

SLEEP

- Start
- Later for
- Excellence in
- Education
- Proposal

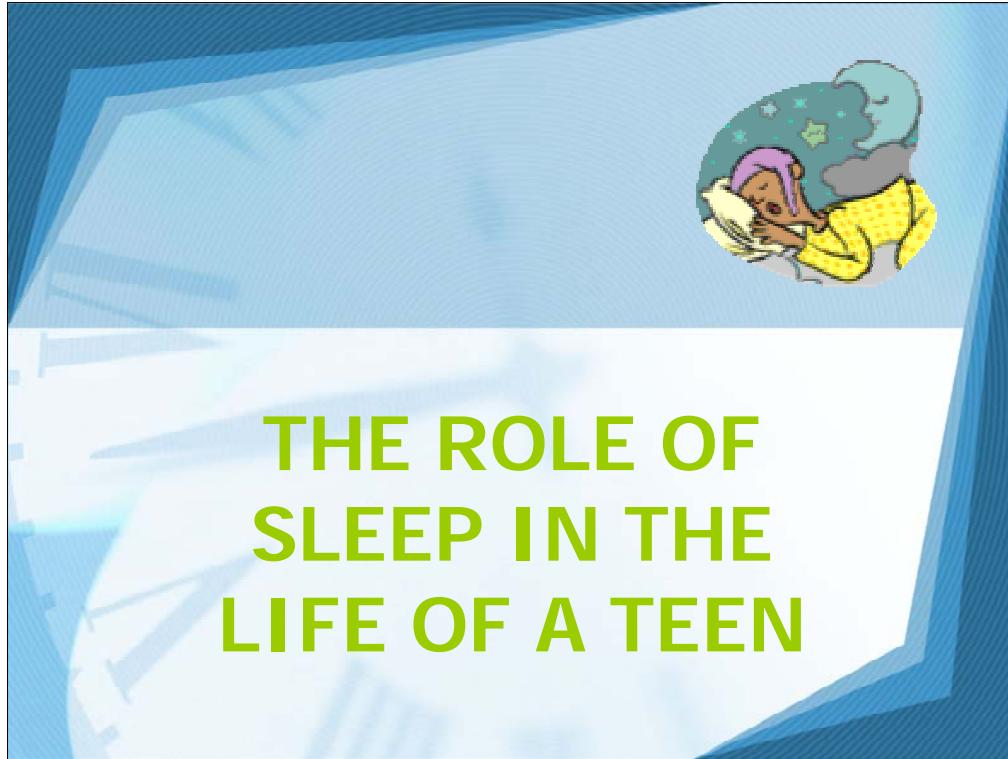


Introduce yourself to the audience.

Note to presenter:

Read the notes in black aloud.

The notes in blue are just for you (in case there are additional questions). 😊



We'll start by describing a few of the reasons that sleep is important.

Sleep is a biological requirement.

Sleep:

Helps us perform effectively and safely.

Enhances memory and our ability to learn.

Sleep is also:

Essential for proper growth and development.

It's A habit that can be formed during adolescence.

It is key to our health – as important as good nutrition and regular exercise.

Teens experience a biological shift to a later sleep-wake cycle

The biological clock of children shifts during adolescence.

- Most teens fall asleep around 11 p.m.
- Melatonin, the sleep hormone, is in their bodies until about 8 a.m.

This “delayed phase syndrome” conflicts with early school start times.



Research shows that teens experience a biological shift to a later sleep-wake cycle. In teens, melatonin* is not secreted until later in the evening – around 11:00 PM – and then drops sharply later in the morning around 8 AM. This shift** is why Fairfax County school start times do not work for our teens.

We recognize that not all teens are the same and some are able to fall asleep earlier while others might not be sleepy until even later. Research supports that most teens cannot fall asleep until about 11 PM.

*Melatonin is a natural hormone secreted in the brain that induces sleep. Measures of melatonin in teens show that it is present in their bodies from 11 PM until 8 AM.

