

Beyond sunglasses and baseball caps

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A new study reported in *Investigative Ophthalmology & Visual Science* found that UV-blocking contact lenses can reduce or eliminate the effects of the sun's harmful UV radiation.

According to the article, "Prevention of UV-Induced Damage to the Anterior Segment Using Class I UV Absorbing Hydrogel Contact Lenses", overexposure to <u>UV radiation</u> can lead to harmful changes in the cornea, conjunctiva and lens, including cataracts, the most common cause of visual impairment around the globe. According to the researchers, some estimates say that by the year 2050, there will be 167,000 to 830,000 more cases of cataracts.

"Unfortunately, people are generally unaware of when their eyes are at greatest risk for damage from UV exposure," said vision researcher Heather Chandler, PhD, from Ohio State University's College of Optometry. "This research involving UV-absorbing contact lenses can provide another option for protection against the detrimental changes caused by UV."

The study exposed rabbits daily to the equivalent of about 16 hours of exposure to sunlight in humans — enough to induce UV-associated corneal changes. The rabbits who wore UV-absorbing contact lenses (Senofilcon A) were not affected by the UV exposure.

Chandler said wearing sunglasses or hats may not provide enough protection from the sun, and adding adequate UV protection to contact lenses may be a practical solution to the problems caused by too much



exposure. She also said that since this study focused exclusively on acute UV exposure, further long-term studies are needed to determine the efficiency of wearing the UV-absorbing contacts over a longer time period.

"Not all contact lenses offer UV protection, and, of those that do, not all provide similar absorption levels," Chandler said. "This research will help patients and doctors consider appropriate UV-blocking contact lenses for those who need vision correction, to fill in some of the UV blocking gaps left by more traditional means. The data generated from this study could support the use of UV-absorbing contact lenses and greatly impact the health of a large number of people."

More information: http://bit.ly/5T2feA

Provided by Association for Research in Vision and Ophthalmology

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