

*Selected quotes from people experiencing serious health impacts caused by LED light exposure:*

***“...in the brief moment before my brain reacts, the worst LEDs look like a spray of strobing needles”***

Excerpt from Dr. M. Nisa Khan's response to an account from this epilepsy patient experiencing seizures triggered by LED lighting:

“I am shocked, outraged, and saddened. I hope you understand how frustrating it is for me at first not being able to get through to the scientists and engineers involved in light, optics, and LED lighting; then to see and understand what the LED lights are doing to some light-sensitive people.

'A spray of strobing needles' means she sees the very intense directive light rays (millions and billions of them simultaneously) coming directly at her. This is exactly what LED lights do in reality; at any color/wavelength. A good majority of the people aren't seeing this reality in its entirety as their eyes are saturated to some maximum light intensity. But their bodies and consciousness know it and at some point, they too will go bonkers.” M. Nisa Khan, Ph.D. - Author *Understanding LED Illumination*

“ I have epilepsy as well, and know the damage the lights can cause”

“ I have not found a medication that stops seizures that are triggered by the (LED) lights”

“ Daily I am bombarded with seizure triggers (strobes on bicycles, dog collars, police and fire engines, and LEDs in stores, restaurants, and even in doctors' offices...which I find unforgivable!)...They also make my muscles twitch and I feel nauseous.”

“When exposed to LED light sources I experience nausea, vertigo, anomia and sometimes migraine-like, pounding headaches combined with a feeling of reality loss...certain street lights or LED panels induce very fierce symptoms after only a short exposure.”.

“ Currently I am not employed or doing any volunteer work because of lighting in buildings...and other road lighting. I hate going out in public because of light sensitivity.”

“I had no previous health conditions, optical sensitivity or problems with headaches...Bright blue-ish LEDs also make me feel agitated and nauseous. I'm perfectly well if I stay away from these lights, but that means staying away from my children's school, the health center and hospital, most churches and meeting houses, libraries...much of life as I knew it. The times the symptoms last depend on the length of exposure to the lighting, but for ages afterwards I feel incredibly drained and down and 'wrong' all over.”

“This situation has recently gotten a lot worse with the introduction of LED street lighting...which causes the worst pain yet.”

“... no longer able to cycle, walk or drive wherever LED streetlights are installed as they instantaneously trigger bad headaches...which quickly develop into disabling migraines, including dizziness, not being able to think straight, some loss of coordination, and a general inability to function... symptoms lasting more than a day.”

*“ I have seizures when I glimpse an LED light...Anyone else experiencing the same???”*

*“I cannot be around any LEDs...incandescent works perfectly well, but the lighting industry is desperate to phase them out...It's getting to be where many of us are prisoners in our own homes.”*

“The LED streetlights I have encountered have been pure and utter hell for me. Being around them I just feel burning right on my eyes...the pain is almost unbearable.”

“Blue light is recognized by photo-dermatologists to be much more penetrating and therefore much more aggravating for people with light sensitive skin conditions. The high blue content of the proposed street lighting...I would become totally housebound...”

“I was bathed in a very bright LED street light from a new housing estate...I felt ...a severe headache, the pain lasted for a month and was accompanied by general light sensitivity to all bright light.”

“It is well-known that light can affect the brain in negative ways. Sometimes I think: how has this happened ? How is this the kind of environment we want to live in?”

“...the impact is far worse from LED lights...I wear special tinted glasses to try and mitigate the effects, but they only help to a limited degree. I'm concerned about when the relaxing orange street light outside my bedroom window will be changed to LED, because others have been converted in our road already.. if the one outside my window gets changed to LED, that would be a disaster for me.”

“I have special glasses I wear when going out that seem to help with bright lights. With the LEDs it can be tricky. If I notice any place I went to has LED lights, then I make it (a point to) remember. It helps me avoid them (LEDs).

“all new street lights including LEDs make me feel disoriented, lose my balance and be unable to sense my feet... I have to hold onto another person to stop myself falling. After being exposed, I suffer a migraine.”

“Most LED street lights make me feel awful and unable to function well, with migraines, dizziness, pain, extreme discomfort, being on edge, and a substantial feeling of general malaise. Non-LED street lights are totally fine for me!”

“Street lights in my area were changed over four years ago from sodium...the effect on me so devastating (that I have) barely left the house or even opened my front door in the evening since they were installed. I can also be affected during the day as many LEDs are actually on permanently...”

“I was already unable to work due to LED lighting in the offices but losing the freedom to be outside or even look outside at dawn or after dusk is a further disability I am having inflicted upon me. The winter months are a particularly difficult time as I have to draw the blinds and curtains in the middle of the day to avoid feeling ill.”

