# Start school Later 

The case for starting New Fairfield High
School Later

## What's the big deal?

- "Sleep deprivation is a growing public health issue affecting our nation's adolescents, putting them at risk for mental, physical and emotional distress and disorders" American Medical Association
- "Adolescents today face a widespread chronic health problem: sleep deprivation" National Sleep Foundation
- "Chronic sleep loss in children and adolescents is one of the most common - and easily fixable - public health issues in the U.S. today" American Academy of Pediatrics
- "The proportion of high school students who fail to get sufficient sleep (2 out of 3) has remained steady since 2007". "Children and adolescents who do not get enough sleep have a higher risk for many health problems, including obesity, diabetes, poor mental health, and injuries. They are also more likely to have attention and behavior problems, which can contribute to poor academic performance in school"
Centers for Disease Control \& Prevention (CDC)
- "chronic sleep loss among teens is associated with a host of problems, including poor school performance, increased depressive symptoms, and motor vehicle accidents," American Academy of Sleep Medicine


## Teens don't get enough sleep

- American Medical Association: "According to recent studies, only 32 percent of American teenagers reported getting at least eight hours of sleep on an average school night. The American Academy of Pediatrics recommends that teenagers between 14 and 17 years of age should get 8.5 to 9.5 hours of sleep per night to achieve optimal health and learning"
- National Sleep Foundation: "While they need on average 9 1/4 hours of sleep per night for optimal performance, health and brain development, teens average fewer than 7 hours per school night by the end of high school"
- Academy of Sleep Medicine : teenagers aged 13-18 years should sleep 8-10 hours per night
- American Academy of Pediatrics: "Many studies have documented that the average adolescent in the U.S. is chronically sleep-deprived and pathologically sleepy"
- 2015 national and state Youth Risk Behavior Surveys : 73\% of high school students do not get enough sleep on school nights


## Early School Start times cause traffic accidents

Drowsiness or fatigue has been identified as a principle cause in at least 100,000 police reported traffic crashes each year, killing more than 1,500 Americans and injuring another 71,000, according to the National Highway Traffic Safety Administration. Young drivers age $\mathbf{2 5}$ or under cause more than one-half of fall-asleep crashes

- 2010 study analyzed teen traffic accidents in two adjacent Virginia Counties: Chesapeake County starts HS at 8:40am \& Virginia Beach County starts at 7:20. . Chesapeake had 46.2 crashes per 1,000 teen drivers. VA Beach County had 65.4-40\% higher
- Similar 2010 Study in two otherVA counties: Chesterfield (7:20 start) and Henrico (8:45 start) found $27 \%$ higher rate of weekday teen accidents in Chesterfield. There was NO difference in adult weekday accidents in the 2 counties over the same period
- Journal of Clinical Sleep Medicine study, 2008: examined sleep and traffic accidents in a single, large school district (10,000 students) before and after a 1-hour delay in start times. Average crash rates for teen drivers in the study county in the 2 years after the change in school start time dropped $16.5 \%$, compared with the 2 years prior to the change, whereas teen crash rates for the rest of the state increased $7.8 \%$ over the same time period.
- A 2014 study of eight public high schools by Kyla Wahlstrom of the University of Minnesota found that the number of car crashes for teen drivers was significantly reduced by a simple shift in school start time from 7:35 a.m. to 8:55 a.m.


## Lack of teen sleep linked to depression \& suicide

- 2016 George Mason University Study interviewed 28,000 VA middle and high school students and determined each hour of sleep lost was associated with a 38 -percent increase in feelings of sadness and hopelessness among teens, a 23percent increase in substance abuse, a 42 -percent increase in suicidal thoughts and a 58 -percent increase in actual suicide attempts
- National Sleep Foundation "Sleep in America" Poll, 2006: results showed $73 \%$ of those adolescents who report feeling unhappy, sad, or depressed also report not getting enough sleep at night and being excessively sleepy during the day.
- Vignau et al. (1997) and Bailly, Bailly-Lambin, Querleu, Beuscart, and Collinet (2004) demonstrated a significant association between problem sleep and suicide attempts in adolescents over and above the effects of suicidal ideation.
- In a large sample of adolescents in China, Liu (2004) found that those who slept less than 8 hr per night were three times more likely to attempt suicide, even after adjusting for overall depressive symptoms

- 2011 Brown University Comprehensive review of 38 previouslypublished research studies involving adolescent sleep and/or obesity from 16 different countries:
"Pediatric studies identified and included in the present review suggest that children who sleep less are at increased risk for being and/or becoming overweight/obese. This significant relationship was found in both cross-sectional and prospective studies, and persisted in most studies even after controlling for potential confounders such as parental BMI, birth weight, and television viewing. Findings from the present review are consistent with conclusions drawn from other systematic reviews and meta-analyses including two meta-analyses that demonstrated that children with "shortened sleep" were at a $56-89 \%$ increased risk for obesity. "

Teen sleep highly correlated to academic performance

- Many, many studies show a strong relationship between sleep and academic performance
- Dr. Kyla Wahlstrom of the University of Minnesota surveyed 7,000+ high schoolers in Minnesota about their sleep habits and grades. Teens who received A's averaged about fifteen more minutes sleep than the B students, who in turn averaged eleven more minutes than the C's, and the C's had ten more minutes than the D's. Wahlstrom's data was an almost perfect replication of results from an earlier study of more than 3,000 Rhode Island high schoolers by Brown's Mary Carskadon.
- RAND Europe report "investigating variation in SST between and within middle schools in Wake County (North Carolina) a study found that an increase in SST by one hour would lead to a three percentile point increase in standardized math and reading test scores for the average student (Edwards, 2012). To put into context, these effects on standardized test scores are of similar magnitude as compared to reducing class sizes by one-third fewer students. Similar results have been found for standardized test scores among firstyear U.S. Air Force Academy students, where a 50-minute delay in start times led to a 0.15 standard deviation increase in standardized course grades from improved performance in earlier classes but also classes during the day (Carrell et al., 2011)."


## Early bed times will not solve it

- National Children's Hospital: "After puberty, there is a biological shift in an adolescent's internal clock of about 2 hours, meaning that a teenager who used to fall asleep at 9:00 PM will now not be able to fall asleep until 11:00PM"
- American Medical Association: "Studies have also shown that puberty is accompanied by a biological delay or shift in circadian rhythm, contributing to later bedtimes and wake times among teens."
- The Mayo Clinic: "Puberty changes a teen's internal clock, delaying the time he or she starts feeling sleepy and awakens."
- National Sleep Foundation: "most adolescents undergo a sleep phase delay, which means a tendency toward later times for both falling asleep and waking up. Research shows the typical adolescent's natural time to fall asleep may be 11 pm or later; because of this change in their internal clocks, teens may feel wide awake at bedtime, even when they are exhausted (Wolfson \& Carskadon, 1998)"


## New Fairfield HS starts too early

High School Start Times (DRG B)
(2018-2019)


## Districts and entire cities across the country have taken notice

They are changing their start times \& seeing immediate, significant results

Our kids are being left behind Our kids continue to face higher risks

| CT Districts Already Changed | CT Districts Actively Investigating |
| :--- | :--- |
| Wilton 2003 | Ridgefield |
| Newtown 2017 | New Canaan |
| Greenwich 2017 | Bethel |
| Guilford 2018 | Norwalk |
|  | West Hartford |
|  | Brookfield |



Please help! Get involved!
Facebook "Start School Later New Fairfield CT" https://www.startschoollater.net/ct---new-fairfield.html