**This shift in the biological clock is called “delayed phase syndrome.”

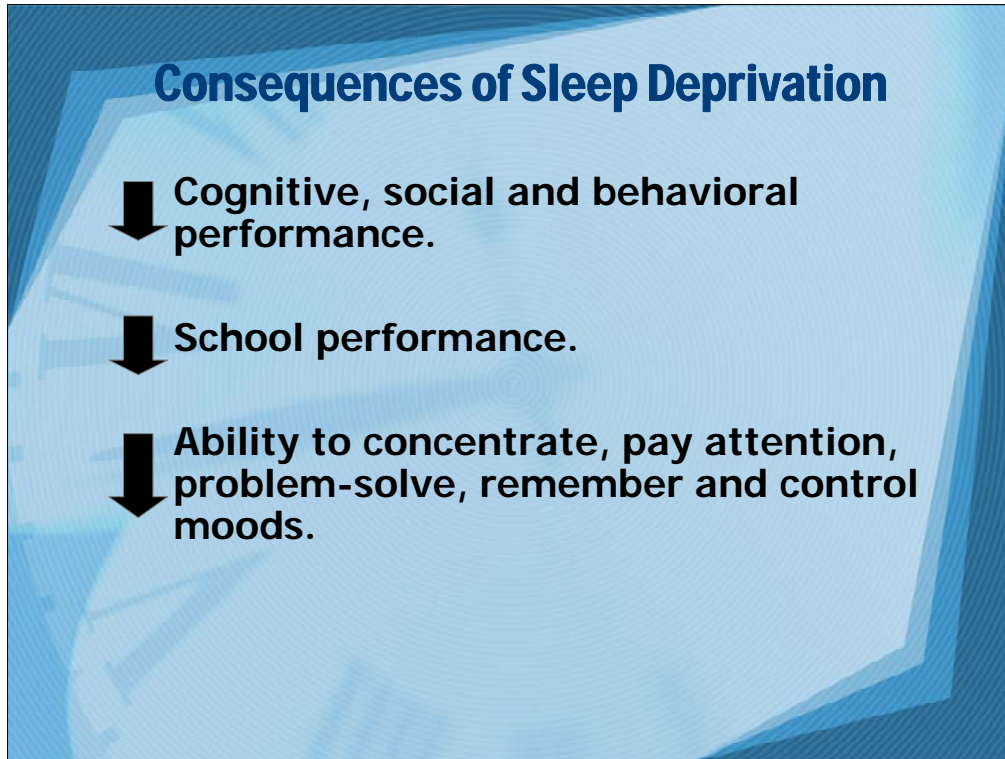
Teens are chronically sleep-deprived

- Teens need 9 ¼ hours of sleep.
- Only 15 % get enough sleep.



Research findings dating back to the 1970s, show that adolescents need on average 8 ½ to 9 ¼ hours of sleep to function at their best and lead a safe and healthy life.

On average, U.S. teens get 7.5 hours of sleep each school night. Twenty-five percent only get 6.5 hours of sleep each school night.



Sleep deprivation has serious consequences. It impairs cognitive, social, physical, and behavioral performance. It is harder for teens to remain alert, concentrate, make wise decisions, and achieve academically. Students who get enough sleep make better grades.

Recent studies show that after a complete night's sleep memory is consolidated, performance improves, problem-solving and creativity are enhanced.

Later Start Times Improve Learning and Grades.

Tardiness and absences are sometimes the result of having difficulty getting up in the morning. In recent NSF polls, approximately 38% of parents stated that it was somewhat to very difficult to get their adolescent up on school mornings. 60% of parents also reported that their child complained of being tired during the day and 15% stated that they actually fell asleep.

Consequences of Sleep-Deprivation

Sleep-deprived people are:

- **Cranky and irritable.**
- **Impulsive, hyperactive, depressed and possibly violent.**
- **More likely to abuse alcohol and drugs.**
- **At risk for accidents and injuries.**



Sleep debt can impair metabolism and disrupt hormone levels. Sleep debt can contribute to obesity.

Overall, daytime sleepiness reduces enjoyment and quality of life.

Sleep-deprived teens can become irritable, easily angered, are less tolerant and find it more difficult to get along with others.

In some teens, sleep deprivation contributes to hyperactivity or depression.

Teens may also experience less emotional control. This puts them at risk for alcohol and substance abuse as well as drowsy driving, violence, and accidents—including serious car crashes.

Researchers found that people deprived of sleep experienced a disruption of their hormone levels which can lead to obesity.

Glucose tolerance was lower in the sleep-debt condition than in the fully rested condition, as were thyrotropin concentrations. Evening cortisol concentrations were raised and activity of the sympathetic nervous system was increased in the sleep-debt condition. Scientists interpret this data as being similar to a “pre-diabetic” condition.

