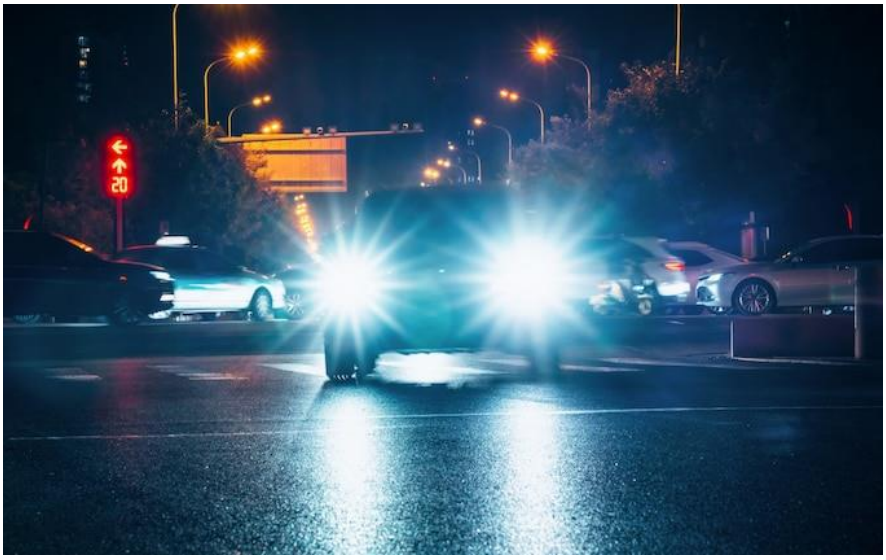
Telegraph

Car headlights are making driving unbearable, says an eye doctor

Cheaper LED headlights are causing blindness from glare – and hundreds of accidents are happening each year

David Cox16 May 2023



Around 300 accidents now occur every year due to headlight glare, according to the RAC.

If you've recently been cursing the brightness of oncoming traffic and worrying about whether your eyes are ageing, then you're not alone.

Earlier this week, the College of Optometrists raised concerns over the number of cars fitted with ultra-bright LED headlights, saying that increasing numbers of its members are being forced to stop driving at night as a result.

Cheaper LED headlights have steadily replaced halogen bulbs in the last few decades, as they emit a brighter and cooler light which makes it easier for drivers to see in the dark. However, this light is also more likely to dazzle oncoming drivers.

According to the RAC, around 300 accidents now occur every year due to headlight glare, with one survey finding that 91 per cent of motorists felt that headlights were too bright. And worryingly, studies have found that while at the age of 18 it takes less than one second to recover from glare, by the age of 65 it can take up to nine seconds. While glaring lights can be a problem for any driver, they are clearly problematic for older drivers, many of whom have some kind of eye condition. The RAC have even found that 25 per cent of drivers over 65 avoid getting in their cars at night, because of the intensity of headlights.

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Professor Shahina Pardhan, a qualified optometrist, and director of the Vision and Eye Research Institute at Anglia Ruskin University, believes that one of the problems is the increasing number of SUVs on the road.

In these vehicles, the headlights are located higher up, meaning that the level and angle of headlights is more likely to impair the vision of oncoming traffic, even when the driver remembers to dip their lights.

"The manufacturers need to do something about this," says Pardhan, "and to make sure that headlights are correctly levelled. We can't just tell older drivers not to go out at night, as that's reducing their quality of life."
Drivers with cataracts are particularly vulnerable.
Cataracts, or a clouding in the lens of your eye, is one of the most common visual problems which occurs with age. According to Badrul Hussain, consultant ophthalmic surgeon at Moorfields Eye Hospital NHS Foundation Trust, around half of all over-60s will have cataracts in one or both eyes, a proportion which steadily increases to 90 per cent of over 85s.

However, cataracts also make drivers even more vulnerable to having their vision impaired by overly intense headlights.
“What happens is that when LED light hits the eye, rather than being perfectly focused on the retina – the layer at the back of your eyeball which sends electrical signals to your brain, enabling you to see – the light gets bounced all over the place,” says Sai Kolli, a consultant ophthalmic surgeon at the Queen Elizabeth Hospital in Birmingham.

Pardhan says that this is often referred to as “disability glare”, as the person sees halos around light instead of a clear image. It is one of the reasons why our reaction times in recovering from glaring lights decrease as we age. While cataract surgeries are one of the most common and successful operations, with around 300,000 to 400,000 performed every year in the UK, and at least 95 per cent of patients experiencing an improvement in their vision, many eligible patients face a very long wait for treatment. In 2021, NHS data showed that waiting times for cataract surgery had increased by 84 per cent.

Kolli says that patients often stop driving at night while they are waiting for an operation. “This will be one of the first things they say when they come for a consultation,” he says. “They might be just above the legal limit but they never drive at night because they get too much glare and halos and they can’t separate objects.”
Can other eye conditions make you vulnerable to glare?

It is not only cataracts which can make drivers more vulnerable to being blinded by glare on the road. Kolli explains that any eye condition which affects the cornea – the transparent part of the eye which allows light to enter – will cause them problems.

One such condition is astigmatism, where the cornea progressively changes shape, causing distorted vision, but dry eye disease, where the tear film, the natural layer of water, oil, and mucus that coats the surface of the eyes, stops giving the eye sufficient lubrication.

According to the National Institute for Health and Care Excellence, dry eye disease becomes more prevalent with age, affecting 8 per cent of under 60s, and 19 per cent of over 80s.
“People with dry eye get lots more glare,” says Kolli. “But it’s a problem which can be treated just with lubricating eye drops.”

Cataracts, astigmatism and even dry eye make one more susceptible to being blinded by glare. What can drivers do about this?

There are a few practical tips which drivers can employ to try and mitigate these problems, such as averting their gaze to the white edge line on the road when faced with an oncoming car with excessively bright headlights. By moving your eyes, the headlight beam will not dazzle you to the same extent.

Keeping the inside and outside of your windscreen clean can also reduce the level of glare from headlights, while another option is to purchase special night driving glasses from your optician.

These glasses reduce the glare from LED headlights through a special coating which filters out blue light and scattering other light wavelengths.

“They can help people by reducing some of the scatter,” says Pardhan. “If you’re wearing normal glasses without this coating, some of the light scattering will come from the spectacle lens itself, increasing that glare.”

But Hussain still advises anyone feeling unsafe around headlights, to avoid driving at night. “Common sense and the law take precedence rather than the eye condition,” he says. “If a number plate cannot be read at the requisite distance and drivers feel uncomfortable or unsafe when driving at night, then they should not drive.”

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