

Delaying School Start Times to Improve Adolescent Mental Health

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[Public act 23-101](#) requested that a task force evaluate the feasibility of a state-wide mandate to adjust (delay) start times for high school students. [The report](#) was finalized in November 2023 and noted the clear benefit of adjusting start times to adolescents' mental and physical safety. However, multiple obstacles related to district variability in terms of population density, bussing needs, traffic congestion, and availability of childcare undermine the feasibility of a *uniform* state-wide policy. Feasibility concerns are real, but they do not change what science shows: [Early school start times](#), like those in effect across the state of Connecticut, are especially detrimental since they conflict with adolescents' sleep needs. Legislators who want to see improvement in teen mental and physical health—and even potentially better health equity between socioeconomic groups—could consider legislation that incentivizes districts to adjust start times, and which might offset increased costs of bussing and/or childcare obstacles.

Mental and Physical Health Context

Connecticut's youth are in a mental health crisis. [More than 1 in 4 of Connecticut's adolescents report poor mental health](#). Sleep deprivation is a primary risk factor for mental health problems in teens and is associated with [depression](#), [anxiety](#), and suicidality. There are a host of physical problems related to sleep deprivation, including [immune-related disease risk](#), [obesity](#), and associated problems such as diabetes and heart disease. Adolescence is a critical developmental period, and sleep problems in adolescence are associated with chronic health problems extending [into adulthood](#).

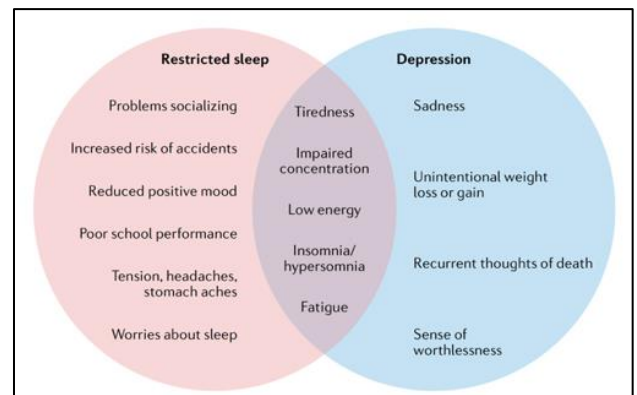


Figure 1: Gradisar et al (2022); Nature Reviews Psychology

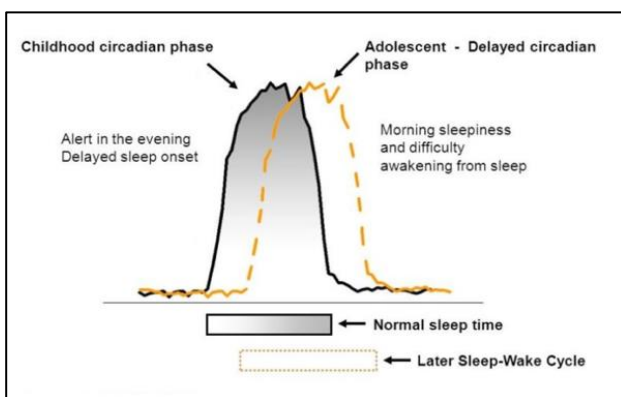


Figure 2: American Academy of Sleep Medicine (2006)

Teenagers' [circadian rhythms](#) differ from those of adults and young children, with their arousal (that is, their most wakened state, when they are alert) peaking in evening hours, and restorative sleep occurring later in the morning. Even if they go to bed earlier, teens' sleep quality is disrupted by early wake times—leading to daytime sleepiness, poor concentration, and other cognitive difficulties.

The American Academy of Pediatrics, noting an “epidemic of insufficient sleep in teenagers,” proffered a position statement that [high schools should not start before 8:30 a.m.](#)

Health Equity

Research has also identified that sleep deprivation among [urban](#) and [socioeconomically](#) disadvantaged youths further exacerbates gaps in [academic](#) and health outcomes, and underscores the need to adjust school start times wherever possible. To this end, [some research](#) has indicated that improvements in youth sleep can mitigate some of the cognitive and emotional detrimental effects of socioeconomic disadvantage.

Connecticut’s Start Times

The *average* high school start time in Connecticut is [7:39 a.m.](#), meaning that roughly 50% of schools have a start time well before the AAP’s recommendation. When averaged across all districts, Connecticut has the [fourth earliest](#) high school start time in the entire country.

Research conducted in [Connecticut and other states](#) has found that delaying high school start times by an hour to [30 minutes](#) results in increased sleep duration, and subsequent improvements in academic and health outcomes.

Additional research on more modest adjustments echoes this finding: A mere 25-minute delay in high school start time yielded an average 29 additional minutes of sleep, and corresponding improvements in daytime sleepiness. Strikingly, the number of students reporting at least 8-hours of sleep rose from 18% to 44% following the 25-minute delay in start times.

Undeniable Benefits

The research [conducted over the past three decades](#) is definitive: High-school aged children benefit from later start times. Later start times ensuring adequate sleep are associated with [reduced rates of suicidal thoughts](#), lower incidence of [mental health diagnoses](#) such as [depression](#), anxiety, and substance abuse disorders, and fewer [driving accidents](#) in this high-risk population. Later start times are also associated with [enhanced academic achievement](#).

Wherever feasible, districts should strongly consider adjusting school start times as a primary intervention for teen mental and physical health. Connecticut state policy could be designed to incentivize or fund programs to accommodate start-time adjustments, such as increased need for childcare and additional bussing costs. All states must face the reality that too-early high school start times are harming students’ health and academic potential; Connecticut lawmakers have every reason to take the lead in advocating for science-based school policies that can provide demonstrable solutions to these growing national challenges.

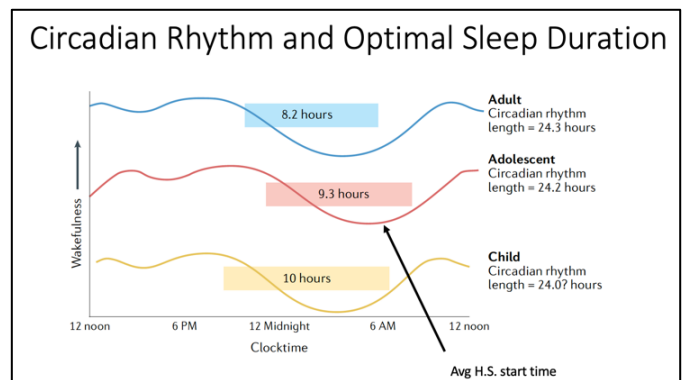


Figure 3: adapted from Gradisar et al (2022); Nature Reviews Psychology