

WHAT YOU NEED TO KNOW ABOUT LED LIGHTING

The age of LED lighting is upon us, and along with its many positive attributes, like long life and low power consumption, there are also some potential downsides of which you should be aware, such as excessive glare, safety and health issues.

The glare we experience when we look into a bright LED light can range from being an annoyance or downright intolerable, or "blinding", and thereby preventing us from being able to see well enough to perform a task, or to be safe while walking or driving. Some people are very sensitive to glare, but that sensitivity is especially prevalent among the elderly, those on medications or with illnesses, or those who are overly tired. Experiencing excessive glare, like looking at on-coming headlights or floodlights, can cause your vision to take seconds or minutes to be fully regained.

The light emitted from LEDs comes in a range of colors, from warm, like the light from a traditional incandescent bulb, to very cold and bluish. According to the AMA, having cold/blue "sunlight" in your home at night, especially in the bedroom and/or bathroom, can upset your biological clock and thereby can be bad for your health. When buying light bulbs, note the color rating on the package, designated with a "K" for "degrees Kelvin". Choose bulbs rated "2700K" or "3000K". They emit warmer colored light, unlike 4000K and 5000K bulbs that emit whiter, bluish light.

LED light bulbs are made up of many tiny diodes, each like a little spotlight, aiming its light in a particular direction. Such "spotlights" can be a considerable source of glare, causing annoyance and impacting our ability to see effectively. Buy outdoor lighting fixtures that shield the light bulb/source and its little "spotlights" from being seen, that keep your lighting from shining to your neighbor's property and into their bedroom windows, so their sleep isn't disrupted. And shut the lights off by, say 10:30 PM, or put them on a motion sensor so they are only on when needed.

And of no less concern is the environmental impact of LED lighting on plants and animals. More than 50% of living creatures do their feeding and hunting under the protection of darkness, and when bluish LED lighting turns their nocturnal habitat into day, those creatures' lives are negatively impacted. Cold, bluish LED lighting is not good for the environment. Use low-wattage bulbs labeled 2700K or 3000K.

Bottom line: LEDs are a great advance in lighting, but can be a considerable source of annoying and blinding glare that can impact your well-being and that of your neighbors and the environment. Buy bulbs with a 2700K or 3000K color temperature ratings, or that are labeled "soft white" or "warm white". Use bulbs with a maximum rating of 1100 lumens. Use lights that shield the bulbs from direct view, and prevent their light output from shining onto your neighbor's property, and into their windows. Use lights with a lumen rating of 1,100 or less, and shut them off by 10:30 p.m., or 11 p.m. each night at the latest,. If family members typically arrive home late at night, use motion detector control so they turn on and off automatically.

For more helpful information about other best outdoor lighting practices, please visit our website at www.polcouncil.org.