

# Ultraviolet

## Fast Facts

In addition to having damaging effects on the skin, ultraviolet (UV) rays can also be damaging to the eyes.<sup>1</sup> There are two types of UV radiation – UVB and UVA – that in high exposure can lead to damage to the eye, such as:

<b>PHOTOKERATITIS</b>	A sunburn of the cornea <sup>1</sup>	<p><b>UVB rays</b> are commonly associated with sunburns and the aging of skin, while</p> <p><b>UVA rays</b> are closely linked to cataracts and macular degeneration.<sup>1</sup></p>
<b>CATARACTS</b>	A clouding of the normally clear lens of the eye <sup>2</sup>	
<b>MACULAR DEGENERATION</b>	Deterioration of the macula, a small central area of the retina of the eye that controls visual acuity <sup>3</sup>	

## UV Risk Factors<sup>1</sup>

Risk of eye damage from UV rays constantly changes based on a variety of factors:

 <b>GEOGRAPHIC LOCATION</b>	Proximity to the equator, particularly in tropical areas, increases risk
 <b>ALTITUDE</b>	UV levels are stronger at higher altitudes
 <b>SETTINGS</b>	Wide-open spaces, especially with highly reflective surfaces, increases risk. For example, fresh snow reflects up to 90 percent, 30 percent off water and 25 percent off sand <sup>4</sup>
 <b>MEDICATIONS</b>	Certain medications can lead to higher UV sensitivity

## UV Myths<sup>4</sup>

<p><b>Sun protection is only needed when it's sunny:</b></p> <p>Sun protection for the eyes is needed on cloudy and overcast days, too<sup>1</sup></p>	<p><b>Midday sun is the most threatening:</b></p> <p>The main effects of solar radiation on the eye occur at dawn and dusk, not midday<sup>5</sup></p>	<p><b>Sun damage only occurs in the summer:</b></p> <p>Exposure to harmful UV rays occurs all year round and in any environment, especially spring and winter months<sup>4</sup></p>
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## Eye Protection

There are multiple options to protect eyes from the sun. In addition to traditional protection such as sunglasses and wide-brimmed hats, UV blocking contact lenses can also provide an important measure of protection.<sup>1\*</sup>

ACUVUE® Brand Contact Lenses are the only major brand which blocks at least 97 percent of UVB and 81 percent of UVA rays, as standard across the entire line.<sup>6†</sup> No other contact lens has higher UV blocking<sup>\*\*</sup>

<sup>1</sup>Ultraviolet (UV) Radiation and Your Eyes. All About Vision. [www.allaboutvision.com/sunglasses/spf.htm](http://www.allaboutvision.com/sunglasses/spf.htm) <sup>2</sup>Cataracts. All About Vision. [www.allaboutvision.com/conditions/cataracts.htm](http://www.allaboutvision.com/conditions/cataracts.htm) <sup>3</sup>What is Age-Related Macular Degeneration? All About Vision. [www.allaboutvision.com/conditions/amd.htm](http://www.allaboutvision.com/conditions/amd.htm) <sup>4</sup>Slone, David H. Intraocular and Crystalline Lens Protection From Ultraviolet Damage. Eye & Contact Lens July 2011; 37: 250–258. <sup>5</sup>Sasaki H, Sakamoto Y, Schnider C et al. UV-B exposure to the eye depending on solar altitude. Eye & Contact Lens 2011; 37:4 191-195. <sup>6</sup>UV Blocking Benefits. ACUVUE. [www.acuvue.com/why-contact-lenses/uv-blocking-benefits](http://www.acuvue.com/why-contact-lenses/uv-blocking-benefits)

\*All ACUVUE® Brand Contact Lenses have Class 1 or Class 2 UV-blocking to help provide protection against transmission of harmful UV radiation to the cornea and into the eye. UV-absorbing contact lenses are NOT substitutes for protective UV-absorbing eyewear such as UV-absorbing goggles or sunglasses because they do not completely cover the eye and surrounding area.  
<sup>†</sup>JJVC Data on file 2013.

# Indications and Important Safety Information

## **IMPORTANT SAFETY INFORMATION FOR ALL ACUVUE® BRANDS** (*Except ACUVUE® VITA®, 1-DAY ACUVUE® DEFINE® and ACUVUE® 2 COLOURS*)

**Important Information for contact lens wearers:** ACUVUE® Brand Contact Lenses are available by prescription only for vision correction. An eye doctor will determine whether contact lenses are right for you.

**How should I use my lenses?** Follow the wear and replacement schedule and the lens care instructions provided by your eye doctor.

**Are there any risks with wearing contact lenses?** Although rare, serious eye problems can develop while wearing contact lenses. Therefore, it is important to talk to your eye doctor about proper wear and care of your lenses.

**Who should not wear contact lenses?** Only your eye doctor can determine if contact lenses are right for you. If your eye doctor has prescribed contact lenses for you, you should not wear them if you have an eye infection, or experience eye discomfort, excessive tearing, vision changes, redness or other eye problems. If one of these conditions occurs, contact your eye doctor immediately.

**Where can I obtain more information about ACUVUE® Brand Contact Lenses?** For more information on proper wear, care and safety, talk to your eye doctor, call 1-800-843-2020 or download the [Patient Instruction Guides](#).

<sup>†</sup>Helps protect against transmission of harmful UV radiation to the cornea and into the eye.

<sup>‡</sup>UVB and UVA blocking percentages are taken on average across the wave length.

**WARNING:** UV-absorbing contact lenses are NOT substitutes for protective UV-absorbing eyewear such as UV-absorbing goggles or sunglasses because they do not completely cover the eye and surrounding area. You should continue to use UV-absorbing eyewear as directed. **NOTE:** Long-term exposure to UV radiation is one of the risk factors associated with cataracts. Exposure is based on a number of factors such as environmental conditions (altitude, geography, cloud cover) and personal factors (extent and nature of outdoor activities). UV-blocking contact lenses help provide protection against harmful UV radiation. However, clinical studies have not been done to demonstrate that wearing UV-blocking contact lenses reduces the risk of developing cataracts or other eye disorders. Consult your eye care practitioner for more information.