Summary of
“Traumatic brain injury in the construction industry”

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Purpose

Previous studies on work-related traumatic brain injury (TBI) in North America have shown that construction workers comprise one of the largest groups of workers who suffer from TBIs (in terms of actual number of workers and rate of TBI).

This study—“Traumatic brain injuries in the construction industry”—analyzed factors associated with work-related TBI specifically in the Ontario construction industry. It was a cross-sectional study that used data from the Ontario Workplace Safety and Insurance Board (WSIB).

Method

The study used data originally from the WSIB, as abstracted by the Construction Safety Association of Ontario. The data included information on the construction setting and the type of occupation.

According to the data, there were 218 non-fatal TBI cases within the Ontario construction industry from January 2004 to December 2005. These cases resulted in time away from work, health costs, and wage loss.

Researchers classified the measured variables into two categories: pre-injury demographic characteristics and injury-related characteristics.

Results

Researchers analyzed these cases and determined that falls were the most common cause of injury. Being struck by or against an object was the second most common cause of injury.

The average age of the injured workers was 35.8 years. The age group of 25 to 34 year olds had the highest occurrence of TBI.

The study showed that the time of day when the TBI occurred was significantly associated with age. Workers under 45 years old were more likely to be injured in the morning compared to workers over who were 45 and older.

The study also showed that TBIs occurred most often during the hour before lunch and during the hours after lunch. August was the month with the most TBIs, while December had the least.

Discussion

The paper, published in the journal Brain Injury, provides one of the most comprehensive examinations of non-fatal workplace TBI in the construction industry. Results suggest that age-specific strategies may be effective in preventing TBI in the Ontario construction industry.