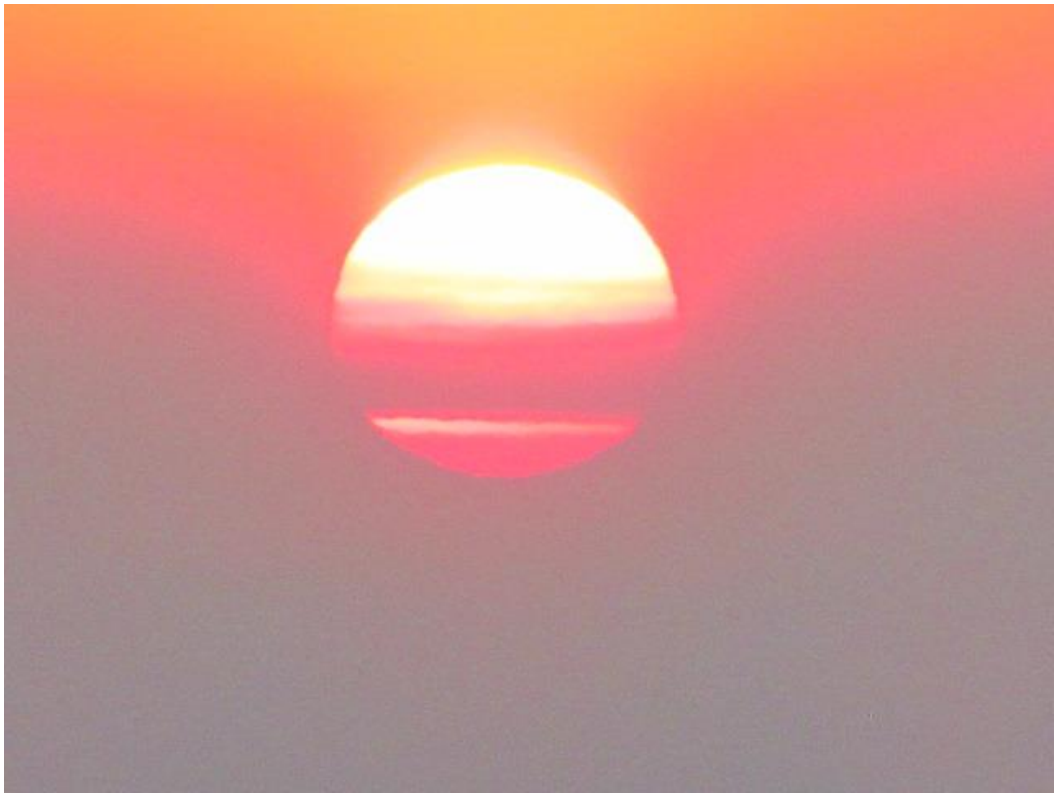
Sensitivity to light in people with environmental illnesses



Sensitivity to light is a rather common problem among people with environmental illnesses (MCS or EHS). It can be limited to bright sunlight, or be more severe where indoor light and light from computer screens cause symptoms.

Keywords: *light sensitivity, photosensitivity, environmental illness, electrical sensitivity*

What is light sensitivity?

Light sensitivity is a class of diseases that all produce symptoms when exposed to light. That can be light from the sun or artificial light.

The problems can be when the skin is exposed to light, or the eyes are. Some people have symptoms from both eye and skin exposures.

When the eyes are affected, it is called photophobia. When the skin is involved, it is called photosensitivity.

There are many different versions of photosensitivity with names such as photodermatosis, photodermatitis, phototoxic, photoallergic and photoexacerbated (Oakley 2016).

Some areas of skin, such as the face, may be more sensitive to light than other parts of the body.

In most cases wearing hat, sun screen, and sunglasses outdoors is all that is needed to cope. In rare cases it can become so severe people have to live in a darkened home and not go outside in the daytime.

Causes of light sensitivity

There are many known causes of light sensitivity:

- Prescription drugs (antibiotics, diuretics, antifungals, many more)
- Anti-inflammatory drugs
- Sunscreens
- Cosmetics
- Fragrances, essential oils
- Auto-immune diseases (lupus, Sjogren's, etc)
- Porphyria
- Dry eyes
- Kidney failure
- Various skin diseases

For a longer list, see Amanda Oakley (1996).

The kind of sunscreen that makes the skin itself more resistant to ultraviolet light is a drug. These drugs can have the side-effect where they actually make the skin more sensitive to light.

Causes less-accepted by mainstream medicine:

- Migraines (during episodes)
- Chronic fatigue syndrome/ME
- Electrical hypersensitivity (EHS)
- Long Covid

- Overreactive thalamus

Skin, eyes, neurological

Mainstream medicine focuses on visual skin symptoms (redness) or eye pains. But some people report symptoms that appear to be neurological, such as tingling and pains with no visible redness (Johansson 1999).

