

UP TO YOU: - DON'T GET YOURSELF IN A PICKLE!! PROTECTIVE EYEWEAR INFORMATION

By Dahlia Hirsch MD, Ophthalmologist and PPR Certified Pickleball Instructor and Coach and

Dr. Hirsch's interview with David Heath OD

Check out my website: www.Pickleballdoc.org

Prevent Blindness has declared April as Women's Eye Health and Safety Month, AND coincidentally April is National Pickleball Month! Many people ask me about safety glasses. For 30 years, as an Ophthalmologist, I treated eye disease, injuries, and did ophthalmic surgery. So to help answer the questions, I interviewed an expert in glasses, and did a deep dive to help you decide if and what to choose.

Last year my Pickleball friend Brad Rector went to play pickleball. For years he taught shop, and at least several times a day had to remind his students to wear their safety glasses.! On this particular day, as always, he also brought his protective glasses with him, but forgot them on his car dash. He started to play a game of friendly low-key doubles; his partner wasn't as good as he is and across from him was a great player and also a less advanced player. Brad recollects thinking—"I should get my protective lenses, but I will just get them after this one social game". His partner popped a ball up by accident cross court, and the player across from him sent the ball to him and it hit his eye straight on. Since then he has had his traumatic cataract removed, had to have a stent put in for traumatic glaucoma (which he will have for the rest of his life), and his pupil will not constrict which affects glare and depth perception. He shares this story with anyone he can, as a message to help others make a better safer choice.



Brad's left eye (your right) has permanent glaucoma with a stent, and the pupil will not get smaller. He had to have cataract surgery as well as glaucoma surgery.

Last month I got a call from another Pickleball friend, Jon Marchisio, 43 yrs. old. He was standing at the line, and someone hit the ball from across the net. He had a subconjunctival hemorrhage (bleed on the surface of the eyeball) which healed in a few weeks. He bought protective lenses, but then last week he was just practicing dinking and did not wear them- and he got hit again!

In 2022 the National Library of Medicine published a case series of retinal tears due to pickleball injury. These are injuries to the back of the eye, that can cause serious visual consequences.

Although a less physically demanding sport compared with some other racquet sports, the potential for ocular injury from either the ball or the racquet of another player remains. The risk is higher in those with previous cataract surgery, nearsightedness, previous vitreous or retina injuries or blunt trauma, and the elderly. **But in Brad’s case, he was a healthy very fit 68-year-old excellent player, and in Jon’s case a healthy fit 34 year old excellent player!**

WHAT KEEPS PEOPLE FROM WEARING EYE PROTECTION

As a PPR certified Pickleball Instructor and Coach, and a multiple National tournament’s medal winner including gold at the Indoor and Outdoor Nationals, I felt hesitations similar to some of you, such as:

- My vision clarity isn’t as good
- My glasses fog up
- What about my prescription?
- My depth perception may be off

IF YOU WEIGH THE PROS AND CONS, AND DECIDE YES, HOW TO FIGURE OUT WHAT TO TRY

MATERIALS

Lenses material- Should be polycarbonate or Trivex

Material	Polycarbonate	Trivex			
Lighter	8% heavier	8% lighter			
Thickness	10% thinner	10% thicker			
Clarity (Abbe value) Higher =clearer	30	45			
Protection against Impact	equal	equal			
UV protection	equal	equal			
Cost		More expense			

Frame- should be a light plastic , wrap around is safer to protect from balls that ricochet from your partner’s paddle- a very common way of getting hit is from the side

Soft hydrophilic nose piece is helpful to prevent slipping when sweating.

Adjustable is helpful.

