

INSOMNIA

Insomnia is difficulty with falling asleep and/or staying asleep with daytime symptoms (such as difficulty concentrating, irritability, low mood and anxiety).

Acute insomnia lasts up to 3-months while **chronic insomnia occurs at least 3 times a week for a minimum of 3-months.**



THERE ARE TWO KEY FACTORS THAT DETERMINE SLEEP (ASIDE FROM OUR CIRCADIAN RHYTHM)

1 SLEEP PRESSURE – PROMOTES SLEEP

- The longer you stay awake, the sleepier you become.
- This is because when we are awake, a chemical messenger called adenosine builds up in the brain which results in us feeling sleepy and aids initiation of sleep. When we sleep adenosine reduces, making us feel less sleepy.



2 HYPERAROUSAL – PREVENTS SLEEP

- Negative thoughts or feelings activates the bodies stress response.
- Our stress response deters sleep as this was previously evolutionarily advantageous.
- This often leads to the mind being alert and the body being restless.

INSOMNIA IS OFTEN DUE TO PROBLEMS WITH SLEEP PRESSURE, HYPERAROUSAL OR BOTH.

3 HOW TO INCREASE SLEEP PRESSURE?

- **Go to bed later or get up earlier** (our instinct is to do the opposite after a bad night's sleep!)
 - » Push your bedtime back to a time you feel sleepy (not tired).
 - » Have a regular morning wake time (even on weekends/days off).
 - » Do not nap - Reduces sleep pressure & can result in a vicious cycle.



As well as allowing your body to get into **a good routine** (also called good sleep hygiene), this will also increase your **sleep efficiency**. This means the percentage of time you're asleep in bed is higher, **consolidating sleep and improving sleep quality.**

4 HOW TO REDUCE HYPERAROUSAL BEFORE SLEEP?

- The key is to **reduce the fear surrounding not sleeping.**
 - » There is **no evidence** that every adult needs 7-9 hours of sleep a night – everybody's needs are different.
- Try to **allow a bad night's sleep** without the fear of its impact the following day. Focus on what you can achieve, sticking to plans and routines – keeping a positive mindset.
- Optimise your days: ensure you are doing things you enjoy in the day, despite not sleeping well.

5

INTRODUCE A “BUFFER ZONE” IN YOUR PRE-SLEEP ROUTINE

- Our mind needs to slow down before switching off to get to sleep - Try to incorporate a buffer zone of at least 30-minutes no matter what time you're going to bed.
- Consider what you are doing in the last hour-or-so before going to sleep. In this time try stopping chores/work, using mobile phones or screens less, and slowing down by doing something relaxing and utilise dim lighting.



6

WHAT DO I DO IF I CAN'T FALL ASLEEP?

- If you're lying in bed trying to sleep, you're likely to be unknowingly drifting in and out of light sleep. This reduces your sleep pressure!
- If you have been lying awake for around 20-minutes, or starting to worry about not sleeping, get out of bed for around 30-minutes, or until you feel sleepy. Do a relaxing activity you enjoy in dim lighting.
 - » This trains your brain to ensure there is an **association between being in bed and sleeping** and removing the link of being in bed, awake and stressed.
 - » Getting out of bed also ensures you're staying awake and **continuing to build sleep pressure** to help initiate your sleep when you get back into bed.



Try implementing the information in this leaflet for a few weeks.
Improving insomnia requires time and persistence.

WE ALSO OFFER A 'GOOD SLEEP HYGIENE' LEAFLET FOR MORE INFORMATION

FURTHER SLEEP RESOURCES

[Effective Treatment for Insomnia - Sleepful](https://sleepful.org.uk/) – A self-paced online programme with no cost (<https://sleepful.org.uk/>)

[Space for Sleep - SilverCloud](https://nhs.wales/silvercloudhealth.com/onboard/nhs.wales/programs/89/details) – A self-paced online programme with no cost (<https://nhs.wales/silvercloudhealth.com/onboard/nhs.wales/programs/89/details>)

[Sleepstation - sleep improvement & insomnia course](https://www.sleepstation.org.uk/) – A self-paced online programme with a cost element. Email guidance is available without a cost attached. (<https://www.sleepstation.org.uk/>)

References

Chaput, J.P., Dutil, C. and Sampasa-Kanyinga, H., (2018) 'Sleeping hours: what is the ideal number and how does age impact this?' *Nature and science of sleep*, pp.421-430.

Consensus Conference Panel: Watson, N.F., Badr, M.S., Belenky, G., Bliwise, D.L., Buxton, O.M., Buysse, D., Dinges, D.F., Gangwisch, J., Grandner, M.A. and Kushida, C., (2015) 'Joint consensus statement of the American Academy of Sleep Medicine and Sleep Research Society on the recommended amount of sleep for a healthy adult: methodology and discussion.' *Journal of Clinical Sleep Medicine*, 11 (8), pp.931-952

Dopheide, J.A., (2020) 'Insomnia overview: epidemiology, pathophysiology, diagnosis and monitoring, and nonpharmacologic therapy.' *The American journal of managed care*, 26(4).

Porkka-Heiskanen, T. and Kalinchuk, A.V., (2011) 'Adenosine, energy metabolism and sleep homeostasis.' *Sleep medicine reviews*, 15(2), pp.123-135.

Riemann, D., Espie, C.A., Altena, E., et al. (2023) 'The European insomnia guideline: An update on the diagnosis and treatment of insomnia 2023.' *Journal of Sleep Research* 32(6), e14035



**Lung Function
& Sleep Apnoea**
Department



Bwrdd Iechyd Prifysgol
Caerdydd a'r Fro
Cardiff and Vale
University Health Board

