

Lighting Considerations for Seniors

Small investments yield high returns for the aging in place.

Katrina Kepf, R.N., CAPS

Tuesday’s Tips- 1/15/19

It is no surprise that many things change as we age. Our eyes are no exception and this can be a key component to safety. Many seniors experience a yellow discoloration of the lenses in our eyes. This can make it difficult to distinguish colors such as blue, green and violet. It also may reduce the amount of light that enters the eye, which can make focus and distance perception more difficult. By age 75, most people require twice as much light as the normal recommended standard, and nearly four times as much as a 20-year-old, to see satisfactorily (Dementia Services Development Center – The Importance of Lighting). Clearly, because of these changes, the lighting requirements in our homes also change as we get older. Fortunately, modifications that provide adequate lighting in the home are some of the easiest and most cost-beneficial due to the latest technology.

Adequate lighting is especially important for people with a diagnosis of dementia. When someone suffers from this disease, dark spots or areas in a room that are not clearly visible or well-lit can appear scary and confusing to the brain. Providing well-lit and bright spaces can help to ease the mind, promote safety and provide a clearer understanding of the surroundings.

Long gone are the days of the standard incandescent and fluorescent light bulbs. They are rapidly being replaced with cost-efficient LEDs (Light Emitting Diodes). LEDs use far less energy, last much longer and are available in an ever-increasing variety of shapes, sizes, and colors. Because they are designed differently, the criteria used to select a suitable solution have changed. Today there’s more to a light source than “a 60-watt bulb”. Information about the most important features of the light (lumens, CRI, color temperature and power consumed) is required to be on each consumer package.

First of all: “lumens” (lm) (no longer “watts” (W)). “Lumens” describes how much light a bulb actually produces. The more lumens mean more light. Here is a handy chart to help you with the old-to-new equivalents:

Lumens	Incandescent light bulb (watts)	Fluorescent / LED (watts)
600 lm	40 W	10 W
900 lm	60 W	15 W
1125 lm	75 W	18.75 W
1500 lm	100 W	25 W

Another consideration is, as mentioned above, the yellowing of the lens. As we age this can cause us difficulty seeing colors clearly. Choosing a light source with a color rendering index (CRI) of at least 80 can help to provide the most accurate color perception.

Still on the subject of lens yellowing, you might consider up-sizing your existing, say, 40-watt bulb that emits 600 lm with a 900 lm LED. The brighter light will certainly improve your vision in your home. And, this is made even easier by the fact that a lamp or fixture rated for 40 watts will certainly accommodate a new, brighter bulb since it will actually consume less energy!

Another color consideration is “Kelvins”. This is a measure of the “warm” and “cool” lights we’re familiar with. “Soft” light is in the 1700K to 3000K range; “cool” light is in the 3500K to 4100K range; and, “day” light is in the 5000K to 6500K range. The actual choice is individual preference, but a warmer light is usually associated with residential and relaxing environments where a cooler light is considered more appropriate for workspaces and task lighting. However, because things appear more yellow as we age, you may wish to try the next range up from what you preferred before. For example, from “soft” to “cool” or “cool” to “day”.

That said, think about the following areas when you are considering lighting modifications and keep in mind that natural lighting varies during different times of the day and the outside weather. Take glare into consideration, as well.

- Kitchens – task lighting, LED strip under to kick of cabinets
- Parking areas
- Entrances, exits, and walkways
- Stairs - LED strip at the nosing of the stairs
- Hallways
- Night lights

The lighting section of the local hardware store can feel a bit overwhelming at first glance. You will find numerous styles and shapes of LED lighting for all of the above uses. And, because LEDs use much less energy, there are even battery-powered, “stick anywhere” products that let you put bright light where you want it without hiring an electrician. These are perfect solutions for dark closets or pantries.

Maintaining good lighting comes with the physical act of changing the light bulbs when they go out. This is often a risky proposition for many, as most bulbs are located high and out of easy reach. Here is another area where LEDs really shine (pun intended). LEDs are known for being extremely long-lasting, with a lifespan of up to 60,000 (!) hours compared to 1,500 hours for the average incandescent bulb. There’s chance that once you make the switch to LEDs you’ll never have to change a light bulb again.

Couple longevity with energy savings and LED lighting is easy on the budget, and easy to do too.
An amazing return on a small investment in money and time!

Here is a great article on lighting that I would like to recommend: <https://bit.ly/2MadB5t>

About Katrina



Katrina Kepf is an R.N. who has for years cared for seniors and the disabled. She is also CAPS (Certified Aging in Place Specialist) certified and a Realtor®. Katrina is the president of L.I.F.E. (Living Independently and Functionally in your Environment). L.I.F.E. (www.etnlife.com) provides home modification and relocation resources for seniors and the disabled in Knoxville, TN. Katrina can be reached at:

katrina@etnlife.com.