

ABSTRACT

THE RELATIONSHIP BETWEEN AIR QUALITY AND INJURY AMONG THE 2002-2003 FRESNO STATE MEN'S AND WOMEN'S DIVISION-ONE SOCCER TEAMS

While air pollution is recognized as a health hazard, the long-term health effects of exposure to polluted air are not yet known. It has been found that exercise increases potential dangers from air quality. Because of the known physiological effects, the author hypothesized a significant difference in the number of acute injuries on unhealthy air quality days as opposed to healthy air quality days. To determine if there is a relationship between air quality and injury, air quality reports and dates on which acute injuries occurred were reviewed. Forty-four members of the Fresno State men's and women's division-one soccer teams were studied. Injury rates were calculated per 100 player hours and analyzed using a Chi square technique. With the alpha level set at $P=0.05$, the results showed no significant difference of acute injury rate between unhealthy and healthy air quality days.

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