Blinding Headlights

March 29, 2016 by Suzanne Coleman, MD https://sliceiconic.com/2016/03/29/blinding-headlights/

I previously wrote about the blinding new LED lights on vehicles and other locations, well they are not the only problem and I wanted to update you on the new information I have. I have recently learned that some of the most blinding headlights on the road are **halogen headlights**.

Halogen headlights are the ones that send out streaks of light in all directions so that in the dark you are completely unable to see anything around them, including cars, people, or other objects on the road or next to it. This is unsafe.

These lights are almost always a bright white or bluish white, but recently I have also noticed yellow ones which behave in the same blinding way.

I encountered these blinding lights on our local police SUVs and contacted them about it. Through them, I learned that these vehicles are **Ford Explorer SUVs** and are equipped with what Ford calls "**halogen projector beams**."

More and more cars seem to have these dangerous lights on them, it isn't just Ford.

If you notice a vehicle whose lamps are too bright, contact the manufacturer and let them know that this is a problem. That is what I did. I think if they are made aware, they will go back and modify their designs so that it isn't a problem. I don't think that they want to be responsible for harming others due to blinding drivers or pedestrians. And I know that they don't want the possibility of lawsuits costing them millions if not billions of dollars in damages.

What else can you do? You can take the initiative and go out at night and **check your vehicle's headlights, taillights, turn signals, and back-up lights to see if they are too bright**. **If they are, go to your mechanic or car parts store** and see if you can get a **different type of bulb** put in instead.

If you have LED bulbs, this may simply mean **switching out your bulb with a lower wattage bulb**. Most early LED bulbs that were used were way too bright because people didn't realize that you need a much lower wattage to get the same amount of light as your older bulb produced. This brighter light is due to the LED's ability to create an increased light output at lower energy, or wattage.

If you aren't able to find a better bulb, at least **make sure that your headlights are properly aimed DOWN at the road**. **This is something that everyone should do.** When you do this, also do an additional check to be sure that when you are angled up a the top of a hill, or going over bumps in the road that your headlights don't shine too brightly into oncoming drivers' eyes as well. You can do this by bending down a bit to make sure that the lights are aimed down far enough. This simple fix will do a lot to help other drivers be safe out there and they will surely be thankful.

Most cars have a simple adjustment under the hood that you can move yourself to adjust the headlight direction up and down. But if you prefer, your mechanic can do it for you, just be sure that you are there with them and make sure that it is done correctly. Otherwise, what's the point?

Be safe out there!

LED Lights: Dangerous on Roadways and Off

January 26, 2015 by Suzanne Coleman, MD

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LED lights on cars at night negatively impact our vision and safety.

LED lights are now being used on roadways as overhead lights, as well as on cars as headlights, taillights and brakes. We also see LED lights used in spotlights, large stadium lights, bicycle lights and other uses.

These lights are very often way too bright and present a danger to us. I am a physician and an analyst and I am working to have these dangers addressed and removed.

Research shows that some LED lights are damaging to the retina. In addition, if you are on the road, or elsewhere, and must look at or towards these bright streaking lights [note, it is now known that these streaking unfocused headlights are halogen headlights, see more info here], you will notice that after you look away they can leave a burned out black spot in your vision. This is the same thing that looking right at the sun does and they both mean that your retina is being put in danger of permanent damage. The longer you look at either of these, the more likely you will have permanent damage to your retina. That is not good.

We should not have to risk damage to our vision simply to drive our cars to go to work, to contribute to the economy, to live our lives. This needs to be addressed as soon as possible by the manufacturers of the lights, the vehicles, the roadway lighting, as well as others who create and sell LED lights.

In addition, the blindingly bright LEDs we find in some vehicle headlights, along with the intense red taillights and brake lights present a danger to drivers. This light distracts drivers from safe driving in dark conditions by diminishing their ability to see what is around them on the road. It directly impacts their vision by causing their pupils to constrict which reduces the ability to see what is around them. It also negatively impacts the ability to properly judge distances, leading to an increased risk of accidents. It also can be so bright that it causes drivers to close or cover their eyes while driving, thus preventing them from seeing the road and reacting safely.

This blinding brightness is also a problem with LED-lit traffic lights (red and green). This is especially seen in areas that are generally dark, like rural highways and roads, but also in suburban areas. The brightness and glare is blinding to the drivers on these roads and therefore a danger.

As a response to these dangers, more and more people have reported that they have stopped driving at night. They report that the lights are just too glaring and painful, and that they cannot see the road. They feel unsafe. That is because they are.

In 2012 (the last year with full data given), a highway safety study showed that there were more roadway deaths than the year before [1]. According to Markus Price, a NHTSA representative, the researchers could not pinpoint a cause for the increase, but they did not look at the issues posed by LED lights. Over the last few years LED lighting has become more widely used on and alongside highways and streets in the United States. I propose that these dangerously bright lights, both LED and halogen, are a direct cause for increased accidents and deaths on roadways and alongside them.

I have been working to have LED lights properly regulated so that they are safe for use on roadways and in other aspects of our lives. Unfortunately, I have been unable to get an appropriate response from American policy-makers to these dangers. Thus, I am reaching out to the public to see if we can work together to get the necessary results as a team.

The goals of this movement are to remove the risks from dangerous LED lights. There are ways to address these problems, they just need to be done. For example, these issues may be addressed by one of more of the following: using lower wattage LED lamps so that their light output matches the actual light output of incandescent lights, instead of it being many times brighter; covering the LED lights with filters or other adapters to properly direct and modify the light so that it does not cause the problems it currently does; engineer the lamps differently so that they do not cause the intensity of light that they do, and so that the glare is no longer a problem.

I believe in preventing harm, not scrambling later to fix problems that could have been prevented, like blindness, death, and disability; doing things that way just doesn't make sense. That is why I am working to get these issues addressed now. Taxpayers shouldn't have to pay out billions of dollars later to replace and upgrade to healthier lighting, it should be done RIGHT the FIRST TIME. The longer we wait to fix these problems, the more we will end up paying for them in the long run.

I ask that you, like I have, reach out to your Congressional representatives, the media, the US Department of Transportation (DOT), your state DOT, the National Health Traffic and Safety Administration (NHTSA), car manufacturers, light manufacturers, your governor, the White House, and anyone else you can to try and get this issue the attention it deserves.

Once you lose your vision, it cannot be recovered. And if you or a loved one is in an accident because of any of these lighting problems, that would be terrible. Please help prevent any further losses and add your voice to ours by contacting any and all of the above suggestions. We shouldn't have to wait until many people die before this issue is properly addressed (as suggested by NHTSA representative Markus Price).

Please share the link to this page and pass this information along, thank you.

More information is being posted on facebook as it is gathered:
https://www.facebook.com/groups/LEDlightdangers/

Useful links:
Some research showing that blue LED light causes death in cells of the eye. The first one showed death in lens cells, the second one in retinal cells:
1. http://onlinelibrary.wiley.com/doi/10.1111/php.12250/abstract
2. http://onlinelibrary.wiley.com/doi/10.1111/j.1751-1097.2012.01237.x/full

Another link with some good info; it discusses why certain lights are painful to look at, and more:
http://texyt.com/bright+blue+leds+annoyance+health+risks
1. http://www.nhtsa.gov/About+NHTSA/Press+Releases/NHTSA+Data+Confirms+Traffic+Fatalities+Increased+In+2
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