

Pain Management Service

Pain and Sleep

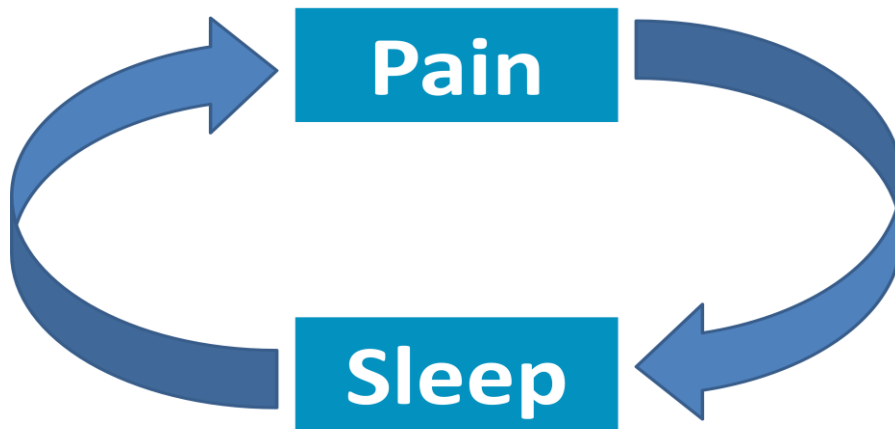
Aim	2
Pain and sleep	2
The importance of sleep	3
The sleep cycle	3
Normal variations in sleep	4
Factors affecting sleep	5
<i>Environment</i>	5
<i>Behaviours</i>	6
<i>Thoughts</i>	8
Strengthening the connection between bed and sleep	9
What do you want to change about your sleep routine?	10
Useful resources for sleep	11

Aim

This information sheet aims to help increase your understanding of sleep including:

- The sleep process
- Why it's important
- How pain and sleep affect each other
- Strategies that can help to improve sleep

Pain and sleep



Pain and sleep can affect each other. The experience of pain can affect quality of sleep, and research tells us that poor sleep can lead to increased pain the next day. It is thought that this is because poor sleep contributes to sensitisation of the nervous system. Improving sleep is therefore an important part of pain management.

But it's also important to remember that sleep problems are common. Causes of sleep problems include: stress, anxiety, depression, some medications, as well as unhelpful sleep habits.

