Can we provide children UV protection with contact lenses?

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Children tend to spend more time than adults outdoors, and may be great candidates for contact lenses with UV protection. Whether playing outside during recess or bike riding to school, it is important to protect children’s eyes from UV light when outdoors.

Although sunglasses are recommended to block 99 to 100 percent of UV-A and UV-B light rays, many styles of sunglasses do not protect the eyes from solar radiation entering from the sides or around sunglasses.

U.S. Food and Drug Administration (FDA) has standards for UV-blocking contact lenses based on American National Standards Institute (ANSI) Z80.20 standards.¹ There are two different classifications of UV-blocking lenses.

FDA Class I blocker – recommended for high exposure environments such as mountains or beaches. The lenses in this classification must block more than
- 90 percent of UVA (316-380 nm wavelengths) and
- 99 percent of UVB (280-315 nm)

FDA Class II blocker – recommended for general purposes. These lenses must block more than
- 70 percent of UVA (316-380 nm wavelengths) and
- 95 percent of UVB (280-315 nm)

Most sunglasses don’t prevent all UV rays from reaching the eyes because direct and reflected sunlight can shine through the sides, top and bottom of eyeglasses. This is known as the Peripheral Light Focusing Effect (PLF).² Studies have shown that UV-blocking contact lenses can also help block the peripheral light that sunglasses can’t block.³ Wraparound sunglasses help protect eyes from UV sunlight, but the amount of UV protection can be increased with contact lenses. Some contact lenses provide little to no UV-radiation protection, while others provide adequate additional protection as a supplement or compliment to sunglasses.

The amount of UV blocking of contact lenses can be found in the FDA-approved package insert. A limited number of contact lenses meet FDA standards for Class I protection. A number of other lenses on the market meet Class II requirements. However, not all contact lens parameters are available with either Class I or Class II UV protection.

References:

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balance between work and home life for women in optometry. She is also a spokesperson for the California Optometric Association and has appeared on several television shows. In her spare time she enjoys cooking, yoga and spending time with her husband, Todd Erickson, also an optometrist, and two sons, Alex (7) and Drew (5).