

# Women are at Higher Risk for Concussions Due to Ball or Equipment Contact in Soccer and Lacrosse

Gender-based differences have been noted in the incidence of sports-related concussions



However, little is known about the possible differences in concussion mechanisms

**Do women and men athletes differ in terms of the mechanisms that cause concussions, such as:**

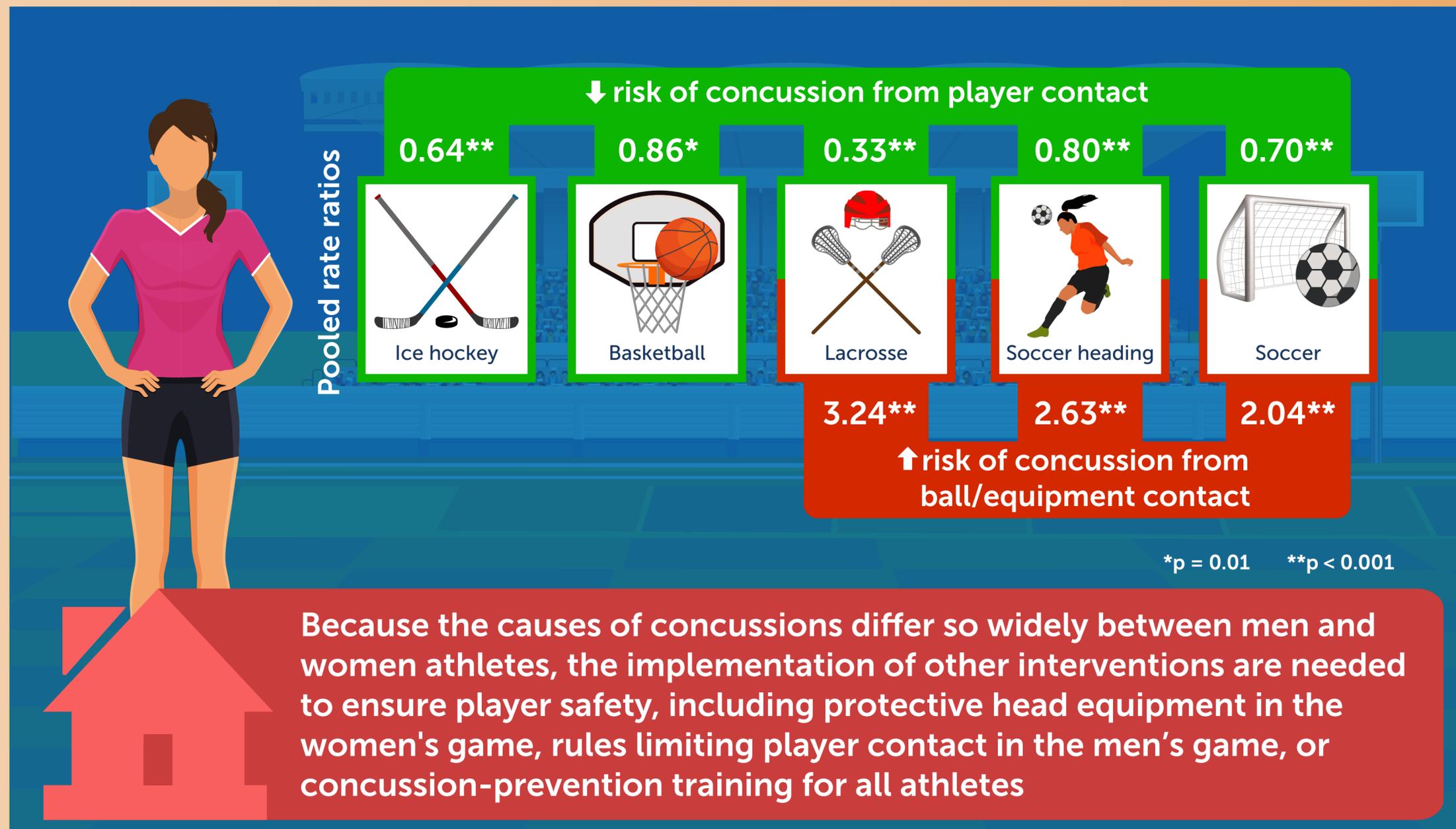
- Player-to-player contact
- Equipment/ball contact



Meta-analysis of 10 studies published from 2000 to 2018



Comparison of men and women athletes with respect to pooled rate ratios of concussions caused by player contact and ball/equipment contact



Because the causes of concussions differ so widely between men and women athletes, the implementation of other interventions are needed to ensure player safety, including protective head equipment in the women's game, rules limiting player contact in the men's game, or concussion-prevention training for all athletes