Light sensitivity and electrical hypersensitivity

Sensitivity to light is rather common among people who are also hypersensitive to electromagnetic radiation (EHS). Surveys in three different countries show that thirteen to 45 percent of people with EHS also report some sort of light sensitivity (FEB 2007; Schooneveld 2007, Kato 2012).

It is not known why electrical sensitivities can cause problems with light. One theory is that light is a form of electromagnetic radiation, and not really any different from the radiation from computers and mobile phones. The only difference is that we can see it.

There have been just a few scientific studies looking at light sensitivity in people with EHS (Sandstrom 1997; Lyskov 2001; Johansson 1999). There are no such studies on people with severe EHS.

It can be difficult to distinguish between light sensitivity and electrical hypersensitivity. It can help give clarity if a computer screen is covered by a dark cloth, while the person continues to sit in front of it.

Light sensitivity and multiple chemical hypersensitivities

One scientist has observed that bright light seems to be a common problem for people with multiple chemical sensitivity (Miller 1994). But it has not been studied.

We have heard of a few cases in people with MCS who did not also have EHS, but it appears more common among people with EHS.

Point-sources of light

Point-sources of light can be particularly troublesome. That can be a candle in a dark room, a bright lamp, computer screens, reflections from shiny surfaces,

individual outdoor lights, etc. We've even known people who had trouble with the full moon on cloudless nights, when out in the dark countryside.

If the point source is not bright enough to cause problems because of the light itself, the problem may be the contrast. The eye and the brain is trying to cope with a "picture" that is both bright and dark in places, and is straining.

Flickering lights

There are many sources of flickering lights. Some are very obvious, such as the flashers on emergency vehicles and tall towers. Flickering is also generated when the sun is low on the horizon and passes through the blades of spinning wind turbines, or is seen from a car driving along a tree-lined road.

People report that they find the white strobe lights more disturbing than more softly blinking red lights on tall masts, chimneys, etc.

Computer screens and fluorescent lights also flicker. It is so fast we can't really see it, but the brain may still pick it up.

People with epilepsy can get seizures if staring at flickering lights.

The brighter the light, the easier it is to consciously notice the flicker (Inger 2014).

A study in Sweden showed that flickering lights caused neurological effects in all ten people with EHS that they tested, and not in the healthy control group (Sandstrom 1997). The same group of scientists did further studies on this (Lyskov 2001).

Even healthy people and animals can potentially be affected by flickering lights (Inger 2014).

The color of the light

For some reason, bluish ("cold") light is often more troublesome than other colors or full-spectrum light. Many people who do not otherwise have problems with light report that they do not "like" bluish light.

The massive roll-out of LED lights for streetlighting and in the households has caused problems. The "white" LED lights are actually blue, with fluorescent phosphor added to re-emit other colors of light. The early versions were very

bluish, while newer types have better phosphor blends that emit a more pleasant light. But any LED light still has a lot of blue rays in it.

Outdoor lighting

Outdoor lights can be difficult, especially some of the very bluish LED street lights. Fortunately, "warmer" street lights are now available, but the people in "early adopter" towns will be stuck for many years with the first models and their terrible light quality. And some towns may still choose the blue lights, since they are more energy-efficient.

Some headlights on cars are also too bluish, and right in your face when driving on a dark country road with drivers who don't care to turn down their brights.

Indoor lighting

Indoor lighting can also cause symptoms. It can be the ambient light level that is too bright. It can also be when a bright light is shining in the eyes (point source), such as from a naked light or even a candle in a dark room.

Psychologizing light sensitivity

The psychiatric profession has a long history of psychologizing people with illnesses that are currently not well understood. In the past that included asthma, hives, stomach ulcers, endometriosis, skin rashes, and much more.

That still includes light sensitivity, if the cause is not currently understood (Selner 1986; Lyndsey 2017).

If the light-sensitive person lives alone, and has to accept some light exposures in order to manage their lives, that can leave the skin seemingly tanned. This "tan" can then be misused to accuse the sick person of lying about their illness (Selner 1986).

This may also happen if the person stays inside, but still gets a "tan" from just the indoor lights.

Some people's skin does not have visual redness when exposed to light (Johansson 1999). Without visual signs, it is easy to jump to a psych conclusion there too.

Celebrities

Hannelore Kohl, wife of the German prime minister Helmut Kohl, had so severe light sensitivity she had to live in isolation in a darkened room. She attributed her extreme light sensitivity to use of antibiotics. It eventually drove her to suicide.

In popular media

The Netflix mini-series *Afflicted* features two young men with light sensitivity so severe they have to stay in darkened rooms. Unfortunately, the series is very sensational and cruelly portrays all the sick people as mentally ill.

More information

The book *Girl in the dark* by Anna Lyndsey is a vivid personal description of ten years living in a dark room: www.eiwellspring.org/reviews/GirlinDark.html.

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2024