When do you need to protect your eyes from UV light?
Optimal UV protection for all seasons

We all know that we need to protect ourselves from intense sunlight. But what many people don’t know is that ultraviolet light is present even when the sun is hidden behind clouds. Thus, on dreary, cloudy days as well as in the shade, effective protection from UV radiation is thus vital to prevent eye damage. But when do you need to protect your eyes from UV light, and what’s the best way to accomplish that? An overview from BETTER VISION.

UV protection even on cloudy days

When it comes to UV protection, many people think of the sun initially. But ultraviolet light is present not just when the sun is shining - the intensity of UV light can be very high even on cloudy days. Whether visiting a café in autumn, during a summer excursion to a lake or skiing in winter, up to 95 percent of the harmful ultraviolet radiation can penetrate the cloud cover even in dreary weather and damage your eyes and skin.

Shade does not provide complete protection from ultraviolet light either, as 50% of UV radiation still gets through from reflected and scattered light.

This effect is amplified when swimming in the ocean, for example, as the water’s surface reflects part of the ultraviolet light. We therefore recommend protecting your eyes and skin from the sun in...
When is UV radiation most intense?

- **There are different types of UV rays**, and each one affects the body in a different way. The intensity changes over the course of the day. Our unprotected eyes are most exposed to UV radiation in the mornings and afternoons, and not just at noontime, as is commonly assumed. At noon, the sun is overhead, shining down on us and not directly into our eyes. To prevent skin and eye damage, effective protection from UV radiation is essential. You can protect your skin from UV radiation with clothing, for example, or for a certain period using sunscreen with a sufficient sun protection factor, and protect your eyes with sunglasses or eyeglasses with UV protection. Not only sunglasses should offer UV protection: clear eyeglass lenses should always be equipped with effective UV protection as well. Good glasses - whether sunglasses or glasses with clear lenses - provide exactly that: they completely absorb harmful radiation. This "UV protection" mustn't be confused with "glare protection". That's why it's important to use optimal protection from glare and reflections as well as from harmful UV radiation in all weather, and particularly in bright sunlight.

The best way to protect your eyes from ultraviolet light

We strongly advise against wearing sunglasses without UV protection – these create even more damage than when you don’t wear sunglasses at all because they simply give the illusion of protecting your eyes. They reduce the amount of light penetrating through, leading the pupil to expand – even though there’s no UV protection. As a result, light penetrates your eye in an even more damaging way. If you’re unsure whether or not your glasses or sunglasses offer good UV protection, your optician will be happy to help. They can check to see if your glasses offer complete UV protection up to 400 nm and can recommend good lenses with UV protection. They can also help you find tints and self-tinting lenses with UV protection.

**Key features of good sunglasses:** you get the best protection by selecting lenses with a size that covers up a large area around your eyes. This protects the highly sensitive skin surrounding the eye.

- **Self-tinting lenses with UV protection by ZEISS**
For most children, playing in the open air under the sun is the greatest part of summer. Yet babies and small children in particular need consistent protection against UV radiation since their system reacts extremely sensitively to it. This is true for their skin and especially their eyes. Consequently, parents should always make sure their offspring have good, tough sunglasses or clear glasses with UV protection in addition to protective clothing and sunscreen. Children’s sunglasses can also be fitted with prescription lenses. **Here's a tip**: let your children help choose their sunglasses – this will make them more likely to wear the sunglasses on their own.

For children less than one year old, experts advise against any form of exposure to the sun as the retina has next to no protection against UV radiation at that age. If your baby is this young, you might find a large hat or pram with a sunshade helpful for providing at least a little bit of protection for their sensitive eyes. However, as we’ve explained, 50% of UV radiation can still reach the eye even if there is shade. The amount of UV radiation actually present in shade depends on how much UV can permeate through the object providing the shade: a building, for example, generates thicker shade than a budget sunshade. Sunglasses for babies or children can always provide additional protection. And don’t forget: all of this applies on cloudy days too – even if the skies are grey, we’re still surrounded by harmful UV light!

> Explore more about glasses for children
Not all sunglasses are equal
Better Vision explains what you should know about UV protection, tinting, mirrors, polarised lenses and more, to help you find the right sunglasses for your individual needs.

Jun 25, 2019
Tags: Sunglasses

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What all parents should know about protecting children’s eyes from harmful Ultraviolet Radiation (UVR).

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A range of healthcare bodies and studies recommend advanced UV protection up to 400 nm. They include: the World Health Organization (WHO), International Commission on Non-Ionizing Radiation Protection (ICNIRP) and Health Physics. (2004): 87(2) 171-186, American Conference of Governmental and Industrial Hygienists (ACGIH), ISO 21348 (definitions of Solar Irradiance Spectral Categories), Australian Sunlens Standard AS/NZS 1067:2003

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