

UV DAMAGE AND CHILDREN: SIGNS, SYMPTOMS AND PREVENTION TOOLS

Whether playing during school recess, for fun on weekends or as part of organized sports teams, children spend significant time outdoors. Research shows that children receive three times the annual sun exposure of adults and are especially vulnerable to UV-related harm. Unlike the mature ocular lens of an adult eye, a child's lens cannot filter out UV rays as easily, allowing them to reach the retina.

How Can UV Radiation Damage My Child's Eyes?

UV radiation endangers an unprotected eye in ways that can lead to vision impairment. Just small amounts of intense UV exposure can cause short-term problems, ranging from irritating to overtly painful. The following symptoms may indicate over-exposure to UV.

- ☐ **bloodshot eyes**
- ☐ **swollen eyes**
- ☐ **hyper-sensitivity to light**

The most extreme of these temporary problems is photokeratitis, which is sunburn of the eye. While photokeratitis can result in vision loss for up to 48 hours, symptoms will dissipate eventually. If your child has suffered a bad sunburn on his or her face, he or she may experience photokeratitis. Complaints of the following symptoms should be taken seriously and a doctor should be consulted immediately.

- ☐ **red eyes; skin around the eyes is red and appears to be sunburned**
- ☐ **extreme sensitivity to light; constant tearing**
- ☐ **disrupted sleep and the feeling that eyes are burning, itchy or scratched**
- ☐ **severe eye pain and spasms of the eye or eyelid**

Over time, the cumulative effects of sunlight can lead to eye diseases and conditions later in life. While some damage can be reversed through surgery, other conditions, like cataracts and macular degeneration, may result in permanent vision loss. It is never too early or too soon to protect your children's eyes from UV exposure.

What Should I do to Protect My Child's Eyes?

The more exposure your children have had to harmful UV radiation, the more at risk they are for these sight-threatening conditions. That said, it is still important for your child to be a kid – play outdoors, enjoy the pool and splash in the ocean.

The answer is all about balance and protection.

- ☐ **Limit outdoor time between 10 a.m. and 4 p.m. – the hours when UV radiation is strongest**
- ☐ **Arm children with UV-protective sunglasses whenever they step outside – no matter where you are, whether it's sunny or cloudy, or what time of year it is**

What Should I Look For When Purchasing Sunglasses?

Any parent knows that children can be tricky to buy for. What your child loves today could be an item of the past tomorrow. It is important to do research before making a purchase and if possible, bring your child with you so that he or she can become a part of the experience. While UV protection is a must, finding sunglasses that your child feels comfortable in and likes will ensure that they are actually worn.

Top Priorities

- ☐ UVA and UVB protection, often designated by a sticker or label
- ☐ Shop at a credible source; do not purchase from street vendors or online auction sites
- ☐ Comfort, comfort, comfort

Other Considerations

- ☐ Plastic sunglasses are inexpensive and come in a variety of colors, shapes and styles (including popular characters) that may appeal more to young children
- ☐ Price does not necessarily indicate quality. For children who are more apt to lose their sunglasses, consider purchasing multiple inexpensive pairs to replace lost ones.
- ☐ Polycarbonate lenses and other impact resistant lenses are more able to withstand rough play and sports
- ☐ Spring hinges protect glasses from breaking despite constant tugging
- ☐ Rubber frames may feel more comfortable behind your child's ears and provide a snug fit without pain pinches
- ☐ Gray lenses absorb all colors equally and may be a good option for younger children who are still learning how to associate natural colors
- ☐ UV-protective goggles can protect eyes from direct and reflected UV rays

No-no's

- ☐ Hats should never be used in place of sunglasses; especially baseball caps which don't offer peripheral protection
- ☐ Dressing up sunglasses can be fun but limit decorations; don't let children draw on glasses or place stickers on the lens. This can scratch the UV protective layer
- ☐ Toy or costume sunglasses are not a supplement to the real thing; they do not have UV protection and can easily shatter or warp and cause more harm to the eye

Closing Argument

Frequent sunglass use comes with practice. Reinforcing healthy behaviors by making your kids routinely wear sunglasses will help to get them in the habit of protecting their eyes. Set an example by always remembering to wear your own shades.

- ☐ It's never too early or too late to start protecting your eyes