

Eye Safety: What's your League's Vision?

By Debbie McClung and Amy Coburn, MD

Good vision is critical in baseball and softball. A player with poor vision can't see the ball, and an eye injury on the field can impair a child for life. Over 600,000 recreational eye injuries occur in the United States each year, leading to over 45,000 emergency eye care visits. ***Baseball is the leading cause of eye injuries in athletes under the age of 14 in the USA.*** Blunt trauma from a ball or bat can cause orbital bone fractures, rupture of the eye, or internal damage with bleeding, cataract, glaucoma, double vision, or retinal detachment. Grit from the field can cause a scratched cornea or conjunctivitis. **The good news is that protective eye gear can prevent at least 90% of injuries!**

While all players are at risk, 2/3 of eye injuries occur in defensive players, especially from bad hops and misplayed balls. Batting and running bases carry lower risk: a batted ball is 361 percent more likely to injure an eye than a pitched ball.

While Little League International does not mandate eye protection, it recognizes situations that require increased eye safety. President and CEO, Stephen Keener states, "We recommend protection for any player who is already visually impaired. Some leagues have mandated the use of helmets with facial protection, but all leagues are required to have them for any player needing one. Today when players purchase their own personal equipment, many also choose to expand from just the fielding glove, batting glove, bat, ball or sweatbands to include a helmet. The type of helmet chosen would depend upon the individual need of the player with parental input that could include concerns about eye issues, mouth, facial protection, concern about hygiene such as to restrict the transmission of head lice, new to the sport or just personal preference. As a result of some of these concerns many parents are deciding to purchase for their children helmets with added facial protection."

Position papers from Prevent Blindness America, and the American Academies of Pediatrics, Ophthalmology and Optometry each:

- ***Mandate eye protection*** for athletes
 - with vision worse than 20/40 in either eye
 - at increased risk due to previous eye injury/surgery
- ***Strongly recommend*** protective eyewear for **all** children participating in baseball.

Certified protective eyewear for baseball must meet American Society for Testing and Materials (ASTM) and American National Standards Institute (ANSI) standards. Every sport has a specific ASTM code.

- **ASTM F803:** for baseball/softball fielders
- **ASTM F910: eyewear/faceguard attached to a helmet** for youth baseball/softball batters and base runners.
- **Polycarbonate lenses:** most shatterproof; can manufacture as prescription lenses for the 24% of players requiring glasses to see well.
- Streetwear glasses (ANSI Z80.3) and OSHA- certified industrial/ educational eyewear are not satisfactory for baseball.
- **Proper fit** is essential!
- **Contact lenses** should be supplemented with protective eye gear.

The Protective Eyewear Certification Council (PECC) certifies protectors that comply with ASTM F803 (fielders) and ASTM F910 (youth batters and runners). The National Operating Committee on Standards in Athletic Equipment (NOCSAE) certifies baseball helmets. Look for the NOCSAE or PECC seals when available.

Protective eye gear, good field lighting and adult supervision decrease the risk of eye injury in developing athletes. As a safety leader, you can assist parents with the resources that allow them to make informed decisions for their children.

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Resources:

Joint Policy Statement: American Academy of Pediatrics and American Academy of Ophthalmology: Protective Eyewear for Young Athletes
http://one.aao.org/CE/PracticeGuidelines/ClinicalStatements_Content.aspx?cid=1fda605b-97b9-47e3-90d1-11b7a9607797#relatedLinks

Prevent Blindness America: Sports Eye Protectors:
http://www.preventblindness.org/resources/Non-Customizable/NC_MK09_08-125_Eye.pdf

Prevent Blindness America: Sports Safety Tips:
http://www.preventblindness.org/resources/Non-Customizable/NC_MK01_08-085_Tips_sports.Pdf

American Optometric Association: A Little Prevention Goes a Long Way
<http://www.aoa.org/x7679.xml>

Ohio Ophthalmological Society: "Don't Blink": <http://www.playhardgear.com/intro.asp>