# HEALTH DISPARITIES IN THE MEATPACKING INDUSTRY

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## Abstract

Meatpacking employees work in hazardous conditions where injuries are frequent, severe and employers may have little incentive to invest in prevention due to low workers compensation costs. This research project uses injury records to assist a labor union in characterizing work injuries in meatpackers, estimated the costs of these injuries to employers, and prioritize hazards for remediation.

To calculate annual incidence rates, we manually tallied OSHA 300 Logs requested by local union officials from unionized meatpacking establishments. We assigned the types of injuries found into one of 12 categories, based on interpretation of injury descriptions found on the OSHA logs. To estimate the costs to employers, injury counts in each category were multiplied by average costs for each injury type, based on workers compensation spending for both indemnity and medical only claims. We also used workers compensation insurance premium experience rated estimates for the industry from state workers compensation insurance ratings bureaus.

In 32 union-represented meatpacking plants from 2004-2009, meatpacking companies reported 40,542 instances of injuries requiring more than first aid among 285,000 worker-years, an annual injury rate of 14% and an official Bureau of Labor Statistics incidence of almost 12%. 37% of these were due to upper extremity repetitive motion injuries. Workers compensation cost meatpacking employers $861 million dollars in 2009, 5.32% of payroll or $1,716.46 dollars per worker employed and 0.5% of industry revenue.

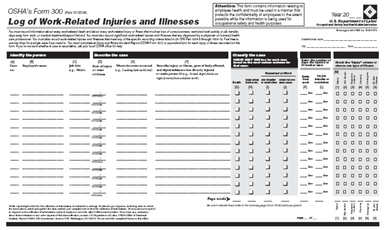
Analysis of the meatpacking industry's workers compensation experience ratings in workers compensation shows that employers face few financial incentives to prevent occupational injuries due to low workers compensation costs as a percent of revenue. Although severity level was not available for each injury, 65% to 70% of cases on average required days away from work or restricted duty, which is an accepted proxy for severity. Employers placed a majority of workers on restricted duty rather than paying out indemnity insurance claims, possibly to keep workers compensation premium costs low. Injury rates higher than the Bureau of Labor Statistics reporting may point to underreporting in non-union plants. With an average of 37% of injuries due to upper-extremity repetitive motion disorders, and 14% of workers injured every year, there is a clear public health imperative to identify, reduce, and eliminate occupational hazards in the meatpacking industry.

## Materials and Methods

Under OSHA's revised 2002 Injury and Illness Recordkeeping Rules [29 CFR 1904.35], employees and their labor representatives have the right to copies of employer records of workplace injuries, including OSHA 300A and OSHA 300 Logs.

Since 2004, the United Food and Commercial Workers Union Safety and Health Office has requested OSHA 300A and 300 logs in retail food, food processing, and animal slaughtering and processing, including beef, pork and poultry. In beef and pork, the UFCW maintains a database of injury records for ten companies and 32 establishments from 2004 - 2009, covering over 40,000 injuries among almost 285,000 worker-years.

For each establishment, annual OSHA 300 A logs are tallied and entered in a excel spreadsheet to record summary information regarding total number of employees, hours worked, OSHA eligible injury numbers, days away from work due to injury, and days on job transfer or restriction. In the more detailed OSHA 300 logs, other information about each case exists. Names appear in Column B, job titles in Column C, and a short description of the type of injury is listed in Column F of the logs. Each of several Occupational Health and Safety Office team members counted injuries in OSHA 300 logs and tallied the type of injury category in 12 separate groups. Staff developed a rubric of category definitions used to sort injury types. Based on this data source of the type of injuries occurring in major meatpacking facilities and the number of workers at each facility, we calculated the frequency of repetitive motion injuries, back injuries, fractures, lacerations, and other categories of injuries.


OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and possibly to safety. To maintain privacy the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 20__
U. S. Department of Labor
Occupational Safety and Health Administration
Form approved OMB no. 1218-0176

Identify the person | Describe the case | Classify the case

(A) Case number | (B) Employee's name | (C) Job title (e.g., Welder) | (D) Date of injury or onset of illness | (E) Where the event occurred (e.g., Loading dock north end) | (F) Describe injury or illness, parts of body affected, and objects/substances that directly injured or made ill (e.g., Second degree burns on right forearm from scalding water)

Enter the number of days the employee was: (G) Away from work | (H) On job transfer or restriction

Check the "injury" column or the "illness" column (J or K):

(1) Injury | (2) Skin disorder | (3) Respiratory condition | (4) Poisoning | (5) Hearing loss | (6) All other illnesses

Page totals

Public reporting burden for this collection of information is estimated to average 18 minutes per response, including time to review the instructions, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to this collection of information unless it displays a currently valid OMB control number. If you have comments about these burden estimates or any other aspects of this data collection, contact: US Department of Labor, Office of Statistical Analysis, Room N-3507, 200 Constitution Avenue, N.W., Washington, DC 20210. Do not send the completed forms to this office.

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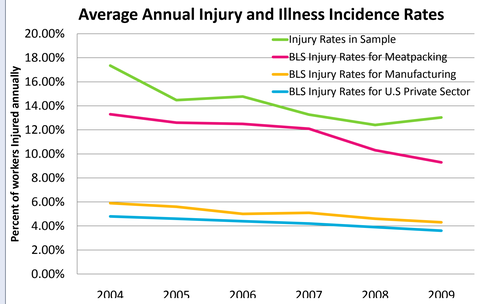
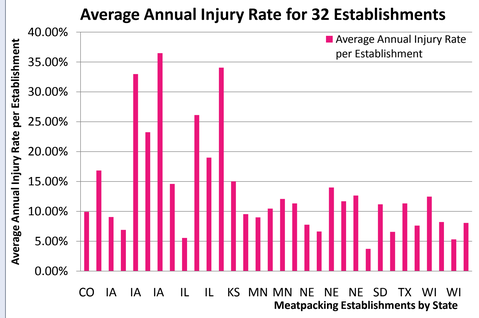
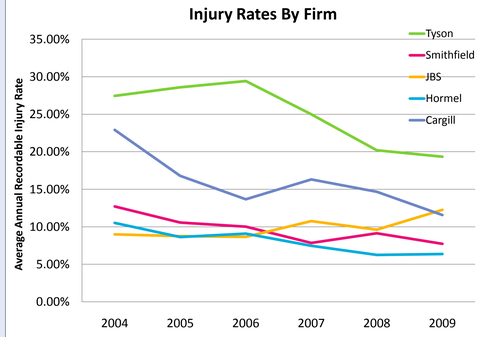
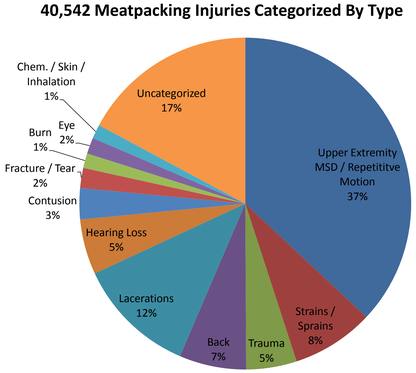
## Injury Rates Are High




## Injuries Are Severe




### Injury Type Definitions

**Laceration:** Cuts, scrapes, avulsions, amputations, and punctures.

**Strains and Sprains:** Categorized if strain or sprain in the description, is not an upper extremity MSD/ repetitive motion or a back injury.

**Hearing Loss:** If injury meets criteria for OSHA recordable loss of hearing (Standard Threshold Shift).

**Musculoskeletal Disorders/Repetitive Motion:** When "pain" is used to describe a hand, wrist, shoulder, or neck; ganglion cysts, trigger fingers, tennis elbow, tendonitis, carpal tunnel syndrome, bursitis, etc…

**Fracture/Tear:** Fracture of fingers, legs, toes, and limbs or torn ligaments.

**Back:** All back injuries including muscle and spine.

**Contusion:** When contusion or bruise is used in the description.

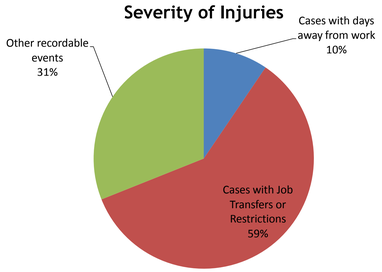
**Eye:** Corneal abrasions, chemical in the eye, animal blood in the eye, conjunctivitis, etc...

