A case-crossover study of risk factors for occupational eye injuries.

OBJECTIVE: To study transient risk factors for occupational eye injuries.

METHODS: A case-crossover study was conducted among patients treated for occupational eye injuries in the emergency department at an eye hospital in Alabama. A questionnaire was administered to collect information regarding risk factors at the time of and prior to eye treatment. Incidence rate ratios were used to measure the relationship between each risk factor and injury occurrence.

RESULTS: Protective eyewear reduced the risk of occupational eye injury, while increased risk was observed for the following: being distracted, use of tools, tool malfunction, performing an unfamiliar task, being rushed, working overtime, and feeling fatigued.

CONCLUSIONS: Although use of protective eyewear can significantly reduce the risk of an eye injury, other factors are important contributors. Identification of potentially modifiable transient risk factors can be used to prevent occupational eye injuries.