The pre-frontal cortex is the part of the brain responsible for emotional control – It is a part of the brain that is still developing in teens and it is the part of the brain most affected by sleep deprivation.

Sleep-Friendly Schools

- **Many schools across the country are establishing later start times**
- **Several studies show the positive outcomes of “sleep-friendly” school start time policies.**

Many schools are considering policy changes regarding school start times which would more readily comply with teen’s natural sleep schedule and also contribute to the learning process.

Since teens are physically ready for sleep at about 11 p.m. and need about 9 hours of sleep, their natural time to wake would be around 8:00 am.

When surveyed, both parents and teachers identify 8:00 am or later as the ideal time to start school.

Benefits of Later Start Times

Sleep increased one hour per school night

- Grades improved
- Student behavior improved
- Students are more alert in class
- Parents report more “connect time” with teens
- 92 percent of parents are happy one year after the change

We have a great deal of data from studies done in different districts that have changed their start times.

Sleep increased one hour per school night, dispelling the belief that students would just stay up later and get the same total amount of sleep. (This statistic is from a very large study of students in the Minneapolis school district—start times went from 7:15AM to 8:40AM).

Benefits of Later Start Times

Decrease in:

- **Car accidents**
- **Depression**
- **Drop-out rate**
- **Clinic visits**
- **Daytime sleepiness**
- **days absent**
- **days late**
- **Appointments w/
counselors**

Read slide

Focal Issue: SCHOOL START TIMES

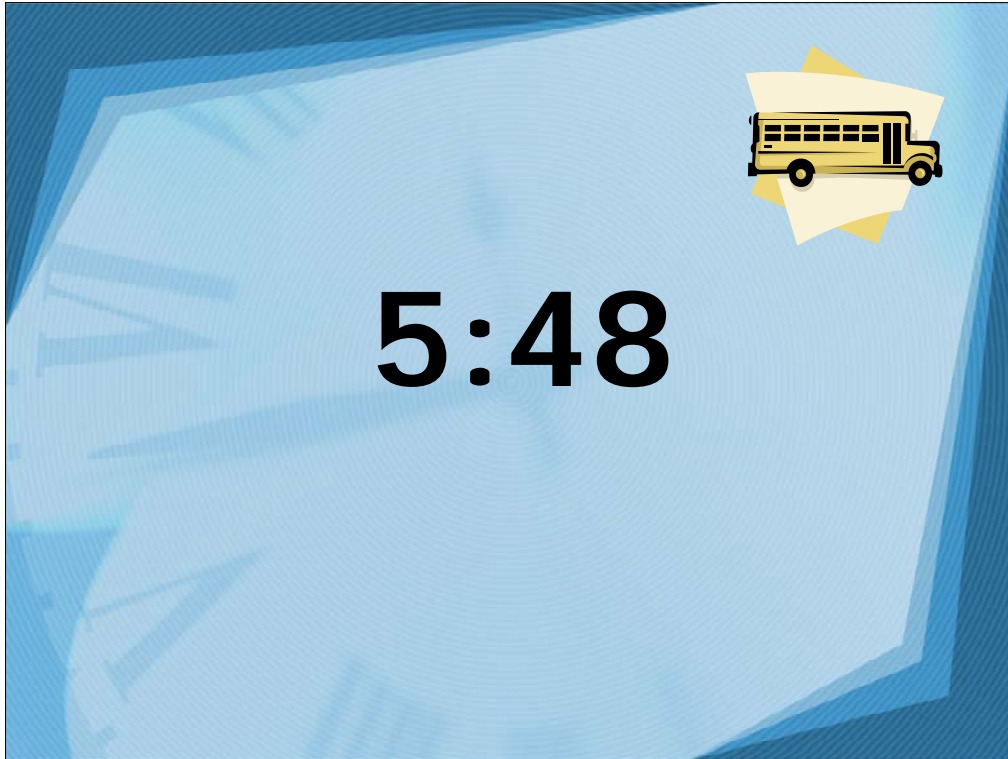
- **FCPS high school and middle school start times are too early.**



Our children **CANNOT** get enough sleep under the current schedule.

