

# Eye on Health

## The Science Of Sight: How Polarized Lenses Help You See Better

(NAPSA)—More people are discovering what boaters and fishermen have known for decades: Polarized lenses reduce eye fatigue, improve safety and let you see more detail by reducing the blinding haze of glare. That goes for driving, sports and countless other activities. If you want to get the most out of these benefits, you need to understand a few basics about polarized lenses:

### What Causes Glare?

Ocean waves roll up and down but light waves roll at every angle—up, down, sideways and everything in between. When light bounces off flat surfaces such as water, snow or pavement, the waves align and roll the same way: horizontally. This concentrates them so much that the reflected light can be 10 times brighter than surrounding light. If you're a fisherman, you can't see the fish you're trying to catch. If you're driving a car, the glare off the pavement can temporarily blind you.

### How Do Polarized Lenses Work?

Polarized lenses use a filter to block the horizontal waves of glare, letting the other light waves pass through. Imagine a curl traveling down a whip. The curl moves like a wave, rolling at any angle. If you put the whip between the boards of a fence, the side-to-side waves are blocked but the up-and-down waves pass through the gap. That's similar to how a polarized lens filters out horizontal waves that cause glare.



**No. 1 in the world rankings—professional bass angler Kevin Van Dam—depends on his polarized lenses when competing at the highest level.**

### Are All Polarized Lenses Alike?

Absolutely not. They all reduce glare with a filter—a thin sheet of plastic inside the lens—but that's where the similarity ends. Some manufacturers use adhesives or heat pressing to combine the filter with the lens material, and that can lead to visual haze and distortion. Also, the filter has to be aligned precisely, and some manufacturers lack the equipment to do a good job.

Instead of using adhesives or heat pressing, Oakley puts the filter in a liquid material that hardens into a durable lens. That way, there's no adhesive to compromise your vision, and the delicate polarizing filter is not damaged or distorted. As far as performance, Oakley aligns the filter with such precision that glare is blocked with 99.9 percent efficiency. You

can get this level of performance in all Oakley's polarized styles including the new Nanowire™ sunglass line, numerous lifestyle sunglasses, snow goggles and prescription sunglasses.

### What Else Should I Look For?

Protection is essential, so look for polarized lenses that filter out 99 percent to 100 percent of both UVA and UVB. Oakley uses Plutonite lens material that filters out 100 percent of all UVA, UVB, UVC and harmful blue light up to 400nm. Also, be aware of impact protection. Oakley's premium eyewear meets the impact protection standards of the American National Standards Institute.

Even with nonprescription lenses, optical performance is a big issue. Inferior lenses can reduce clarity and magnify images like corrective lenses, and they can even make objects appear shifted from where they really are. That's why all Oakley polarized lenses use the patented technologies of the company's High Definition Optics® (HDO) to offer unbeatable clarity and true, precise vision.

Look for other benefits such as lens colors that enhance your depth perception or improve your ability to distinguish colors. Special lens coatings are also available, such as Oakley Hydrophobic™, a technology that makes the lenses of Nanowire®, Radar™ and Flak Jacket™ repel water, oils and dust.

To learn more about polarized lenses, visit [www.oakley.com/polarized](http://www.oakley.com/polarized).