

# SLEEP AND CANCER PREVENTION

This factsheet was developed by the International Association of Fire Fighters and the Firefighter Cancer Support Network.



Fire fighters often face disrupted sleep from long shifts, overnight calls, and irregular schedules. Poor sleep quality can cause more than fatigue and is positively associated with the long-term risk of developing cancer.<sup>1</sup>

Chronic sleep disruption and circadian rhythm disturbance have the potential to reduce immune function and DNA repair, increase inflammation, and suppress melatonin, which – over time – can contribute to higher risks for certain cancers.<sup>2</sup>

Some of the sleep risks fire fighters often face include shift work, interrupted sleep from calls and station tones and alarms, sleep disorders, and stress and noise exposure. These risks can disrupt circadian rhythm and reduce sleep quality.



Here are some steps fire fighters can take to improve sleep:

- Prioritize your sleep hygiene and aim for 7–9 hours of quality sleep per 24-hour period (including naps)
- Keep your sleep environment dark, cool, and quiet when possible
- Avoid caffeine and heavy meals 2–3 hours before bed
- Reduce screen time and blue-light exposure before sleeping
- While on shift, try to nap or rest when you can, especially after long shifts
- Use blackout curtains or eye masks when sleeping during the day
- Maintain consistent sleep routines even when off shift
- Monitor your sleep and get screened for sleep disorders if you feel something is off
- Use a CPAP machine or other prescribed treatments consistently

Sleep can be an essential component in reducing your cancer risk, so it is important to prioritize your sleep both on and off the job.

<sup>1</sup> Song, C., Zhang, R., Wang, C., Fu, R., Song, W., Dou, K., & Wang, S. (2021). Sleep quality and risk of cancer: findings from the English longitudinal study of aging. *Sleep*, 44(3), zsa192. <https://doi.org/10.1093/sleep/zsa192>

<sup>2</sup> Haus, E. L., & Smolensky, M. H. (2013). Shift work and cancer risk: potential mechanistic roles of circadian disruption, light at night, and sleep deprivation. *Sleep medicine reviews*, 17(4), 273–284. <https://doi.org/10.1016/j.smr.2012.08.003>