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## **Safety of Women's Boxing**

Women's Boxing is a safe contact sport. The recent Women's World Championships in Ningbo, China was a competition consisting of 207 bouts. No boxer suffered loss of consciousness. We define "concussion" very strictly as anyone who receives strong blows to the head from the padded glove. Even with our strict criteria, the concussion rate was 0.0096 ---less than 1%. There were no hand injuries, no lacerations, 2 nosebleeds, and 2 minor facial bruises.

Olympic Style Boxing ranks high among all sports for safety. A study in Australia (1) compared medical costs of all sports related injuries over a twenty year time period with the following results:

<b>Sport</b>	<b>Cases</b>	<b>\$Amount</b>
<b>Rugby League</b>	<b>208</b>	<b>5,862,236</b>
<b>Rugby Union</b>	<b>39</b>	<b>1,665,620</b>
<b>Motor-cycling</b>	<b>22</b>	<b>564,565</b>
<b>Cricket</b>	<b>22</b>	<b>121,797</b>
<b>Soccer</b>	<b>17</b>	<b>355,493</b>
<b>Australian Rules</b>	<b>12</b>	<b>128,244</b>
<b>Pony Riding</b>	<b>6</b>	<b>52,138</b>
<b>Polo</b>	<b>5</b>	<b>217,585</b>
<b>Touch Football</b>	<b>4</b>	<b>152,325</b>
<b>Boxing</b>	<b>0</b>	<b>0</b>

Benefit claims paid by NSW Sporting Injuries Insurance Scheme 1979-1998 by sport

A recent article reviewing 751 boxing injuries evaluated in United States Hospital Emergency Rooms over three years (2) concluded, "The overall injury rate for combat sports does not appear to be higher than in popular non-combat sports."

**Women's Olympic Style Boxing is safer than men's. Tournament statistics over 15 years show lower injury and concussion rates than in men's tournaments. The increased safety of Women's Boxing may be dependent on physiologic differences between women and men. The female athlete has a more flexible neck, less shoulder and neck musculature, and less upper body strength than the male athlete (3). In Boxing which allows only arm blows, women suffer injury and concussion less commonly than men.**

**Critics of Olympic Style Boxing have always been concerned about possible occurrence of chronic mental or psychological impairment to those who participate in the sport. Many scientific studies have shown that athletes who participate in Olympic Style Boxing are no more likely to have chronic mental impairment than athletes who do not box! (4) (5) The incidence of neurologic injury is rare in Women's Olympic Style Boxing.**

**The overall incidence of orthopedic injuries in women boxers is also extremely low. Hand injuries are rare as consistent with the tournament statistics presented above. Lower extremity injuries are almost non-existent.**

**Many have asked if breast cancer might be brought on by the trauma of competition. Trauma to the breast has never been associated with increased cancer risk in any sport. No more than an arm bruise, or other soft tissue bruise would be associated with cancer. This is supported by all known data in all published studies.**

**For young women competitors, there is the question of injury during pregnancy. Young women who are pregnant may not box. All female athletes must sign a declaration of non pregnancy before being allowed to compete. Blows below the beltline are forbidden in boxing. There is no evidence of harm to the fetus that distinguishes boxing from any other sport.**

**There is a small tragic inevitable death rate suffered by young athletes who participate in every sport. How does "Boxing" compare?**

**FATALITY RATE PER 100,000 PARTICIPANTS**

Horse-racing	128
Sky-diving	123
Hang gliding	55
Mountaineering	51
Scuba diving	11
Motorcycle racing	7
College football	3
Boxing	1.3

**Boxing and Medicine, Human Kinetics, Illinois 1995 (6)**

**No statement on the safety of a sport would be adequate without reference to health benefits of that sport. A group of experts recently ranked all sports and found “Boxers” to be the fittest of all athletes (7). Boxing is recognized as a sport that builds self confidence in athletes. Fitness and improved self confidence are the health benefits of Boxing.**

**Conclusion:**

**The published scientific literature supports Olympic Style Boxing as an extremely safe sport. Women’s Olympic Style Boxing is safer than Men’s.**

**Boxing develops excellent physical conditioning. It builds self Confidence. The concussion rate is lower than in many non contact sports. Women’s Boxing has a fifteen year history of safety. The sport of Boxing is an excellent healthy choice for women.**

- (1) 14<sup>th</sup> Annual Report 1997-98.** NSW Sporting Injuries Committee, Sydney 1998
- (2) Boxing, wrestling, and martial arts related injuries treated in emergency departments in the United States, 2002-2005.** Evangelos Pappas Long Island University-Brooklyn Campus, Brooklyn, NY, USA ©Journal of Sports Science and Medicine (2007) 6(CSSI-2), 58-61.
- (3) Med Sci Sports Exerc 2005 Feb;37(2):272-9** (ISSN: 0195-9131) Tierney RT; Sitler MR; Swanik CB; Swanik KA; Higgins M; Torg J Biokinetics Research Laboratory, Athletic Training Division, Department of Kinesiology, Temple University, Philadelphia, PA 19122, USA.
- (4) American Journal of Epidemiology, Vol. 139, Issue 6, 573-588,** copyright © 1994 by Oxford University Press.
- (5) Update On Prospective Study By John Hopkins University On Olympic Style Amateur Boxing,** W.F. Stewart, B. Gordon, O. Selnes, K. Bandeen-Roche, S. Zeger, R.J. Tusa, D.D. Celentano, A. Schechter, J. Liberman and C. Hall Department of Epidemiology, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, 2001
- (6) Boxing and Medicine,** Cantu R (editor), Human Kinetics, Illinois 1995
- (7) Degree of Difficulty Project,** Peter Davis, Ph.D. et al., Scientific Panel supported by ESPN, Copyright ©2007 ESPN Internet Ventures