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EYE
PRO

A seasonal newsletter from your trusted eyecare professional

The difference between the lenses

Lenses that act as sunglasses

Photochromic lenses change from light - or clear - to dark and back again depending on the amount of ultraviolet light they are exposed to. Go outside into sunlight and they act as sunglasses. Return inside or to an area where there is less UV and the lenses become lighter. Early photochromics were strictly glass lenses, but today, you can choose from plastic, polycarbonate and specially-thinned (high-index) glass and plastic. New technology photochromic lenses change very quickly (approximately 60 seconds).

Lenses to reduce driving glare

Polarised lenses are used in sunglasses to reduce glare from reflective surfaces such as the surface of a lake or the hood of a car. Glare occurs because sunlight bounces off a - usually - horizontal surface and enters the eyes at a similar (horizontal) angle. Polarised lenses are laminated with vertical stripes that prevent the horizontal light entering the wearer's eyes. Fishermen and drivers seem to derive most benefit from polarised lenses because they deal with mostly horizontal surfaces. A fisherman wearing polarised sunglasses can see below the surface of the water to search for fish or hidden obstacles. Drivers are no longer affected by a constant reflection of light from their bonnets or the road ahead.

Lenses that reduce reflections

Anti Reflection (AR) coatings are similar to the coatings found on microscopes and camera lenses. The coating provides relief from fatigue and eyestrain. It also enhances night time driving by eliminating reflections from street lights, headlights from on-coming vehicles, and tail lights. When worn in daylight and indoors, AR coatings provide better visual performance, making objects appear crisper and brighter. When reading a newspaper, magazine, or even a computer screen with AR coated lenses, images and letters will appear sharper and crisper. Another benefit is that AR coatings can enhance the wearer's appearance. They make lenses look thinner by reducing distracting reflections and the wearer's eyes are more visible. This improves eye contact for better communication.

SEE the road ahead



It's a well known fact that Kiwis love driving, and we will take to the road in droves with summer holidays looming.

However, studies show that one in five of us has a vision defect that could affect our performance on the road.

Because our drivers' licenses are generally only renewed every 10 years, it's a good idea to have your optometrist check your vision skills for safe driving, especially if you've noticed any changes.

A particular problem for many of us in New Zealand is glare from the sun or surface reflections. And, obviously, if you can't see clearly you can't drive safely.

Many drivers involved in accidents say they didn't see a car or pedestrian because of glare or reflections. Excessive glare can also cause drowsiness and headaches.

Specific driving eyewear is now available for people who spend a lot of time behind the wheel.

Taxi drivers, motor sport enthusiasts, truck drivers and many regular drivers are choosing new lens technology to help them with their driving.

New developments include improved lens colour, materials and coatings which can reduce glare, eliminate fogging, provide better contrast and improve depth perception.

And as sharp vision is critical behind the wheel, it does pay to invest in technology that can give you an edge.

Other eyesight issues for drivers to contend with include night vision, which could definitely do with a check-up, especially if you're over 40. Night vision is tested because drivers need to be able to see in low and variable light conditions, and recover quickly from the glare of oncoming headlights.

It's also smart to have your depth perception tested to ensure good distance judgment. This is especially important for passing other vehicles and changing lanes.

And then there's your colour vision (see story below). Colour vision plays an important part in driver safety because you must be able to instantly recognise traffic lights, hazard warning lights and indicator signs.

On this note, the LTSA recommends avoiding medium or dark blue sunglasses because they can seriously interfere with some people's ability to distinguish traffic light colours.

So, why not give your driving vision a simple WoF before these Christmas holidays. See your EYEPRO optometrist for a comprehensive check-up.

I see red ... or maybe it's purple!

The colour-blind man whose wife has to match his ties with his shirts is no joke.

Approximately 8% of all males have some 'colour deficiency' in their eyesight, compared to less than .5% of females.

Most of the time colour deficiency is inherited, but it can be acquired as a result of disease, injury, age and drug or alcohol abuse.

If you're in that '8% of men' category – or a partner of one of them! - read on.

Colour vision deficiency is best described as a disturbance of colour vision which affects the ability to perceive differences between colours.

A person with 'normal' colour vision sees six bands of colour (red, orange, yellow, blue, green and violet). Someone with colour deficiency, on the other hand, may see only four bands (yellow-orange, grey, blue and violet).



Most of the time colour deficiency is inherited, but it can be acquired as a result of disease, injury, age and drug or alcohol abuse.

People with colour deficiency can also confuse blue-green and red-purple shades with grey, and they may confuse yellow, brown and green with each other. They may also have difficulty distinguishing pastel colours.

Colour deficiency affects people to different degrees. Some common complaints are difficulty seeing coloured chalk on a blackboard, inability to determine different bank notes, or increased chance of nose-to-tail road accidents through reduced ability to see red brake lights. Career choices can also be restricted - Armed Forces and Police usually require recruits to have 'normal' colour vision.

In some cases acquired colour blindness can be an early sign of eye disease, so if you have noticed a change in your ability to determine colours contact your optometrist for an assessment - and peace of mind!

More children eligible for ENABLE subsidy

The eligibility age for the ENABLE subsidy for children's spectacles has been raised from 'under 8' to 'under 15'.

The change occurred on the 1st of October. The ENABLE subsidy is for children with vision problems in low-income families. There are five areas covered within the subsidy for the provision of:

- Examination
- Lenses
- Frames
- Eye patches
- Repairs/maintenance



To be eligible for the subsidy, children must have a disability as defined by the Ministry of Health. Essentially they must have difficulty seeing, be 15 years old or younger, their family must hold a valid Community Services Card or the child must have a High Health Use card, and the child must have undergone an eye examination with an optometrist or ophthalmologist.

The subsidy level is to a maximum of \$281.25 (including GST) per year. A further \$50.00 (inc GST) is available for children that require an adult size frame. There are special circumstances in which a child may be eligible for more than the annual \$281.25 subsidy.