

# SleepCaptions

## Delayed Sleep Phase Syndrome (DSPS)

**Delayed Sleep Phase Syndrome:** A disorder of sleep timing that results in an inability to sleep until two or more hours later than the socially acceptable time for sleep. Teenagers, who have a natural inclination to sleep later, tend to develop this condition.

### Features

The timing of sleep is shifted later by two or more hours in those with Delayed Sleep Phase. People with DSPS simply cannot fall asleep earlier. However, they do not have insomnia because they are able to fall asleep when their internal clock allows them to do so.

Sleepiness does not develop until two to three hours past the desired bedtime, usually midnight to 3:00 a.m. When sleepiness finally arises, it will continue for a normal amount of time, about eight hours. Unfortunately, the majority of society operates on an earlier schedule, and this is why DSPS becomes a problem. Attempting to force the body awake for school, a job, or social needs may lead to daytime sleepiness, altered eating habits, and fatigue. When a person with DSPS is left to his or her schedule, the quality and amount of sleep is normal.

### Diagnosis

A physical exam is recommended to rule out the possibility of another sleep disorder or health problem. Since the symptoms of Delayed Sleep Phase Syndrome are similar to Insomnia as well as normal variations of sleep, a sleep specialist can identify the exact reason for the delayed sleep pattern.

A Sleep Log or diary of sleep habits is an integral part of diagnosing DSPS. The sleep log will demonstrate a regular pattern of delayed sleep—that is otherwise normal. Sleep studies are not normally needed

to confirm a diagnoses of this condition, unless symptoms are severe. If needed, a polysomnogram will not only pinpoint sleep times, but measure brainwaves, heart rate, breathing, and muscular activity during sleep.

### Treatment

**Chronotherapy** aims to reset the internal biological clock. Patients delay bedtime by three hours per day over the course of five or six consecutive days, until the desired bedtime is reached. A modified version of this therapy involves staying awake for a full night and day, followed by going to bed 90 minutes earlier than usual for a week. This process is repeated weekly until the new bedtime is reached.

**Light Therapy** resets the internal clock by using a full spectrum lamp or portable visor set to 10000 lux for 30 to 90 minutes immediately upon awakening, or just before getting up. Exposure to sunlight at this time may also help. Bright light should be avoided in the late afternoon and evening, when the body needs to prepare for sleep.

**Healthy Sleep Hygiene** such as avoiding caffeine after noon and alcohol within four hours of bedtime will allow other therapies to work better.



### Do I Have DSPS?

I cannot fall asleep until 2 or more hours past my desired bedtime.

I cannot wake up until 2 or more hours past my desired wake time.

If left to my own sleep schedule, I would sleep for a normal amount of time.

If left to my own sleep schedule, I would sleep soundly.

My natural sleep time is stable, just delayed.

I have had this stable but delayed sleep pattern for at least 7 days.

## Delayed Sleep Phase Syndrome Mechanics

Although the exact cause of Delayed Sleep Phase Syndrome is not known, it is related to circadian rhythms, which regulate the internal biological clock. A desynchronization develops between the environment (desired sleep time) and an individual's biological clock. This desynchronization is not affected by travel or a change in the environment. Rather, the natural inclination to sleep is delayed because the 'internal clock' is set to a later time.

DSPS is sometimes mistaken for insomnia because the later bedtime leads people to believe they cannot sleep at all. In reality, they have no problem falling asleep, when the time is right for them.



## Need more information?

Visit the SleepMedicine Education web site at: [sleepmedicineeducation.com](http://sleepmedicineeducation.com) for additional publications. See also:

**SleepIssues:** "Out of Sync?"

**SleepGuides:** "Treating Sleep Disorders"

To schedule an appointment at any Sleep Medicine Centers location, visit [www.sleepmedicinecenters.com](http://www.sleepmedicinecenters.com) or call:

(716)92-DREAM

(877)53-SNORE



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## Risks for DSPS

- ✓ Age (teens to early twenties)
- ✓ Family history
- ✓ Seasonal Affective Disorder (SAD)
- ✓ Depression
- ✓ Lack of exposure to natural (sun) light

## Effects of DSPS

- ✓ Excessive daytime tiredness
- ✓ Fatigue
- ✓ Altered eating habits
- ✓ Depression
- ✓ Job loss or school failure

## Did You Know?

According to the American College of Physicians, Delayed Sleep Phase Syndrome among adolescents is as high as 7%, with males predominating.

Delayed Sleep Phase Syndrome is likely to be found in 10% of people with a complaint of Insomnia, according to the American Academy of Sleep Medicine.

The Journal of Sleep Research reveals a prevalence of DSPS at

17%, based on a 1993 random study of 7700 adults in Norway.

A family history is common in approximately 40% of people with Delayed Sleep Phase Syndrome, according to the American Academy of Sleep Medicine.