

# Delayed Sleep Phase Syndrome (DSPS)



## What is delayed sleep phase syndrome?

Delayed sleep phase syndrome (DSPS) is a disorder where you find it harder to go to sleep until very late at night. This can be as late as 4AM. In the morning, you will want to sleep in for longer, perhaps until the early afternoon. If you have to wake up earlier than this, then you will feel groggy, but as the day goes on, you will get more energy. Even if you wake up early, in the evening your body will still only want to go to sleep late at night. On the weekend, many people with DSPS will sleep in even later in the afternoon.

## What causes delayed sleep phase syndrome?

Your body contains a kind of internal clock that tells you when to wake up and when to go to bed. Scientists think that if you have DSPS, this clock is not running properly. A hormone called **Melatonin** might be involved here. Your lifestyle can also be involved. Young adults often don't feel very sleepy at night, so they stay up too late, and this moves the timing of their **Body Clock**.

## What is melatonin?

This is a hormone that your body makes to help control your body clock. Having the wrong amount of **Melatonin** at the wrong time can cause problems with your sleep.

## Important things to know about delayed sleep phase syndrome

- If you have DSPS, your body wants to go to sleep and wake up later than normal
- People with DSPS don't want to sleep for longer or less than the average person
- DSPS is a problem with your body clock
- You can have DSPS at any age, but it happens more in teenagers
- Using a computer close to bedtime can make DSPS worse
- Getting up at a regular time and bright light in the morning can help
- There is a link between DSPS, depression and insomnia

Melatonin levels increase at night and makes you feel sleepy. The blue light from computer screens can suppress your natural melatonin levels and stop you feeling as sleepy at night.

## How common is DSPS?

It is most common in teenagers. About 7% of teenagers have it. It can occur at other ages, but it is less likely.

## How does it affect people?

If you have DSPS, you have a higher chance of getting depression and **Insomnia**. Also, many people have to get up early in the morning for work or study. This can cause problems if DSPS is present.

## How is it treated?

For some people DSPS will go away by itself. If not, then you can see a **Sleep Specialist**. The specialist will suggest changes in your sleep routine to regularise the hours of sleep. He or she might suggest bright light therapy – either from morning sunlight or from a light box that is designed for the purpose. This is normally done for about

an hour after you wake up. The specialist might also suggest that you take [Melatonin](#) just before your bedtime. A further treatment for DSPS is called chronotherapy.

## What is chronotherapy?

This involves going to bed at slightly later times each day. You will also wake up at slightly later times each day. You will keep doing this until you are going to sleep in the evening and waking up early in the morning. For example, say you are going to bed at 5AM each night, and waking up at 1PM. On the first day of chronotherapy, you might stay up until 8AM, waking up at 4PM. On the second day, you would stay up until 11AM, waking up at 7PM. On the third day, you would stay up until 2PM, waking up at 10PM. You would keep staying up 3 hours later each day, until after a week you were going to bed in the evening and waking up in the early morning. Some people take things more slowly and might stay at the same bedtime for more than one day, to help them adjust.

People with mild symptoms may find it possible to gradually move their hours of sleep to an earlier time of night, allowing them to avoid chronotherapy. See [Teenage Sleep](#).

## Can I prevent it happening again?

Once you are at the right bedtime and wake-up time it is very important that you keep the time of getting up as constant as possible. This includes week days and weekends. It is also important that you get plenty of good light in the mornings. This will lower your melatonin levels. Open your curtains and have your breakfast next to a brightly lit window. Stop using your computer any closer than an hour before your planned bedtime.

This information is produced by:

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A voluntary group offering assistance and support to people and their families living with sleep disorders

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The peak national association of clinicians and scientists devoted to investigation of sleep and its disorders

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## What helps to cope with DSPS?

Some people find it very hard to overcome their DSPS. Some changes to your lifestyle may help you cope. These changes won't stop DSPS, but will make your life easier. You can try to work in the evening, or do night shifts. If your work hours are flexible, then DSPS will be less of a problem. Some people with DSPS find that naps are helpful but they need to be kept short. If you are feeling sleepy during the day, then try to avoid driving. The same goes for using dangerous machinery.

## What else might cause the symptoms?

Some people with DSPS think they have [Insomnia](#). This is because they can't fall asleep at the expected time. If you have a good night's sleep when you are allowed to choose your own sleeping and waking times then DSPS is a more likely diagnosis.

## When should you seek help?

Sleepiness in the mornings, including when driving, can be a major problem. If the timing of your sleep is affecting the quality of your life and/or your safety then you should get help. (See [Drowsy Driving](#))

## What might your doctor do?

Your GP might see if you can change your sleep and wake times using [Melatonin](#) at night and light exposure in the morning. They can refer you to a [Sleep Specialist](#) if this doesn't work. To get an accurate diagnosis you will need to keep a sleep diary. This is where you write down all the details about your sleep, every day.

## Where can I find out more?

<http://www.end-your-sleep-deprivation.com/delayed-sleep-phase-syndrome.html>

<http://dspdmyths.info/czeisler> (lecture)



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