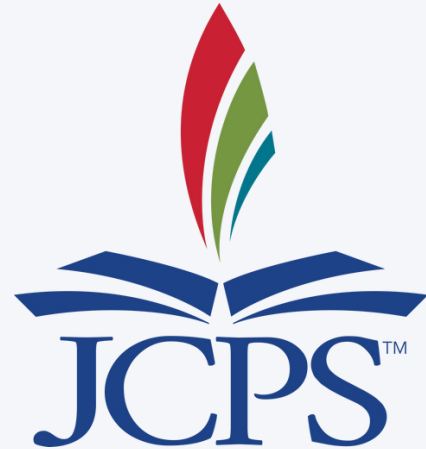


# Superintendent's Report

February 28, 2023



# Attendance Data

**Of the 37,411  
Middle/High  
resides  
students:**

Last year, nearly 50% were chronically absent.

So far this year, nearly 45% are chronically absent.

65% of the students are students of color.

47% of total # of students of color are chronically absent



# Missed Instruction



- 20,000 students have missed classes due to a late bus
- 3 million minutes of instruction have been lost

## **American Academy of Pediatrics**

"The American Academy of Pediatrics recognizes insufficient sleep in adolescents as an important public health issue that significantly affects the health and safety, as well as the academic success, of our nation's middle and high school students. Although a number of factors, including biological changes in sleep associated with puberty, lifestyle choices, and academic demands, negatively affect middle and high school students' ability to obtain sufficient sleep, the evidence strongly implicates earlier school start times (ie, before 8:30 am) as a key modifiable contributor to insufficient sleep, as well as circadian rhythm disruption, in this population. Furthermore, a substantial body of research has now demonstrated that delaying school start times is an effective countermeasure to chronic sleep loss and has a wide range of potential benefits to students with regard to physical and mental health, safety, and academic achievement. The American Academy of Pediatrics strongly supports the efforts of school districts to optimize sleep in students and urges high schools and middle schools to aim for start times that allow students the opportunity to achieve optimal levels of sleep (8.5-9.5 hours) and to improve physical (eg, reduced obesity risk) and mental (eg, lower rates of depression) health, safety (eg, drowsy driving crashes), academic performance, and quality of life."

## University of Minnesota - College of Education + Human Development

"The results from this three-year research study, conducted with over 9,000 students in eight public high schools in three states, reveal that high schools that start at 8:30 AM or later allow for more than 60% of students to obtain at least eight hours of sleep per school night. Teens getting less than eight hours of sleep reported significantly higher depression symptoms, greater use of caffeine, and are at greater risk for making poor choices for substance use. Academic performance outcomes, including grades earned in core subject areas of math, English, science and social studies, plus performance on state and national achievement tests, attendance rates and reduced tardiness show significantly positive improvement with the later start times of 8:35 AM or later. Finally, the number of car crashes for teen drivers from 16 to 18 years of age was significantly reduced by 70% when a school shifted start times from 7:35 AM to 8:55 AM."

## Science Advances - Sleepmore in Seattle

“The Seattle School District delayed the secondary school start times by nearly an hour. We carried out a pre-/post-research study and show that there was an increase in the daily median sleep duration of 34 min, associated with a 4.5% increase in the median grades of the students and an improvement in attendance.”

“Although it is highly likely that increased sleep was the cause for reduced sleepiness, it is much harder to attribute casualty for 4.5% higher grades on increased sleep; nevertheless, it is certainly reasonable that students who are better rested and more alert should display better academic performance. Last, the later school starts led to an increase in punctuality and attendance that, remarkably, was only evident in the economically disadvantaged school. Obviously, attending school and arriving on time to school is beneficial for learning, and this results suggests that delaying high school start times could decrease the learning gap between low and high socioeconomic groups.”

## **Adolescent Sleep Patterns, Circadian Timing, and Sleepiness at a Transition to Early School Days - Mary A. Carskadon, Amy R. Wolfson, Christine Acebo, Orna Tzischinsky, Ronald Seifer**

"In summary, along with strong psychosocial influences, changes in bioregulatory systems controlling sleep may limit teenagers' capacities to make adequate adjustments to an early school schedule. Imposition of an early school start time may require unrealistic - if not unattainable- bedtimes to provide adequate time for sleeping. Our study clearly showed that early school start times for adolescents were associated with significant sleep deprivation. The consequences of insufficient sleep in adolescents are substantial. Excessive sleepiness of the degree documents here can be associated with performance decrements, memory lapses, and mood changes, as well as behavior problems. In susceptible young people, this pattern may lead to academic, behavioral, and psychological problems, as well as increased risk for accidents and injuries, particularly for teenaged automobile drivers."

## **National Institute of Health - Sleep in Adolescents: The Perfect Storm**

"As reviewed above, bioregulatory and psychosocial forces collude to push sleep onset later, yet schools are timed to begin earlier across adolescence, and sleep time is compressed as a consequence. The list of negative outcomes associated with insufficient sleep is lengthy and ranges from sleepiness and mood disturbances noted above, inattention, poor grades, behavior problems, substance use, driving crashes, overweight, and immune system compromise. For some adolescents, the issue can present as sleep-onset insomnia that may be associated with the circadian phase delay; when combined with lack of motivation, depressed mood, and fatigue, a depressive disorder is often the initial assumption. An approach that targets sleep timing and phase adjustment is likely to be ameliorative.

At the end of the day, the pediatrician can have positive impact by intervening in any of a number of levels:

- encourage your local school districts to consider starting the school day later for adolescents"