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**253484** A case-control study: Job demand and control, and lacerations among pork-processing workers in the Midwest

*Sunday, October 30, 2011*

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**Objective:** We conducted a case control study examining associations between job demand and control and laceration injuries in the pork-processing industry.

**Methods:** Cases were selected from workers who experienced a laceration injury at a pork-processing plant, and 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 and 142 matched case-control pairs were interviewed. Job demand and control was measured using Karasek scales (shortened version). We used conditional logistic regression to estimate the association between potential determinants and laceration incidence.

**Results:** Cases were more likely to report higher total job demands (OR=1.8, CI:1.1-3.1), whereas there was no difference among cases and controls for job control (1.2; 0.7-1.9). Among individual items, compared to controls, cases were more likely to report their job requires excess work (2.1; 1.3-3.7), and also more likely to report their job requires them to be creative (1.9; 1.1-3.1) and learn new things (1.8; 1.1-3.0).

**Conclusions:** Important associations were seen between job demand and injury. Having a pork processing job that requires learning and creativity was also associated with injury.

### Learning Areas:

Occupational health and safety

### Learning Objectives:

1. Describe risk factors for laceration injuries among workers in pork-processing plants.
2. Examine how demanding and how much control workers experience in their jobs can influence their injury risks.
3. Identify how aspects of job demand and control can be changed to reduce injuries and promote worker protection.

**Keywords:** Injury Risk, Occupational Exposure

### Presenting author's disclosure statement:

**Qualified on the content I am responsible for because:** Dr. Melissa Perry is Professor and Chair of the Department of Environmental and Occupational Health at the George Washington University School of Public Health and Health Services in Washington, DC. She earned her Master of Health Science and Doctor of Science from the Johns Hopkins School of Hygiene and Public Health. She is an epidemiologist who over the past 18 years has conducted epidemiologic and preventive intervention studies targeting a number of health endpoints, including occupational injury and disease.

**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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