.m., is equivalent biologically to an adult starting work at 5 a.m. This mismatch between teenagers' need for sleep and the societal pressure to start school early is causing severe sleep deprivation in this age group.

What are the Consequences of Chronic Sleep Deprivation in Teens?

During puberty teens sleep-wake cycles become delayed by 2-4 hrs. This biological change in sleep-wake cycles is caused by biological changes in the body by puberty. This biological shift in sleep of teens are causing teens to get tired later in the evening, while still having to get to school early in the morning, causing chronic sleep deprivation. Chronic sleep deprivation is known to be associated with:

- Increase in depression, anxiety, and suicidal ideation.
- Reduced learning and poor academic performance.
- Increased aggression and violence.
- Increased substance abuse and use.
- Reduced conflict resolution.
- Increased risk of sports injuries.
- Increased risk of car accidents.
- Obesity and diabetes.

What Organizations Already Support Later School Start Times?

Dozens of organizations support later school start times for teens. Among these supporters are the American Academy of Child & Adolescent Psychiatry (AACAP), the American Academy of Pediatrics (AAP), the American Academy of Sleep Medicine (AASM), the Centers for Disease Control and Prevention (CDC), the Education Commission of the States, the National Education Association, the National Parent Teacher Association, the National Sleep Foundation and the Society of Behavioral Medicine.

Who is Opposing Delaying School Start Time?

Despite support from the national education association and the national parent and teacher association, teachers themselves are not uniformly supportive of delayed start times—largely due to their desire not to extend the workday. Additionally, athletes, parents of athletes, and trainers have voiced concern that delayed school start time will negatively impact athletic performance. However, studies by schools who have delayed middle and high school start time have found that students engage in as much athletic activity after, as before, a change in school start time. Importantly, well-rested athletes have less injuries: a direct benefit of delayed school start time.

How Does Delaying School Start Time Impact the Students?

Legislation defining a later school start time in Michigan would have great effects on teen mental and physical health, improve academic outcome, lifelong earnings, and reduce sports and car accidents. States like California, have taken legislative action on this matter. After [SB 328](#) was implemented in July 2022 defining that middle and high school start time to be 8.30 a.m. or later, and all other schools to be 8 a.m. or later, teenagers reported having a better sleep schedule.

Districts who have delayed school start times have found improved academic outcome of the students, increased attendance, less tardiness, and increased lifelong earnings. In addition, these districts have seen a reduction in mental health problems, violence, accidents (cars and sports) and drug use.

Delaying middle and high school start time has also been found to benefit low-income students to a greater degree than high income students. This is in part due to an increase in school attendance of low-income students after school start time was delayed.

When it comes to delaying school start time, the benefits are clear – there is an increase on the health, well-being and success of students. Legislation to address this matter could have far-reaching effects.