

## Sports Vision in Practice Q&A responses by Michelle Beach, Parkvision

1 What are the causes of a low MP-eye score?

A low score on the MPEye is usually indicative of low macular pigment density...the protective shield for the macula. You can read more about this here: <a href="https://azuloptics.com/the-mpeye/">https://azuloptics.com/the-mpeye/</a>

What is the advantage of using a Logmar chart over a Snellan?

The **LogMAR** chart is widely used around the world and is recognised to be the more accurate measurement of **visual** acuity, especially with lower **visual** acuities. Acuity measured by LogMar has been shown to be twice as repeatable – it also supposedly more accurate at low contrast which we also measure on a sports vision screen.

When it comes to contrast, how do you determine which colour is best for which sport? would colourimetry test help?

Outside the examination room I use eyebrights in the athlete's natural environment. If an athlete was shown to be very colour sensitive, I would probably investigate this further using colourimetry, ReadEz software or similar. An athlete that is very sensitive to colour may have visual stress so a full BV investigation would be recommended and then check colour sensitivity again.

- 4 How do you determine eye dominance. What's the process?

  This was discussed at the end of the webinar hopefully demonstrated well enough to give you an idea.
- When you get them to look through the triangle made with their hands, is it with both eyes open?

  Absolutely eye dominance must be measured with both eyes open whether pointing a finger at a target or the triangle method.
- Are you ever concerned about fitting CLs for sports because of possible eye injuries during a game?

  This again was discussed at the end of the webinar.....a soft contact lens for sport preferably daily disposable, I have no concerns over. An athlete is more likely to be injured from a poor catch, tackle, move if their vision is not as accurate as possible. Depending on the sport, you can recommend more frequent replacement if a monthly. We are using ortho-K more and more if applicable.
- I have noticed there are a few references to reusable contact lenses. Are they preferred for sports over daily lenses?

Always as a preference: every lens is clean and fully hydrated optimising visual performance. I would liken it to driving through a brand new windscreen of one with a bit of grease, dead flies and rain smudges...which would you choose?

Parents often put up a barrier when contact lenses are suggested as an option for their child how would you deal with this?

We fit kids from 7 years old – managed carefully and depending on the parent/child." As your child grows the ball/ physicality and reaction time gets harder and faster. If your child cannot see properly, they will stop being as good at their chosen sport as they are now, and perhaps stop enjoying it as much and be more likely to get injured. We want to encourage children to be fit and enjoy sports to the best of their ability." Always offer to fit lenses in perhaps the school holidays and suggest the child goes and plays sport for an hour with them in as a trial.... there will be no hesitation then! Every patient has a contact lens buddy at Park Vision and we "baby step" the kids through the process ...they are often better than the adults as they are used to following instructions.

9 For skiing. What are your thoughts. Polarised or non polarised?

I think if you are to enjoy skiing one lens does not necessarily fit all conditions. A good yellow low light lens for a white out, polarised by day to clearly see the rucks in the snow and reduce glare – I also love the prism snow lens Oakley do. It does depend on the conditions.



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- 10 Have you worked with anyone in water sports like swimming or paddleboarding?

  Yes lots of water polo! This is where an ortho-K lens comes in. Or a daily lens with goggles and discard this immediately after use. A -5.00/ -1.75 swimmer is not going to not wear a correction –Rx goggles can work but elite athletes don't like the peripheral aberrations and poor choice of goggle design. Better to educate on "bugs" etc and why we encourage immediate discard than them ignoring you and wearing them anyway!
- is being right hand left eye dominant detrimental to golf?

  Not at all right hand swing....left side of face facing the green and therefore left eye controlling aim. Good to understand as golf stance can be affected.
- Is there any advice you'd give for patients who do archery? In particular presbyopic archers

  I would correct the dominant eye for distance and a multifocal for the non-dominant enough binocular vision to help with spatial awareness but enough near vision to see up close for score cards, near set-up etc.

  Try this first and see how they go......always explain what you are trying to achieve and why. Get the patient to bring their equipment in so you can see the sight line and any aiming targets along the bow. (maybe not the arrow!)
- Are there any suppliers you would personally recommend for sports vision options with inserts?

  We used Maui Jim inserts when adidas stopped supply to the UK. We have actually sourced sports vision kit through Amazon we have needed to be resourceful!
- Do you recommend any particular brands of CL's as you mentioned using Elite lenses for your patients? And why please.

Think of giving your patients the best possible vision through a lens....high water content as the athlete is likely to get hot and so be losing water. Stability and comfort is key. You may have to fit slightly tighter for matches/games etc to stop movement. A lens that has been removed several times may distorted, have protein deposits, lose hydration++++

- Do you have a particular frame/lens supplier? you mentioned prism lenses, do you prefer Oakley? who do you use when outside Oakley's range?
  - I use inserts outside Oakley. If the prescription is that high, the peripheral aberrations and vision away from the optical centre is likely to be poor. The frame is likely to also be heavier and not look great. Athletes are vain and do not like to show weakness... fit lenses then talk about sunglasses etc over the top.
- Do you know when the diploma will be available to do?

  I think the Autumn. https://www.sportvision.co.uk/sport/public/public.aspx
- 17 What qualifications do you need to be eligible a sports vision diploma course

  An Optometrist / Dispensing optician qualification but I do know several lens specialists that have gone
  along to the course to learn more from a glazing / lens perspective.
- How much will the diploma cost? Is it free?

  No like most conferences and CPD, it is an in-depth course that you will spend several days attending and a written exam. See link above.