**Burn:** Water burns from sterilizers, steam burns, etc…

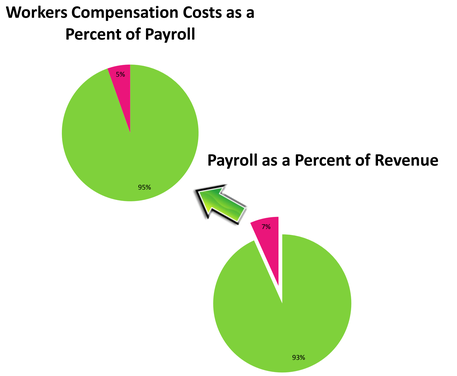
**Chem./Skin/Inhale:** Ammonia leaks, workers that had allergic reactions or fainted due to chemical smells, chemical burns, skin rashes, dermatitis and other conditions caused by contact with animal products or chemicals, etc...

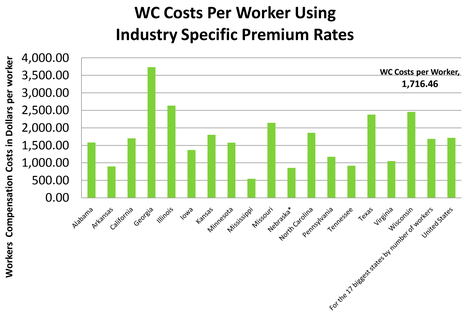
**Trauma:** When a person falls on grating, in the parking lot, slips on fat, is struck by animal, cart or has door fall on top of them, etc...

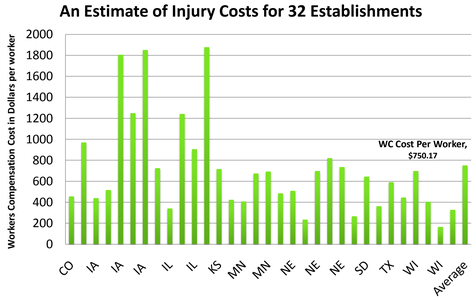
**Uncategorized:** All other non-categorized occupational injuries and illnesses.




## Employers Pay A Fraction of Revenue in Injury Costs




## Conclusion

1. Injury rates are higher than the Bureau of Labor Statistics official incidence rates for the animal slaughtering and processing industry.
2. Recorded injury rates vary considerably by company and establishment.
3. Injuries are severe; Almost 70% of injured workers had to take time off (10%) or were placed on restricted duty (59%).
4. Employers pay a fraction of revenue in injury costs.
5. Upper extremity musculoskeletal disorders are 37% of injuries.

## Recommendations

1. Make injury records electronically available for ease of data analysis and manipulation.
2. Reform workers compensation to reflect the human cost of injuries and to improve collaboration between OSHA and workers compensation insurers and rating agencies.
3. Implement ergonomic standards to address the largest category of injuries that workers experience.

## References

1. OSHA Logs requested by the Occupational Health and Safety Department of the United Food and Commercial Workers Union.
2. Bureau of Labor Statistics, Industry Injury and Illness Data, Summary Tables - detailed industry data presenting incidence rates and numbers of injuries and illnesses combined and injuries only for 31 - 33 for Manufacturing, the U.S. Private Sector, and 311611 for Animal Slaughtering and Processing (minus Poultry) for the years 2004 through 2009.
3. We used 2007 U.S. Economic Census data for NAICS 311611 Animal Slaughtering and Processing (minus Poultry) to look up total revenue, total number of workers and total payroll for use in estimating the costs of injuries.
4. We gathered industry specific premium rates by state from the National Council on Compensation Insurance (NCCI), and individual state workers compensation insurance rating bureaus that do not participate with NCCI. All rates are from the year 2009.
5. We gathered injury specific average insurance payouts from OSHA's "Safety Pays" website, Ohio, California and Washington State workers compensation insurance agencies. We applied these costs to our own counts of injuries by type to estimate costs on an establishment specific basis.

## Contacts

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