

Light from electronics disturbs sleep, especially for teens

By Meeri Kim, Washington Post

The pervasive glow of electronic devices may be an impediment to a good night's sleep. That's particularly noticeable now, when families are adjusting to early wake-up times for school. Teenagers can find it especially hard to get started in the morning. For nocturnal animals, it spurs activity. For daytime species such as humans, melatonin signals that it's time to sleep.

As lamps switch off in teens' bedrooms across America, the lights from their computer screens, smartphones and tablets often stay on throughout the night. These devices emit light of all colors, but it's the blues in particular that pose a danger to sleep. Blue light is especially good at preventing the release of melatonin, a hormone associated with nighttime.

Ordinarily, the pineal gland, a pea-size organ in the brain, begins to release melatonin a couple of hours before your regular bedtime. The hormone is no sleeping pill, but it does reduce alertness and make sleep more inviting.

However, light – particularly of the blue variety – can keep the pineal gland from releasing melatonin, thus warding off sleepiness. You don't have to be staring directly at a television or computer screen: If enough blue light hits the eye, the gland can stop releasing melatonin. So easing into bed with a tablet or a laptop makes it harder to take a long snooze, especially for sleep-deprived teenagers who are more vulnerable to the effects of light than adults.

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