

# YES

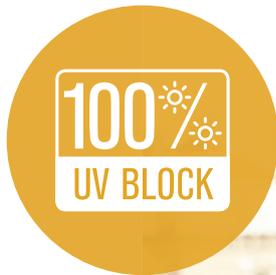
you control UV

100%  
UV BLOCK

UV Control

Protecting your patient's eyes against harmful UV radiation

HOYA



**Did you know?** By the time an individual turns 18, he or she will already have acquired nearly 80% of lifetime UV exposure.\*

UV is an important part of our daily lives. It provides us with the necessary vitamin D and boosts our spirits and vitality, thanks to its influence on the production of endorphins. However, UV radiation is also one of the proven causes of several medical problems as we age.

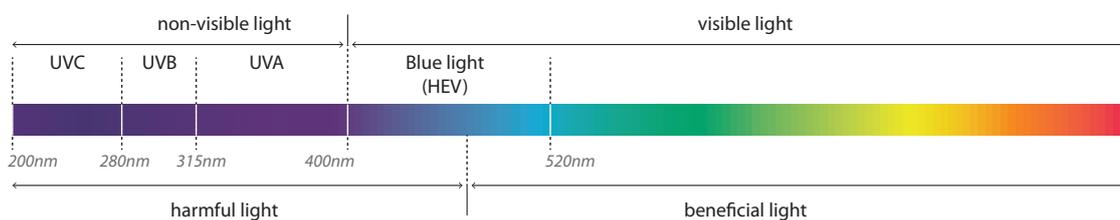
Like your skin, your eyes can get sunburn-like damage from long-term unprotected exposure to UV. Most of us are aware of this during summer. However, only few of us take action against the daily presence of UV throughout the year when its harmful effects are perhaps less 'visible'. Excessive exposure to UV radiation can easily be reached doing our daily activities, it is therefore extremely important to take the necessary precautions to protect your eyes.

*\*Source: [thevisioncouncil.org](http://thevisioncouncil.org)*

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## What is UV?

UV is part of light transmitted by the sun and is invisible to the human eye. Although UV is not visible, its harmful effects can be quite impactful.



- **UV-A** (315-400nm) accounts for 95% of the total exposure. It penetrates the tissue most deeply. UV-A rays contribute to aging the eye and can lead to an early onset of cataracts.
  - **UV-B** (280-315nm) causes more damage because of its high energy. UV-B rays are responsible for burning the cornea, a painful condition that is irreversible.
  - **UV-C** (200-280nm) and UV vacuum (<200nm) is blocked by the Ozone layer and does not reach the surface of the earth.
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## Introducing HOYA UV Control

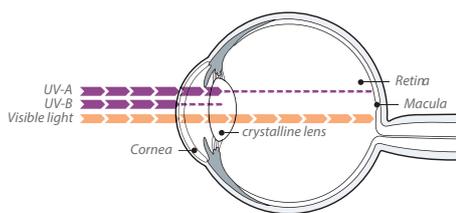
UV radiation is the largest cause of multiple eye disorders. Standard lens materials can only absorb UV rays entering from the front of the lenses to enhance the cosmetic and optical performance. However, UV rays can still be reflected into our eyes via the back surface of the lenses. Until now.

Introducing a new coating treatment to the HOYA Control series — **UV Control**, a unique coating applied to the back surface of the lenses, blocking the harmful UV rays from reflecting into your patient's eyes. Together with the UV resistant lens material, **UV Control** is the most all-round solution offering 100% protection against harmful UV.



## Understanding how UV penetrates our eyes

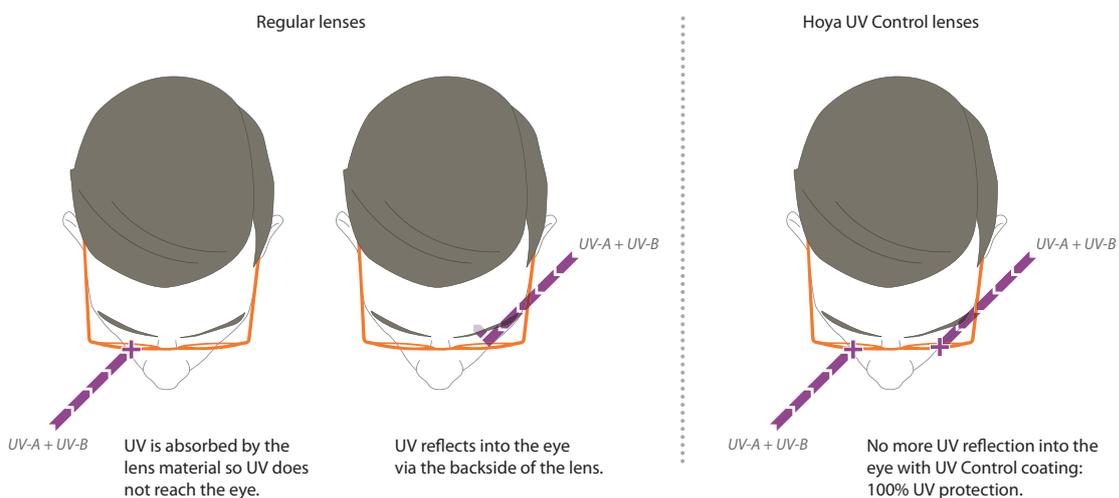
Penetration of UV and visible light



		Typical diseases
UV-A	UV-A penetrates the eye deeper and is largely absorbed by the crystalline lens.	Cataracts
UV-B	UV-B is mostly absorbed by the anterior eye structures, such as the cornea.	Corneal degeneration

## The difference

Unlike other back surface UV coatings in the market which mainly concentrate on the impact of UV-B, the performance of **UV Control** is measured and evaluated in consideration of the full UV spectrum, providing complete protection from UV-A and UV-B rays.



# You're in control



**HOYA UV Control** is a unique coating applied to the back surface of the lens, blocking the harmful UV rays from reflecting into your patient's eyes.

- Prevents UV aging the eyes
- Prevents UV damaging the eyes
- Protects against UV related eye disorders and diseases

## Diamond Finish **UV Control**

**UV Control** is available in all lens materials and in combination with **Diamond Finish multi-coat**, the toughest anti-reflection coating in the market today. The strong adhesion between the various coating layers ensures years of excellent performance and durability.

- Anti-reflection layer ensures a comfortable light transmission of up to 99%
- Long-lasting water, grease, and dirt repellent qualities ensure clear vision
- Easy-to-clean and optimal transparency, even after long and intensive cleaning
- Up to **5 times more scratch resistant** than standard anti-reflection coatings



UV Control



scratch resistant



anti-reflective



water repellent



dirt repellent

Say no to harmful reflections. **You control UV.**