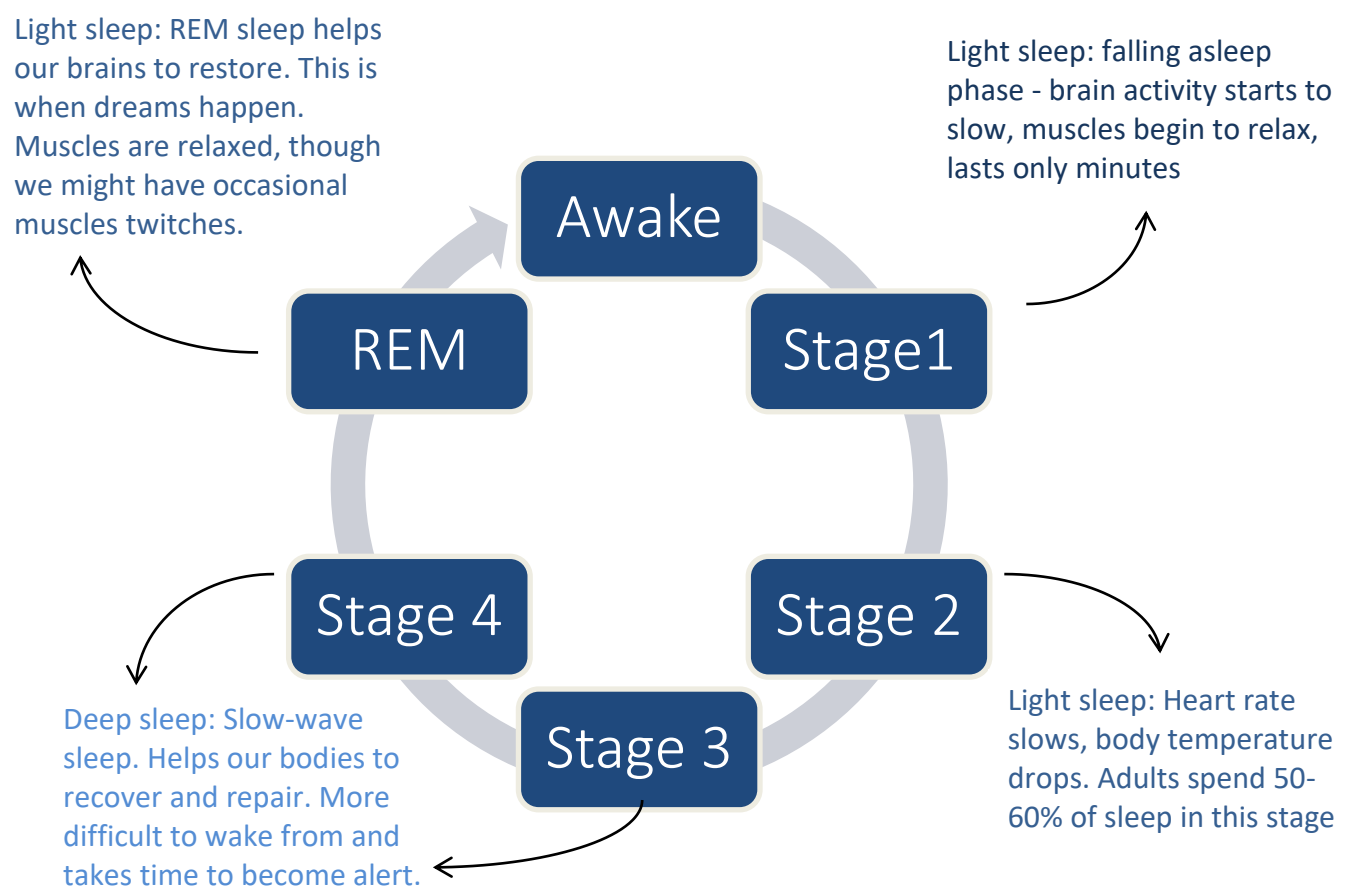
The importance of sleep

Sleep helps us function well during the day physically, mentally and emotionally.

- Sleep gives our bodies a chance to rest and restore. It is during our sleep that our body tissue is repaired, our tired muscles recover and our immune system restores.
- Our brains need to rest too. Sleep helps us process information from the day, and memories are stored. Sleep helps us to learn.
- Sleep is also important for our psychological wellbeing.

The sleep cycle

We cycle through different stages of sleep through the night, each with a different purpose. We go through the cycle multiple times throughout the night.



The amount of time we spend in each stage of sleep varies as the night goes on. Earlier in the night we spend more time in deep sleep. Later in the night we spend less time in deep sleep, and much more time in REM and lighter sleep.

It is normal to wake briefly several times through the night, this happens more often towards the end of the night when sleep is lighter. Often we just go straight back to sleep and don't even remember waking up. However if sleep has been a problem and we start to worry about the fact we are awake, and how awful that is, then we are more likely to become more awake. It can then take longer to get back to sleep. Or, if we become aware of pain, that can also affect how quickly we fall back to sleep.

If we have been sleep deprived we don't need to make up for what we have missed. Instead our sleep quality changes naturally. Our brain and body is good at giving us more REM sleep and deep sleep as needed.

It is thought that chronic pain is associated with less deep sleep, more light sleep and more frequent waking. This may be linked with over-activity in the nervous system.

Normal variations in sleep

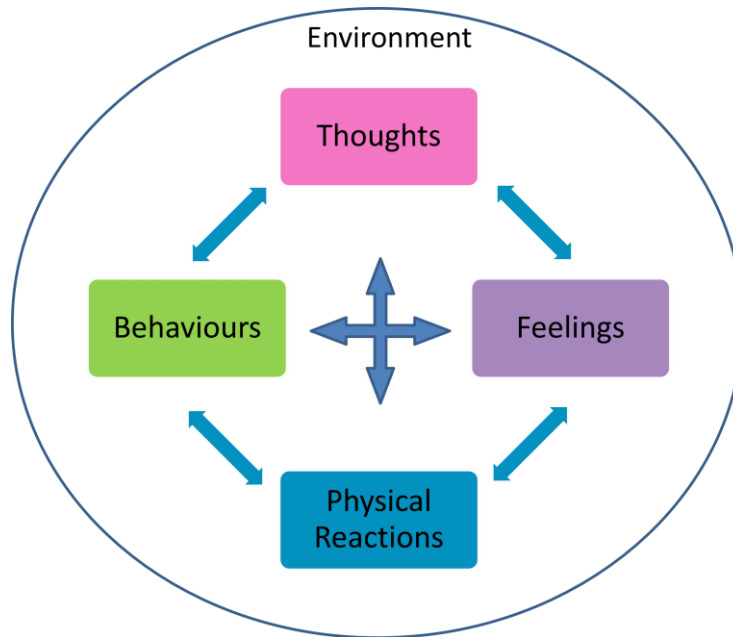
Sleep needs vary with age and stage of development. We generally need less sleep as we get older. For example a baby needs more sleep than older children, and we need less sleep in our 60s that we did in our 30s or 40s.

As we age, the proportion of deep sleep we get in a night decreases and the proportion of light sleep increases, this is normal. We tend to sleep more lightly as we get older. REM sleep remains about the same. So some of the sleep problems we get, like lighter, more easily disturbed sleep, may be normal changes.

