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252009 A case-control study of risk factors for laceration injury among pork-processing workers in the Midwest

Wednesday, November 2, 2011: 8:45 AM

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Objective: Pork-processing is a fast-paced and physically demanding industry. We wanted to assess fixed risk factors for laceration injury in this occupational setting. **Methods:** In this case-control study, we assessed age, gender, Hispanic ethnicity, job tenure, work department, and prior presence of hand symptoms. We interviewed 142 matched case-control pairs. Cases were selected from workers who experienced a laceration injury at a meatpacking plant. Controls were selected from workers at the same plant who had not experienced an injury. Cases were paired with controls based on plant and day of week. We used conditional logistic regression to estimate the association between potential determinants and laceration incidence. **Results:** Cases were slightly younger than controls (mean 37.5 years (SD 11.0) vs. 40.7 years (SD 10.9)). Longer job tenure (42% of cases vs. 58%; OR 0.6, 95% CI:0.38-0.96) and the presence of hand symptoms such as pain or numbness during the previous month (23% of cases vs. 36%; OR 0.55, CI:0.33-0.93) were associated with injury. Gender (68% of cases were male vs. 61% of controls) and Hispanic ethnicity (48% of cases vs. 42% of controls) did not significantly affect laceration risk. A worker's job area was not strongly associated with laceration injury risk (p-value 0.17). **Conclusions:** Younger workers and workers with shorter job tenure had higher odds of laceration injuries. Age, gender, and ethnicity were not significantly associated with injury. A detailed evaluation of how jobs are performed and how tools are used by meatpacking workers is needed to better design prevention strategies.

Learning Areas:

Epidemiology
Occupational health and safety

Learning Objectives:

1. Describe risk factors for laceration injuries among workers in pork-processing plants.
2. Evaluate the differences in the tools used and jobs performed by injured and uninjured workers.
3. Name one or two possible laceration-injury prevention strategies to be evaluated in future studies.

Keywords: Occupational Health, Injury Risk

Presenting author's disclosure statement:

Qualified on the content I am responsible for because: I am trained in occupational epidemiology. I participated in data collection, data analysis, and interpretation.

Any relevant financial relationships? No

I agree to comply with the American Public Health Association Conflict of Interest and Commercial Support Guidelines, and to disclose to the participants any off-label or

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