FOR IMMEDIATE RELEASE

CONTACT:
Patti Davis
Director of Communications
& Member Services
AOSSM
Tel: (847)292-4900
Email:patti@aossm.org

FEMALE LACROSSE PLAYERS AT HIGHER RISK THAN MALES FOR HEAD, FACE, AND EYE INJURIES

Study supports use of protective eyewear for female players in high school, college

CHICAGO – February 1, 2007 – Despite playing a game with less physical contact, female lacrosse players in high school and college sustain a higher rate of injuries to the head, face, and eye than their male counterparts, according to a study published in the February issue of The American Journal of Sports Medicine by SAGE.

“Although high school injury rates are lower than those of college, the nature of the injuries, body parts affected, and mechanisms of injury are similar,” writes Andrew E. Lincoln, ScD. MS, of the Medstar Research Institute, Hyattsville, Md., and coauthors. “Female players sustained more head, face, and eye (HFE) injuries partly because of a lack of protective equipment. Before 2005, protective eyewear was not required for females at any level of play. Our findings offer support to US Lacrosse’s (2005) mandate of protective eyewear for all female lacrosse players,” the authors say.

Lacrosse is one of the fastest growing sports in the U.S. The number of both youth and collegiate participants has grown dramatically, with the biggest increase occurring in the number of women’s NCAA lacrosse teams (which has nearly doubled since 1993). On all levels of play, lacrosse is a fast-paced team sport. The hard rubber ball used in lacrosse can travel at speeds of up to 90 mph in the men’s game and 60 mph in the women’s game. The use of protective equipment has differed between the sexes because the women’s game prohibits deliberate body-to-body contact.

Using sport-specific injury surveillance systems, the researchers collected data on HFE injuries during 4 seasons (2000-2003) of high school and college lacrosse (both practice and competition). High school data came from 23 high schools in the Fairfax County (Va.) Public School System; at the college level, HFE injury data were collected through the NCAA Injury Surveillance System and consisted of a sampling of men’s and women’s lacrosse programs during the 2000-2003 seasons. Teams from all three NCAA divisions were represented in the sample. [The data collection period preceded the mandate for protective eyewear in girls’ and women’s lacrosse.]

Based on athletic exposures, both high school girls and college women sustained more HFE injuries than did male players in high school and college. Boys, girls, and collegiate men sustained a majority of HFE injury during games, whereas collegiate women sustained a majority of such injuries during practice. The most common types of HFE injuries for all players were concussions, contusions, and fractures. Despite wearing a required helmet, males suffered more concussions than females in both high school and collegiate play. Concussions in male players were most often caused by direct contact with another player, whereas females sustained concussions by incidental contact with the lacrosse stick, ball, or ground.

In contrast to the concussions sustained by high school boys and college men, females in high school and college experienced significantly higher proportions of injuries to the nose and eyes than did their male counterparts. Fractures and contusions were common in both high school girls and collegiate women. At the time that this study was conducted, the only required piece of protective equipment for
female lacrosse players in the field was a mouth guard; goalies also were required to wear a face mask. All male players wear helmets with face masks, mouth guards, and gloves.

“The injury patterns we found largely reflect the protection offered by this equipment in that high school boys and college men sustained few facial and eye injuries, whereas a significant proportion of girls’ and women’s injuries involved the face and eyes,” the authors write. “This is most likely because of the lack of any required head/face protection other than a mouth guard.”

“Head, face, and eye injuries are a concern for all lacrosse players, but the mechanisms and types of injuries for males and females are different because of the differences in rules, protective equipment, and the nature of the game. We used prospectively gathered data to develop a program aimed at preventing HFE injuries in women’s lacrosse. This program includes the addition of protective equipment, enforcement of rules, and education of the lacrosse community,” says study co-author Richard Y. Hinton, MD, MPH, of the Department of Orthopaedic Surgery, Union Memorial Hospital, Baltimore, Md.

###

*The American Journal of Sports Medicine* is the monthly peer-reviewed scientific journal of the American Orthopaedic Society for Sports Medicine (AOSSM). AOSSM is a world leader in sports medicine education, research, communication, and fellowship. The Society works closely with many sports medicine specialists and clinicians to improve the identification, prevention, treatment, and rehabilitation of sports injuries. Please visit [www.sportsmed.org](http://www.sportsmed.org). To contact authors Andrew E. Lincoln ScD, MS or Richard Y. Hinton, MD, MPH, call AOSSM Director of Communications and Member Services, Patti Davis, at 847/292-4900 or email patti@aossm.org. Please consult the article for additional information, including other authors, author contributions and affiliations, financial disclosures, funding and support, etc.

**About SAGE**

SAGE Publications is a leading international publisher of journals, books, and electronic media for academic, educational, and professional markets. Since 1965, SAGE has helped inform and educate a global community of scholars, practitioners, researchers, and students spanning a wide range of subject areas including business, humanities, social sciences, and science, technology and medicine. A privately owned corporation, SAGE has principal offices in Los Angeles, London, New Delhi, and Singapore. [www.sagepublications.com](http://www.sagepublications.com)