*“a devastating change...excluded from work and leisure outside the house...(no) classes or meetings, even just walking through the town is impossible (since LED street lighting arrived)...very upsetting, but better than living in constant pain...”*

**People with epilepsy are explicitly protected under the federal ADA. One in 26 people have epilepsy. A question about problems with LEDs was posed to a private Facebook group for people with epilepsy. 85 out of 172 respondents answered 'yes' in some form, an almost 50% rate of affirmatives, despite the fact that photosensitive epilepsy is only known to occur in 3-4% of people with epilepsy overall. This statistic of near 50% speaks to the extreme power of LED exposure to trigger seizures and other adverse neurological effects.**

*Question: “ Do LEDs lights cause problems for you? “*

“LEDs are the worst. I do traditional bulbs in my home...I always need a hat and do not go out much at night anymore.“

“ Yes they (LEDS) do and they cause migraines! They are horrible! “

“When I first saw LED light it just killed me. I felt blinded by it! “

“Yes, if I see an LED light for a long period of time I will have a seizure and then get a bad headache after. “

“In the frozen food section at all supermarkets, those (LED) lights give me a pre-aura sensation with a headache, dizziness, as well as confusion. “

“We only have non-LED in our home. Our daughter has a great deal of trouble with LED lights – they aggravate her epilepsy, as do florescent lights. “

“I wish LED lights would be illegal.“

“Yes, Headlights that are LED murder me at night. My girlfriend has to turn the dash lights all the way down because she has an LED touchscreen. Friggin' blue LEDs are just the absolute worst, though.“

“ Yes, they (LEDs) do cause problems for my kid. (they are seizure triggers.)“

“ LEDs are horrible to look at when driving. They are the worst!!! I just don't understand how (LED headlights) could be legal.”

“Within seconds of being exposed to LED lights, even if I cannot see the actual light source, I begin to feel the effects. My symptoms are typical auric sensations before a seizure and migraine. I feel dizzy, cranky, shaky, I get heartburn, I am drawn to the source of the light. After a few minutes, I'll usually sit down - assuming I'm alone, which doesn't happen much - and either vomit or cry, or both. As a result of ubiquitous use of LED lights, I am now confined to my home, and I struggle to find lighting I can even use at home. When the exterior LED lights are turned on, I must close myself in my bedroom on the other side of the house. I suffer from (partial complex) seizures, so I mostly 'blank out' during and after exposure. If exposed long enough, I suffer status migraines that last for ten days.”

“ My biggest fear is not being able to drive again, but my next fear is not being believed and there being no treatment as a result of that.”

*“...my experience with LEDs compared to other lights? They are THE WORST.”*

“when the (supermarket) freezer section lights automatically turn on, if my wife walks up to them, they throw her into a seizure.”

“...other areas of the city were being changed to LEDs...and I was getting headaches whenever I went into town. The street lighting department tried to find compromises (by) trial testing amber LEDs (2700K) and forms of shielding, but I still got headaches...they agreed to keep my street and some surrounding streets (sodium street lights) The future is uncertain – could the decision later be changed? How could I ever move house?”

“ a large open-plan office block I visited regularly for work and meetings changed overnight to LED strip lights. I immediately felt very uncomfortable and was in pain looking across the room...I had to leave the building as I had a headache and felt sick..the headache worsened and I would say it was the worst headache of my life. After many repeats of these symptoms in different places all with LED lights...and lots of optical and neurological investigations and trying various medicines over several years, the only way I have been able to manage my symptoms is to try and avoid all significant LED light sources. With the exponential growth of LED lighting in all its forms, this has left me virtually housebound and unable to work, shop, socialize etc...”

“I have photosensitive epileptic seizures...LEDs lights do cause me problems.”

“I'm not photosensitive (but) I definitely notice..in a room lit only by LEDs ...if you turn your head, everything looks fragmented while your head is in motion.”

“ (yes, for our son's epilepsy...bright lights like those in stores) don't trigger a convulsive sort of seizure, but they get him extremely agitated so that he goes into what we call 'autistic mode' – he'll go rigid and make repetitive sounds.”

“Yes, LEDs effect people with seizures...schools on my driving route with LED signs...store lights are another story...(like once, at the pharmacy, I had to wait half an hour)...the stupidity of having an epileptic stand there for thirty minutes under those lights! I have to drive home and no-one warned me. Yes LEDs effect epileptics!”

“...after using (my upgraded computer) for a few hours, I felt terrible, with brain fog, tiredness, dizzy, with a headache...I woke next day with a serious migraine. I still have symptoms, tingling scalp, foggy mind etc. I now have an even lower tolerance to LED lights.”

“This lighting is a problem for Chiari Malformation as well...we are all affected by fluorescent lights and I already know the new LED types are not much better.”

“The parking garage has LED lighting. The second (I am in the garage) I get a light-headed feeling and nausea...I cannot use LED light bulbs without feeling quite ill. My time in public stores, these days, has to be very short.”

“I've never had migraines...but recently I was in Walmart and it felt like the lights were flashing, it seemed exceedingly bright. I am experiencing the same thing now at work. They've changed the lighting to LEDs in our warehouse and now this is happening.”

*“I assume there is a great deal of pressure from the LED industry to force adoption of their products.”*