Are school officials and personnel aware of the effects of early school start times on adolescent sleep and their shift to a later sleep-wake cycle? In recent times, high school start times, in particular, have become earlier. As a result, students rise with difficulty and before getting sufficient sleep. Teachers report that students walk in like zombies, are not alert in the morning and not receptive to instruction. Because students are still physiologically asleep, it is difficult to learn in the classroom and the opportunity to learn and achieve is sacrificed.

Furthermore, as a result of their sleep being cut short, most teens experience daytime sleepiness throughout the day - affecting all aspects of their lives in school, at work, during sports and with friends and family.



Does anyone know what happens at 5:48 AM in Fairfax County?

[\(Click page down again and the bus drives in\)](#)

It is the first school bus pick up.

Think about it. 5:48 a.m. some children are standing out on a dark street corner waiting for the bus.

1998 Task Force Concluded:

Later secondary school start times benefit teens:

- 1. Improve academic performance.**
- 2. Reduce unsupervised after-school time for teens, lessening dangerous and criminal behavior**
- 3. Decrease teen car crashes due to lack of sleep**
- 4. Improve moods and relationships**

In 1998, the School Board created a 53-member Task Force to study later start times. The Task Force agreed that later start times would benefit teens in a number of ways:

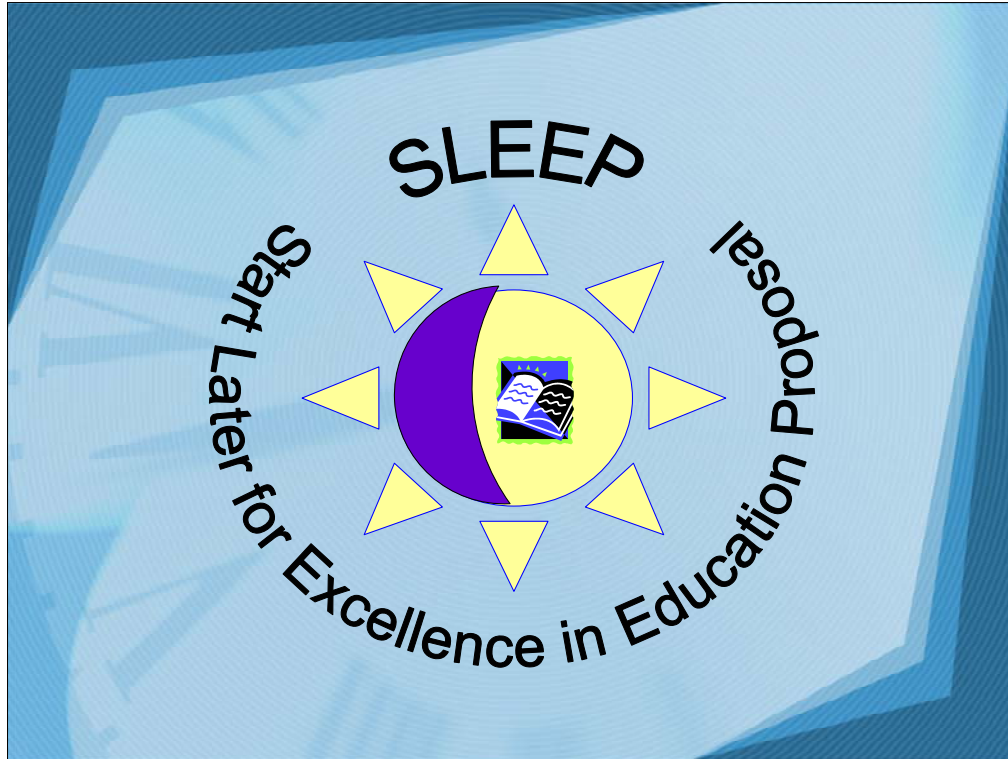
Improved academic performance, (read slide).

1998 Task Force (cont'd)

- Sleep deprivation is having a negative impact on learning in Fairfax County.
- "Later high school and middle school bell times . . . can produce results of benefit to the entire community."
- No consensus on how to adjust the bell schedules.

The Task Force could not come to a consensus about how to make the change to the schedule. Estimates provided by the FCPS Transportation Department for various options to fix the problem have been as high as \$41 million for FY2006. We would like to see some other lower cost options explored.

There are more than 79,000 secondary school students in FCPS.



We started our grassroots organization to promote later start times for middle and high schools in Fairfax County.

