

"Lack of sleep disrupts every physiologic function in the body," said Eve Van Cauter of the University of Chicago. "We have nothing in our biology that allows us to adapt to this behavior."

EMF/sleep studies

[EMF and pineal](#)

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[Histamine increased](#)

[EMF and melatonin](#)

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[Total and slow wave sleep decreased](#)

[EMF and pineal/serotonin metabolism](#)

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★ [Mobile phones, altered stage R sleep](#)

★ [Higher EMF \(towers\), more insomnia](#)

[RF affects sleep-dependent performance](#)

[EMF damages sleep quality vs. quantity](#)

[EMF, sleep, pineal, melatonin, circadian](#)

[RF, sleep spindles, non-REM sleep effects](#)

[EMF, signal transduction, melatonin receptors](#)

[Mobile phone, "talk" mode, delays sleep onset](#)

[Pulse modulated RF, sleep EEG, performance](#)

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[EEG architecture, EMF frequencies, modulation frequencies](#)

[ELF, electrical workers, oxi. stress, melatonin, sleep problems](#)

BOOKS



[Lights Out](#)

[Lunaception](#)

[Circadian Prescription](#)

[EMF: A Consumer's Guide](#)

[Insomnia, Fatigue, Cell Towers](#)

ARTIFICIAL EMF EFFECTS ON RESTORATIVE SLEEP:

*Decreased melatonin released
Increased histamine released
Reduced total sleep time
Reduced slow wave sleep
Decreased tissue repair
Distracting symptoms: tinnitus, more*

WHAT CAN WE DO?

DAYTIME BEHAVIOR

*Monitor your diet
Monitor your exercise
Don't take late naps
Minimize EMF exposure
Reduce total light in evening
Block blue light in evening*

NIGHTTIME BEHAVIOR

*Ideally, turn circuits off to bedroom
Power down wireless devices
Sleep in a bed without metal
Turn off all light reaching bedroom
Move clocks away from bed
Move radios away from bed*

★ **SLEEPLESS IN AMERICA**

IPHONE ADDICTION MAY ALSO CAUSE INSOMNIA



How does EMF disrupt sleep?

Reduce melatonin

Increase histamine

Alter sleep spindles

Reduce slow wave sleep

Disrupt circadian responses

Alter cryptochrome functions

Causing symptoms that disturb rest

METAL MATTRESSES, EMF, SLEEP EFFECTS



EMF AND SLEEP

EMF/Sleep articles

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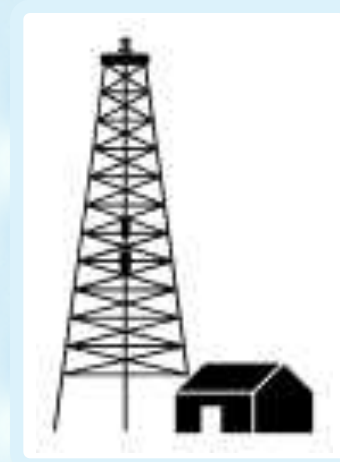
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[Townsend Newsletter, LeBeau](#)

[Is your bedroom keeping you awake?](#)

[MF, MF component of RF, cryptochrome](#)

[Smartphones jumble body's sleep rhythms](#)



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What can we do?

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MAP INDEX: MELATONIN (PDF)

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Newest version [this map](#)
Date of this update: 04-21-16

*The mechanisms whereby non-visible electromagnetic fields influence the melatonin forming ability of the pineal gland remain unknown; however, the retinas in particular have been theorized to serve as magnetoreceptors with the altered melatonin cycle being a consequence of a disturbance in the neural biological clock, i.e., the suprachiasmatic nuclei (SCN) of the hypothalamus, which generates the circadian melatonin rhythm. The disturbances in pineal melatonin production induced by either light exposure or non-visible electromagnetic field exposure at night appear to be the same but whether the underlying mechanisms are similar remains unknown.
R.J.Reiter*