



## Sleeping and Sparklers: Keep 4th of July Fireworks from Waking You Up

The Sleep Blog, SleepDr.com

With the Fourth of July rapidly approaching, we're all looking forward to a delicious backyard barbeque, celebrating with friends and family, and especially the nighttime fireworks display. What we might not be anticipating is the late-night cacophony that these explosions and celebrations cause. Learn here how to enjoy the festivities without the fidgety night!

### How does noise affect our rest?

Have you ever dreamt about a strident beeping, only to wake up and realize that the noise was coming from your alarm clock? Even while sleeping, our brain continues to register basic sensory details, including outside noises.

Depending on the type of sound we are exposed to, excess nighttime noise can be disruptive to our rest. Humans are especially likely to wake up during the light stages of sleep, and are most responsive to emotionally significant noises, such as a yawling baby.

Sounds at levels from 40 to 70 decibels are the ones that typically keep us awake. Examples of sounds falling within these limits are birdcalls, loud music, a vacuum cleaner, or even a familiar din such as a bustling city or a running air conditioner. So why do only some of these noises bother us?

The answer lies in the distinction between regular background noise and disruptive "peak" sounds. If you are used to sleeping in a continually busy environment like a loud city or an active household, you are probably accustomed to noise, and may even have trouble sleeping in a completely silent environment. Background noise can also be beneficial by reducing the difference between ambient noise and a startling, higher-volume blast. These "peak" sounds—such as a firework exploding—are more likely to disturb sleep than the low-level tones that can populate our bedrooms.

### Minimize the negative consequences of loud noises

One way to improve sleep quality is to broadcast white noise in the sleeping area. White noise helps mask loud sounds and reduces the difference between background levels and peak sounds. It can be provided by anything from an air purifier to a sound conditioner. Consider moving a fan into the bedroom on Friday evening to provide some white noise.

On an everyday basis, you can avoid aural disruption by practicing healthy sleep habits like turning off your TV and radio before going to bed.

However, if you really want to block out the commotion from nighttime pyrotechnics—or if you will be in close proximity to fireworks—consider buying a pair of earplugs to protect both your ears and your sleep quality.

We hope you have a happy and healthy Fourth of July!