A Dark Bedroom for Depression

Evening light causes depression, even in small amounts. In a 2018 study, people who slept with very low levels of background light in their bedroom had double the risk of depression over a five-year period, compared to those who slept in pitch darkness.

It's a surprising finding, as the level of light we're talking about is very low – about as much as a nightlight. It makes sense, however, in terms of biology. Light passes through the eyelids, and the eyes are very sensitive to blue-wavelengths of light. They have special receptors for that wavelength, called melanopsin, and those receptors regulate melatonin and other neurochemicals involved in sleep and depression.

Reducing blue light in the evening hours is just as important as sleeping in darkness. Bluelight blocking glasses do just that, and wearing them 1-2 hours before bed can deepen sleep, reduce weight gain, and prevent depression.

For bipolar disorder, the link is even stronger. People with bipolar mania recover faster when they sleep in a pitch dark room or wear blue-light blocking glasses in the evening: www.chrisaikenmd.com/darktherapy

Blocking blue light while you sleep

Blue-blocking glasses are uncomfortable to sleep with, so it's best to create a pitch dark room for sleep. Popular ways to light-proof a bedroom include:

- Blackout curtains (ShiftShade, or the DIY solution: buy blackout fabric, cut to fit your window, and attach with pins or Velcro tape).
- Press aluminum foil against the window panes and attach with painter's tape.
- Sleep in the basement.



People with mood disorders have fragile biological clocks, making them more sensitive to light at night.

- Place black electrical tape over LED lights on electronic devices.
- Purchase a draft snake or use a rolled up towel to cover the bottom of the door.

What if a pitch dark room is unsafe or uncomfortable? There are special no-blue light bulbs that can be keep on at a low level without altering brain chemistry. In Amazon, search for "Amber night light" or "no blue light" and "night light." Find examples at:

www.chrisaikenmd.com/darktherapy

Morning sunrise

One problem with a pitch-dark room is that you'll miss out on the morning sunlight, an important cue that shifts brain chemistry into daytime mode. Morning light is just as important as evening darkness for mood. A dawn simulator can bring that effect by creating an artificial sunrise in your room:

www.chrisaikenmd.com/dawnsimulator

A sleep mask is another way to create bedroom darkness. It works well, but might prevent the mood-lifting benefits of a dawn simulator.

Shift Work Syndrome

Night shift work is linked to the same health risks as evening light. Those include: depression, bipolar, fatigue, heart disease, cancer, diabetes, obesity, irritability, and poor concentration. With shift work, the problem is caused by a mismatch between sleep schedule and light exposure. Adjusting the light exposure with the techniques mentioned above is very helpful to shift workers:

- 1. *Artificial sunset*. Wear blue-light filtering glasses 2-3 hours before bed.
- 2. Artificial night. Sleep in a pitch dark room.
- 3. Artificial sunrise. Use a dawn simulator to wake up.

Some shift workers may also benefit from a lightbox in the "morning" (that is, when they wake up). Lightboxes give a more powerful dose of light than a dawn simulator, and can be used in conjunction with them:

www.chrisaikenmd.com/lighttherapy

There are also medications available to help people adjust to the night shift (e.g. modafinil/Provigil and armodafinil/Nuvigil).

-Chris Aiken, M.D., updated 8/5/2024