Lens surfaces treatments

UV 400 will block 100% of UVA and UVB sun rays (over the counter and cheaper glasses often say they protect but do not when tested independently)

Anti- scratch

Anti glare

Anti-fog (some glasses have vents to help decrease fog)

DO NOT RECOMMEND POLARIZED- although they reduce glare, these can screw depth perception for a fast moving ball

LENS FUNCTIONS

VARIABLE COLORS- Photochromic- change colors from nearly clear to true sunglass. Not as good for indoors, though they should change color only if exposed to UV light. Most completely purpose-made clear lenses let through around 93% of the light. So these won't go all the way to completely clear, but they go to a very, very light tint. The lenses can take up to a minute, depending on air temperature, to change shade completely, so may be more difficult if clouds are coming and going. Photochromic lenses can vary in quality based on newer technology. Dr. Heath told me that Johnson and Johnson makes a contact lens that darkens outside- and then one can use a clear frame-. So far it is only available for myopes (nearsighted people).

Interchangeable lenses- allows the perfect lens no matter what- but again would have to change often if the day is partly cloudy partly sunny.

LENS COLORS

Lens colors are very personal. So it is best to try them on indoors and outdoors. That being said, here are some guidelines that may be helpful to you.

Indoor- performance and premium anti-reflective coating so less halos, and a lightly tinted option like rose copper or amber to make the ball pop

Amber lenses are especially good because not only will they cope with strong sunlight but they cut glare and improve contrast – everything will appear a little sharper helping with definition

Grey- some people like because colors seen are more true

Blue and turquoise/green lenses are also useful as they can “highlight” a yellow ball, making it pop against the sky and court

Pink lenses- are often preferred for early morning or last afternoon play without direct bright sun

Special considerations, if a person had cataract surgery, the implant may already have some yellow filter. A person with early cataracts might benefit from amber which would brighten things up. IF a person has dry eyes, a wrap around keeps out the dirt and wind- can ask for a dry seal- but vents are needed so if the eyes water the glasses won't fog up.

LENS PRESCRIPTIONS

According to Dr. David Heath, OD, most people with a mild prescription prefer to forego their prescription for ball sports.

Progressive prescriptions - Progressive lenses offer multiple correction values in one lens, so you can have distance and close-up values in one pair of glasses. David Heath, OD, says "I am not a big fan of using near vision correction in sports glasses. Neither bifocals nor progressive." But remember, you won't be able to look at your phone or read with the sports glasses. Most fast ball sports players forego the presbyopia prescription (near vision prescription) – "a problem that can occur is they may look through progressive and lose depth perception while moving backwards".

For prescriptions of strength over 4 diopters for myopia or farsightedness, or for prescriptions with over 3 diopters of astigmatism, the wrap around lenses will cause distortion on the sides. Most wrap arounds are 8-10 base curve (curvature), and for those stronger prescriptions one would want a 6 base curve or less.

AND BACK TO SAFETY- the reason for this article! For the safest lenses, they should be ASTM rated for ball sports. This is most important if you are predisposed to having eye or vision problems already, or are slow to get out of the way.

Who are Some Sports Glasses Companies?

There are some that I am personally familiar with.

For inexpensive photochromic glasses, I have used Rockbros, which can be purchased on Amazon.com. I like the light frame, and the photochromatic feature. The lens quality is adequate.

I mostly use the RIA glasses, which I like a lot because they are very light, rimless below and the sides to excellent peripheral vision, and good quality lenses. They have interchangeable lenses. I use the clear for indoors, and the amber for outdoors moderate sunshine. Most impressive is that their lenses are made by Zeiss, which is a very good company that made the lenses and the microscopes I used for performing Ophthalmic Surgery. They do not yet accommodate prescriptions, but plan to offer prescriptions late summer 2023. They also hope to have their photochromic lenses available late summer.

I also have a few pairs of Oakley's, which are quite expensive, and I think give me very clear vision and are lightweight. I have the amber lenses. They are very good for bright sunlight.

If you need a prescription, a website that is quite informative is SportsRx, though it mostly carries glasses owned by a company which has taken over most of the market for glasses. Be sure you know your PD (pupillary distance) and how strong your prescription is- remember you may need a smaller frame, or one with less curvature. They do provide a lot of information on their website.

Tifosi may be a good inexpensive brand that carries prescriptions, but I have not been able to find out much about the curvature of the lenses. They do carry some frames for smaller faces.

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