

THINGS YOU SHOULD KNOW If you have Delayed Sleep-Wake Phase Disorder (DSWPD), your body wants to go to sleep and wake up later than normal.

You may have trouble getting up on time.

Although delayed, the amount of sleep is normal.

DSWPD is a problem with your body lock.

DSWPD is more common in teenagers.

Getting up at a regular time and bright light in the morning can help.

DSWPD, depression and insomnia are linked.

Delayed Sleep-Wake Phase Disorder (DSWPD)

What is Delayed Sleep-Wake Phase Disorder (DSWPD)?

Delayed Sleep-Wake Phase Disorder (DSWPD) is a disorder where you find it hard to go to sleep at conventional or socially acceptable times because you don't feel tired until very late at night. Because you can't fall asleep until very late, you will want to sleep until much later the next day, perhaps until the early afternoon. If you have to wake up earlier than this, you find it very difficult and will feel groggy. As the day goes on, this grogginess eases and you begin to feel more alert the later it gets. Even if you do wake up early, in the evening your body will still only want to go to sleep late at night. On the weekend when there are no work or school obligations, many people with DSWPD will sleep at even later times than during the week.

What causes Delayed Sleep-Wake Phase Disorder?

Your body contains an internal clock that regulates when you wake up and when you go to sleep (See Body Clock for further information). If you have DSWPD, this clock is not properly synchronised (i.e., doesn't have the same timing) to the environment. The hormone melatonin is not being produced at the right time (see below). This causes a mismatch between when you think you should go to bed and when you are able to go to sleep. This mismatch can happen for a number or reasons, but often lifestyle is involved. For some people, even just a few late nights in a row can shift the timing of their body clock, making it difficult to sleep and wake at an earlier time. For example, often young adults stay up later on weekends for social reasons, and this moves the timing of their body clock.





What is melatonin?

This is a hormone produced by your body to help control your body clock and bring on sleep. Normally melatonin production increases in the early evening, making you feel sleepy. Production increases until the middle of the night and then gradually declines until the early morning. If you have DSWPD, melatonin production begins and ends much later, making the timing of your sleep much later. Melatonin production is highly sensitive to light, particularly blue light emitted by devices such as phones, tablets and computers. Bright light, particularly blue light, late at night can reduce your natural melatonin levels and make falling asleep difficult. Less melatonin production can also lead to a shift in the timing of your body clock.

How common is Delayed Sleep-Wake Phase Disorder?

It is most common in teenagers. About 7% of teenagers have it. It can occur at other ages, but it is less likely. Because people with DSWPD have trouble falling asleep at more usual times at night it is also sometimes mistaken for insomnia.

How does Delayed Sleep-Wake Phase Disorder affect people?

DSWPD can impact your daytime alertness/concentration and mental health, but also has an impact on social, family and work life. If you have DSWPD, you have a higher chance of getting depression and insomnia. Also, many people must get up early in the morning for work or study, which can cause problems if DSWPD is present. People with

DSWPD are often wrongly viewed as lazy or unmotivated because of the difficulty they have functioning early in the day.

How is Delayed Sleep-Wake Phase Disorder treated?

For some people, DSWPD will go away by itself, particularly if lifestyle factors are causing the problem and these can be changed. If not, then you can see a sleep specialist. The specialist will suggest changes in your sleep routine to keep the hours of sleep regular, usually after asking you to keep a sleep diary for one to two weeks. They 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 immediately after you wake up. The specialist might also suggest that you take a melatonin supplement just before your earlier desired bedtime. A further treatment for DSWPD 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 until8AM, 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 (or every second day), until you were going





to bed in the evening and waking up in the early morning.

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 Delayed Sleep-Wake Phase Disorder 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 weekdays and weekends. It is also important that you get plenty of good light in the morning. This will lower your melatonin levels. Open your curtains and have your breakfast next to a brightly lit window. It is also important to avoid bright light at night and it is recommended you stop using your computer any closer than an hour before your planned bedtime.

What helps to cope with Delayed Sleep-Wake Phase Disorder?

Some people find it very hard to overcome their DSWPD. Some changes to your lifestyle may help you cope. These changes won't stop DSWPD 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 DSWPD will be less of a problem. Some people with DSWPD find that naps are helpful, but they need to be kept short (e.g., maximum 20 minutes) and taken earlier in the day. If you are feeling sleepy during the day, then try to avoid driving and operating dangerous machinery.

What else might cause Delayed Sleep-Wake Phase Disorder symptoms?

Some people with DSWPD think they have insomnia. This is because they can't fall asleep at the expected time. If you don't have difficulty falling asleep and have a good night's sleep when you are allowed to choose your own sleeping and waking times, then DSWPD 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 <u>Drowsy Driving</u> for further information).

What might your doctor do?

Your GP might see if you can change your sleep and wake times using <u>melatonin</u> 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 timing, every day.

Where can I find out more?

- http://www.end-your-sleepdeprivation.com/delayed-sleepphase-syndrome.html
- https://www.sleepfoundation.org/dela yed-sleep-wake-phase-syndrome





Other useful links:

- Teenage Sleep
- Melatonin
- Body Clock
- Insomnia
- Depression and Sleep
- Mental Health and Sleep
- Drowsy Driving
- Advanced Sleep Phase Disorder (ASPD)
- Sleep Hygiene: Good Sleep Habits



Sleep Health Foundation ABN 91138737854 www.sleephealthfoundation.org.au

A national organisation devoted to education, advocacy and supporting research into sleep and its disorders.

Sleep Disorders Australia ABN 91 138 737 854 www.sleepoz.org.au

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

Australasian Sleep Association ABN 91138737854 www.sleep.org.au

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

Disclaimer: Information provided here is general in nature and should not be seen as a substitute for professional medical advice. Ongoing concerns about sleep or other medical conditions should be discussed with your local doctor.