We recognize that the only way to convince our leaders to make this change is to enlist the support of many people in a long-term effort.

Parents and students who support this bell schedule change need to be persistent in voicing their opinions.

For Elementary School Presentations:

We know that parents of elementary school-aged children may not relate to this issue yet, but if you hope to have more reasonable secondary school schedules for your children, please become involved now.

Why change the bell schedule?

- Academic Achievement
- Health
- Safety
- Quality of Life



The bottom line should be what is best for our students.

We want our leaders to focus on the school system's primary goal—to create an environment that helps student's achieve academically and promotes their health, safety and the quality of their lives.

The challenge to FCPS is to bring everyone together to set policy and schedules that meet people's needs, but are also in line with the research on adolescent sleep needs and patterns.

We need to keep ideas and thoughts focused on the bottom line and facilitate discussion and policies that encourage students to get enough sleep and improve their sleep habits.

SLEEP Organization

- **Pyramid coordinator for each high school**
- **Student coordinators at some schools**
- **Email distribution list**

SLEEP has volunteer pyramid coordinators working to increase awareness of teen sleep needs in many of the high school pyramids.

There are student coordinators in some schools and we are looking for more.

SLEEP has an email distribution list, so it can spread the word when coordinated political action is needed.

Coalition Building

- **Work with stakeholders**
- **Develop reasonable solutions.**
 - **PTAs**
 - **Student Advisory Council**
 - **Principals and teachers**
 - **Counselors and nurses**
 - **School Board**
 - **County Supervisors**
 - **Coaches**
 - **Pediatricians**
 - **Bus drivers and transportation dept.**

We are working with a variety of stakeholders to increase awareness of teen sleep needs and to develop reasonable solutions.

Because such changes involve so many people and their programs, the process can become cumbersome and complex. We recommend that all stakeholders be involved in developing a new and workable bell schedule.



SLEEP has developed a website where you can:

(READ SLIDE)

SLEEP has a petition because this type of change requires political support.

The Frequently Asked Questions section includes suggestions about how to address issues that result from the change.

Issues To Address



Maintain:

- Reasonable elementary start times.
- Affordable bus schedules.
- Appropriate extra-curricular schedules.
- After-school care for elementary school students.

SLEEP acknowledges that it is important address the following issues when developing a new bell schedule for Fairfax County:

READ Slide

Support for Later Times

- Surveys
- FCCPTA position paper
- FCPS Student Advisory Council
- School Board Members: Kaye Kory, Stu Gibson, Steve Hunt, Dan Storck, Brad Center, Janet Oleszek.
- National Sleep Foundation

1998 Task Force surveys show that our community is in favor of later start times:

75 % of students at several high schools

Two-thirds of selected parents

Two-thirds of teachers at one middle school

All supported this change.

In 2004/5, at JEB Stuart, more than 85% of parents say the school days starts too early. Sixty-seven percent of teachers surveyed report that students fall asleep during class occasionally (38%), often (21%), or daily (9%).

School Board voted 11:1 to hire a transportation consultant to identify inexpensive alternative that would allow for later secondary school start times. (Kathy Smith was the only board member to oppose).

Other Local Start Times Are Later

- **Alexandria 8:15 – 9:15 AM**
- **Loudoun County 8:20-8:50 AM**
- **Arlington County High Schools
8:19 AM**

Other counties have managed to change to later start times in response to the research.

Arlington made the switch in 2001.

The times listed for Arlington are high school start times, the range of times listed for Loudoun and Alexandria include middle and high schools in those counties.

We have heard that some families are moving out of Fairfax County to surrounding counties to avoid the early high school start times.

What You Can Do

- **Visit our website**
www.SLEEPinFAIRFAX.org
- **Sign the petition**
- **Sign up to receive emails**
- **Write to School Board members**
- **Write to Dr. Dale**
- **Volunteer to help**

Read slide

If you want the bell schedules to change, please act now to let our leaders know that this is important to you and to your family.

This type of change is difficult and will only happen if we each demand what is best for our children and our community.

We need your help.

SLEEP Contacts:

- Sandy Evans
SLEEP2005@aol.com
- Phyllis Payne, MPH
dpayne6@cox.net
- To find your high school's
Pyramid Coordinator, visit
www.sleepin Fairfax.org

You can leave this up, so people can copy the information down.