Sleep varies from person to person. The eight hours you hear about is just an average, not an ideal time. There is no ideal, it is an individual thing. Some people sleep far less than others with no adverse effects.



Factors affecting sleep



We are thinking about how to improve our ability to fall asleep and get back to sleep. Looking at the above cycle, this is a change in our physical reactions. We are going to look at what factors we can change or manage differently to encourage sleep.

Environment

There are a number of factors in the bedroom environment that can make a difference to sleep.

Bedroom environment factors	Things to consider
Noise	Earplugs Soothing music or radio on low Apps that play white noise or natural sounds
Temperature	Cool air (16-18°) is thought to be ideal Layers are useful
Air	Air the room, fresh air can be helpful for sleep.
Light	Darkness promotes sleep, consider black out blinds.
Calm	Does your bedroom give you a feeling of calm when you walk in? Consider what you could change e.g. clutter
Comfort	What could help?
Screens	Consider removing screens from the bedroom or switching off earlier.



Getting comfy

It can be really difficult to get comfortable for long periods when you are in pain. In the lighter stages of sleep, pain and/or stiffness can lead to waking. It can be important to find more than one position, the body needs a change. No one position is right for everyone, even those with the same condition. Using pillows to support the curves of the body can be helpful.

Here are some ideas others have found useful:

- Side lying with support
- Side lying half turned to front or back
- Long pillows
- Supporting under the ankle as well as the knee
- Elevation of the legs when lying on your back
- Supporting the arm with a pillow
- To support the curves of the neck most people need more pillows lying on their side than on their back.
- To support the shape of your neck, try a homemade shaped pillow e.g. use a rolled up towel inside a pillowslip or tie an old pillow in the middle to make a butterfly shaped pillow.



Behaviours

Think about your behavior throughout the whole day as well as in the evening. Pacing activity can help to reduce wind-up.



Try not to take naps

Naps can reduce the body's drive for sleep during the night. If you feel really sleepy, try doing something to distract yourself e.g. going for a walk, talking with or phoning someone. Think about different types of rest that will not send you to sleep.

It is true that some people do take naps and still sleep well. However if you are not sleeping well at night and are trying to change this, the recommendation is not to take naps during the day. If you really feel strongly that you want to nap then try to keep naps under 15 minutes.

Fatigue is not always helped with more sleep. Pacing and effective rest can be helpful in managing fatigue.

Exercise

Evidence shows that short bursts of exercise during the day, like walking, swimming or yoga, can help with sleep (and mood). This is not about wearing your body out but more about releasing tension and gently tiring your muscles. It is important to pace any exercise to avoid winding up your pain system. A gentle stroll before bedtime can help sleep.

Unhelpful things we might do before bed

Caffeine	Caffeine has a stimulating effect on the nervous system, it keeps us awake and the effects can last for many hours. Perhaps try a decaf alternative or herbal.
Smoking	Nicotine is a stimulant, it makes it harder to fall asleep.
Heavy, spicy and sugary foods	These types of food close to bed time can disturb sleep. Try lighter snacks instead.
Alcohol	Avoid using alcohol as a sleep aid. Whilst it may help with falling off to sleep, quality of sleep is affected. When alcohol levels in the blood drop, it tends to have a waking effect.
Screens	The blue light from screens promotes wakefulness. Try using filters or having a turn off time.
Mentally demanding activities	This type of activity right before bed can delay the winding down we need to fall asleep.

Motion is lotion

In the evenings before bed:

- Use your most comfortable position
- Get up and move
- Use gentle movements
- Repetitive, rhythmic movements can be helpful

Bedtime routine

- Create a calm, soothing routine for yourself to help you relax and prepare for sleep.
- Stick to the same time for going to, and getting up from, bed.
- BUT don't go to bed unless you're sleepy.
- Try not to go to bed early because of fatigue. This can be hard but if you go to bed early, you are more likely to wake up in the early hours.
- Try not to sleep in after a bad night as it can affect the next night's sleep.





