



American Public Health Association

800 I Street, NW • Washington, DC 20001-3710

(202) 777-APHA • Fax: (202) 777-2534

comments@apha.org • <http://www.apha.org>

Promoting the Use of Protective Eyewear For Children In Sports

Policy Date: 11/8/2006

Policy Number: 20067

BACKGROUND

Each year in the United States, there are approximately 600,000 documented sports-related eye injuries,¹ over 42,000 of which require emergency room attention² and an estimated 13,500 of which result in a permanent loss of sight.³ Approximately 72 percent of sports eye injuries occur in individuals younger than 25 years, and approximately 43 occur in individuals younger than 15 years.⁴

Different sports carry differing degrees of risk of eye injury. The following sports have been identified in the literature as representative of having a moderate-to-high risk of eye injury: basketball, baseball, softball, cricket, lacrosse, field hockey, ice hockey, squash, racquetball, fencing, boxing, full-contact martial arts, air rifle, tennis, badminton, soccer, volleyball, water polo, football, fishing, golf and wrestling.^{5,6, 7}

CURRENT POLICIES AND POSITIONS ON PROTECTIVE SPORTS EYEWEAR

Various studies conclude that upwards of 90 percent of sports eye injuries can be prevented through the use of protective eyewear properly suited for the respective Sport.⁸⁻¹⁰ A number of organizations have initiated programs and/or published policy and/or position statements that strongly recommend the use of appropriately certified protective eyewear when participating in sports that represent a risk of eye injury. These include: The U.S. Department of Health and Human Services [Healthy People 2010 objective 28-9],¹¹ The American Academy of Pediatrics,⁷ The American Academy of Ophthalmology,¹² The American Optometric Association,¹³ The International Federation of Sports Medicine,¹⁴ Prevent Blindness America¹⁵ and the Coalition To Prevent Sports Eye Injuries.¹⁶ The American Public Health Association, in previous policy statements, has drawn attention to

the risks of injury of certain sports such as boxing (85-20), as well promoting use of protective equipment such as mouthguards (95-06).

Recently, the State of New Jersey has acted upon these aforementioned policy/position statements to enact the first law ever in the United States to require use of protective eyewear by children participating in organized sports.¹⁷

Therefore, the American Public Health Association:

1. Strongly recommends that all participants in defined moderate- to high-risk sports utilize protective eyewear appropriately certified for the specific sport, and further urges state legislatures to mandate that all children wear sports protective eyewear that meets the lens and frame standards of ASTM F80318 and other ASTM standards relating to eye protection in sports [eg, F513 (hockey), F659 (skiing), F910 (baseball), F1587 (hockey goaltenders), F1776 (paintball)];
2. Urges all state legislatures to enact legislation comparable to the New Jersey statute requiring safety eye protection for children who wear glasses engaging in sports and funding to provide eyewear for those children who cannot afford it and to include additional provisions for the athlete with reduced best-corrected visual acuity due to amblyopia or other cause;
3. Encourages philanthropic organizations to assist in the funding of protective eyewear for children who cannot afford them;
4. Encourages manufacturers of sports protective eyewear to account for anthropometric diversity with respect to age, gender and ethnicity in the design of their products to ensure properly fitting equipment;
5. Encourages health educators and facilitators of sports programs (including coaches, officials, athletic directors, athletic trainers, school principals, physical education teachers and school nurses) to teach the value of quality fitted sports protective eyewear to all athletes engaging in high-to-moderate-risk sports, to communicate the risks of recreational eye injuries and provide guidance regarding the choice of eye protection to their at-risk populations, upon consultation with eye care professionals;
6. Urges that studies of cost-effectiveness of sports protective eyewear be conducted; and
7. Encourages insurance companies to employ risk management strategies to communicate the risks of sports eye injuries and provide guidance in their mitigation, such as training coaches, referees and participants in the proper choice and use of sports eye protection.

References

1. Feist RM, Farber MD. Ocular trauma epidemiology. Arch Ophthalmol Apr 1989; 107(4):503-504.
2. US Consumer Product Safety Commission. Sports and Recreational Eye Injuries. Washington, D.C.; US Consumer Product Safety Commission; 2000.

3. Vinger, PF The Mechanisms and Prevention of Sports Eye Injuries, Protective Eyewear Certification Council, <http://www.protecteyes.org/PECC%20Injuries%20prevention.pdf>
4. US Consumer Product Safety Commission. Sports and Recreational Eye Injuries. Washington, DC; US Consumer Product Safety Commission; 2000.
5. Vinger PF. A practical guide for sports eye protection. *Phys Sports Med.* 2000; 28(6).
6. Capao-Filipe JA, Rocha-Sousa A, Falcao-Reis F, Castro-Correia J. Modern sports eye injuries. *Br J Ophthalmol* 2003; 87(11):1336-9.
7. <http://aappolicy.aappublications.org/cgi/content/full/pediatrics;113/3/619>
8. Jeffers JB, an on-going tragedy: pediatric sports-related eye injuries. *Semin Ophthalmol* 1990; 5;216-223.
9. Orlando RG, Doty JH. Ocular sports trauma: a private practice study. *J Am Optom Assoc* 1996; 67(2):77-80.
10. Larrison WI, Hersh PS, Kunzweiler T, Shingleton BJ. Sports-related ocular trauma. *Ophthalmology* 1990; 97(10):1265-9.
11. <http://www.healthypeople.gov/Document/html/tracking/OD28.htm#vision>
12. <http://www.aao.org/member/policy/upload/Protective-Eyewear-or-Young-Athletes.pdf>
13. <http://www.aoa.org/x2711.xml>
14. <http://www.fims.org/default.asp?PageID=120975716>
15. <http://www.preventblindness.org/safety/sportspage1.html>
16. <http://www.sportseyeinjuries.com/objectives.aspx>
17. Assembly Bill 2091, 211th Legislature State of New Jersey; accessible at: http://www.njleg.state.nj.us/2004/Bills/PL05/306_.PDF
18. ASTM F 803 - 01 Standard Specification for Eye Protectors for Selected Sports. American Society for Testing and Materials. Annual book of ASTM standards: Vol 15.07. Sports equipment; safety and traction for footwear; amusement rides; consumer products. West Conshohocken (PA): American Society for Testing and Materials; 2003

800 I Street, NW Washington, DC 20001-3710 (Ph) 202-777-APHA (Fax) 202-777-2533

2007 © American Public Health Association