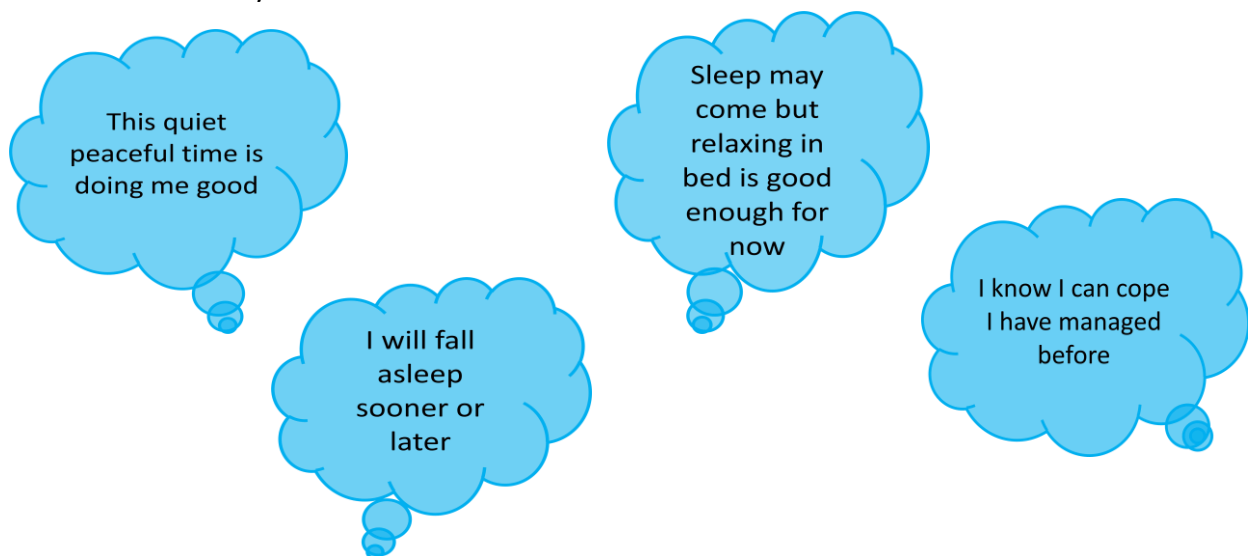
Thoughts

Worry about sleep

Stress and worry about not sleeping well can start to affect sleep, sometimes even more than the pain. And the more tired someone is, the more they might worry about sleep.

Try to notice the thoughts you have about getting to sleep, or the thoughts you have when you wake in the night.

Perhaps you could respond to your thoughts with some of these statements. Or create your own that work for you.



Clock watching

- Worry about not getting enough sleep can lead to wanting to keep checking the time when struggling to get to sleep or on waking in the night. However this tends to lead to more worry about being awake and not sleeping well.
- Paying attention to the time is likely to generate unhelpful thoughts e.g. *"I should be asleep by now, tomorrow will be a nightmare!"*
- Try turning the clock to the wall or leaving your phone out of the room.
- Try telling yourself *"it doesn't matter what time it is"*.
- Practise directing your attention somewhere else.



A busy mind

Sometimes we go to bed and suddenly our mind comes alive! Thoughts and worries can go round and round in our heads, stopping us from getting to sleep. The following strategies can be helpful for a busy mind:

- Writing down thoughts and worries. You can deal with them in the morning.
- Breathing
- Calm place



Give up trying

The more we try to sleep, the more it can escape us! The act of trying can keep us awake and lead to frustration when we don't succeed. Good sleepers don't really think much about how to get to sleep, they don't put any effort in, it just happens.

So how can we stop trying when all we want is a good night's sleep?

- Try keeping your eyes open and resist letting them close (in the dark).
- Trying to do something else can sometimes help e.g. reading, listening to gentle music or a podcast, a relaxation exercise. We are then not putting effort into trying to sleep.

Strengthening the connection between bed and sleep

We want our brain to recognise that bed is for sleep. We want the bed to be a cue for sleep. If your brain connects the bed with lying awake for long periods, tossing and turning, it makes this harder.

Try not to use your bed for anything except sleep (no TV, no meals in bed). Sexual activity is an exception.

If you've been lying awake for a while, try getting up. Keep lights dim, do something calming e.g. put on some gentle music or the radio quietly, or potter around. Things like watching TV or doing crosswords might be too absorbing or stimulating. Avoid caffeine and nicotine, opt for milky drinks or water instead. If you suffer from stiffness some gentle movement might help. Stay out of bed until you feel sleepy again. This will mean you're more likely to fall asleep more quickly.

What do you want to change about your sleep routine?

Area e.g. environment	Factor e.g. playing games on my phone in bed	How I plan to change it e.g. playing on the sofa then putting my phone further away when I go to bed

Useful resources



Sleepio is an online sleep improvement programme. It has been clinically proven to help people fall asleep faster and stay asleep through the night. It can be accessed via website or app. <https://www.sleepio.com/>



The **Calm app** is helpful for people experiencing stress and anxiety. It provides guided meditations, sleep stories, breathing programmes and relaxing music.



The **Headspace** app helps you to learn the skills of meditation. You gain access to hundreds of meditations included those intended to help stress, anxiety and sleep.

Lothian Pain Management website:

<https://services.nhslothian.scot/painmanagement/AAH/Pages/default.aspx>

There are some resources on the Lothian Pain Management website that you may find helpful to incorporate into your bedtime routine:

- Soothing Rhythm Breathing
- Mindfulness of the Breath
- Calm Place
- Mindful Movement Based Tai Chi Exercises