Commission on
Health and Safety and
Workers' Compensation

The Impact of Occupational Injury And Illness on Non-occupational Disability Benefits

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Overview

- Background
- Data
- Adjustments
- Results
- Implications
- Future Work

Background

California workers' compensation

- Paid for by employers
- Average premiums have ranged from 3%-6% (1999-2004)
  - Range is 0.4% to 60% across industry classes
- Includes medical, temporary and long-term disability
- California--Temporary disability up to 730 days

California one of 5 states with near universal non-occupational disability system

- Paid for by employees
- California rate 1.1% of payroll, with maximum contribution
- Covers disability lasting 7-365 days
- No medical or long-term disability benefits

Background

Policy concerns

- **Internalizing occupational injury costs to give employers and employees proper incentive for investments in prevention**
- **Proper employee costs for SDI signals appropriate benefit breadth and level**
  - **Paid "Family Leave"**
- **Frequent litigation over correct payor, leads to substantial legal and admin costs**

Background

- This is a truly unique set of research
  - Only research SDI in any state
  - Only research comparing two, separate short to medium term disability systems

Data—State Disability Insurance (SDI)

- We obtained a 20% sample of all claimants, the “Single Client File” (SCF) for 1991-2002
- Many employers can opt out of SDI if they are:
  - State government
  - Large employers that elect self-insurance
  - Self-employed workers

Data—SDI

- From Employment Development Department (EDD) “employer file” we obtained a specially constructed data that
  - Defined all workers that were eligible for SDI benefits by number of unique SSNs
  - By 2-digit SIC
  - By contribution and wage
- Allowed us to construct denominators for injury, illness, and total rates by 2-digit industry
- Numerators:
  - Excluded several ICD-9 codes (pregnancy)
  - Defined each claim as injury or illness based on ICD-9 codes

DATA—Bureau of Labor Statistics (BLS) for California

- Survey of Occupational injuries and Illnesses (SOII) for 2000-2002
- Data are incidence/(100 FTEs)
- Separately for injuries and illnesses
- By 2-digit industry codes
- Differs from SDI data which are incidence relative to unique SSNs/year

DATA-Current Population Survey (CPS)

Basic Monthly File

- Allows us to translate unique SSNs into Full-time equivalents (FTEs)
- Allows us to identify characteristics of workers that might affect probability of disability
  - Age, gender, race, ethnicity, etc.

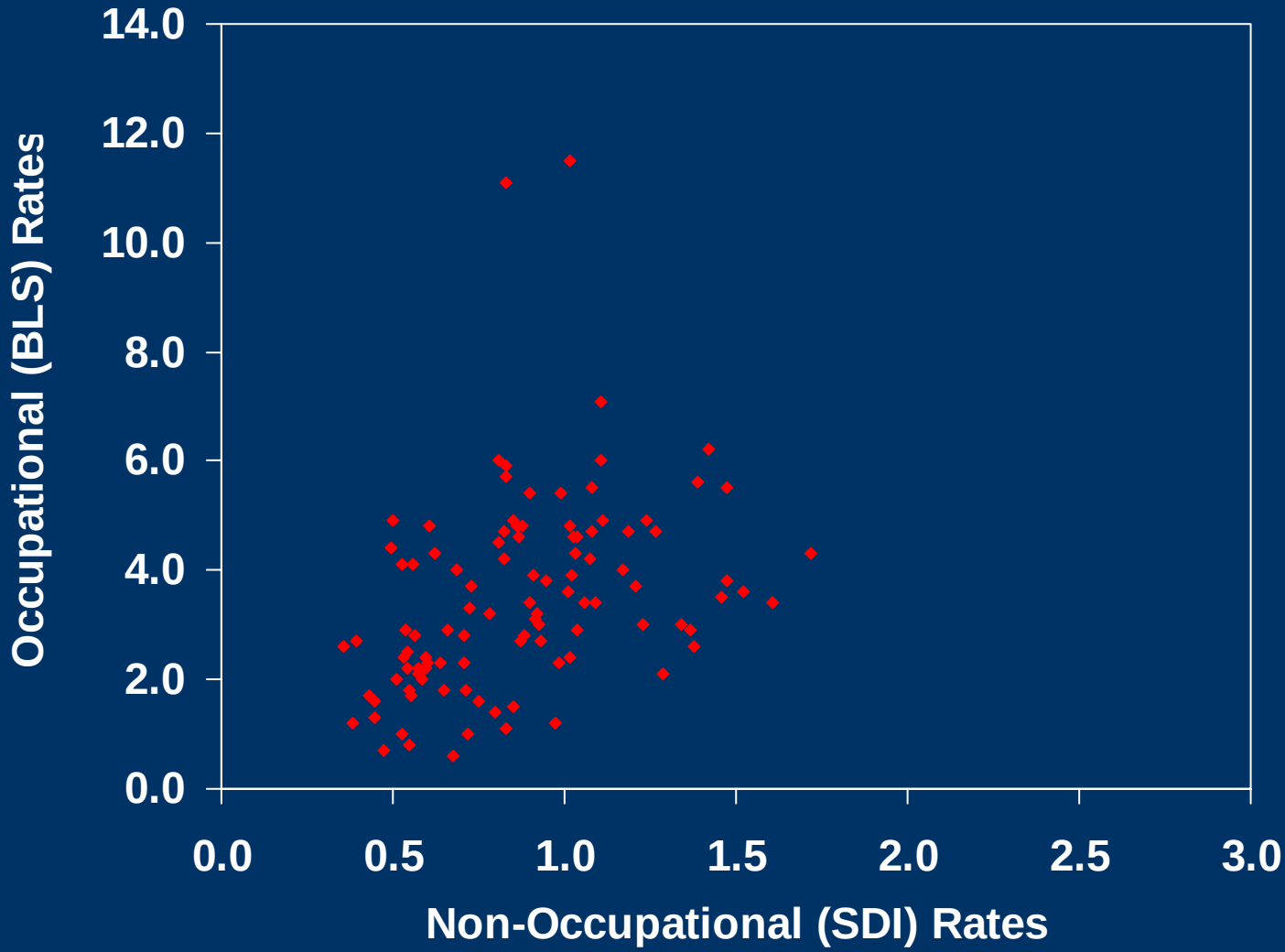
Data—National Health Interview Survey

- Injuries/Illnesses may be correlated with both industry and worker demographics for example,
  - young workers have fewer non-occupational illnesses (but maybe more non-occupational injuries)
  - Female workers might have more illnesses, but fewer injuries
  - Construction has mostly younger, male workers

Data—National Health Interview Survey

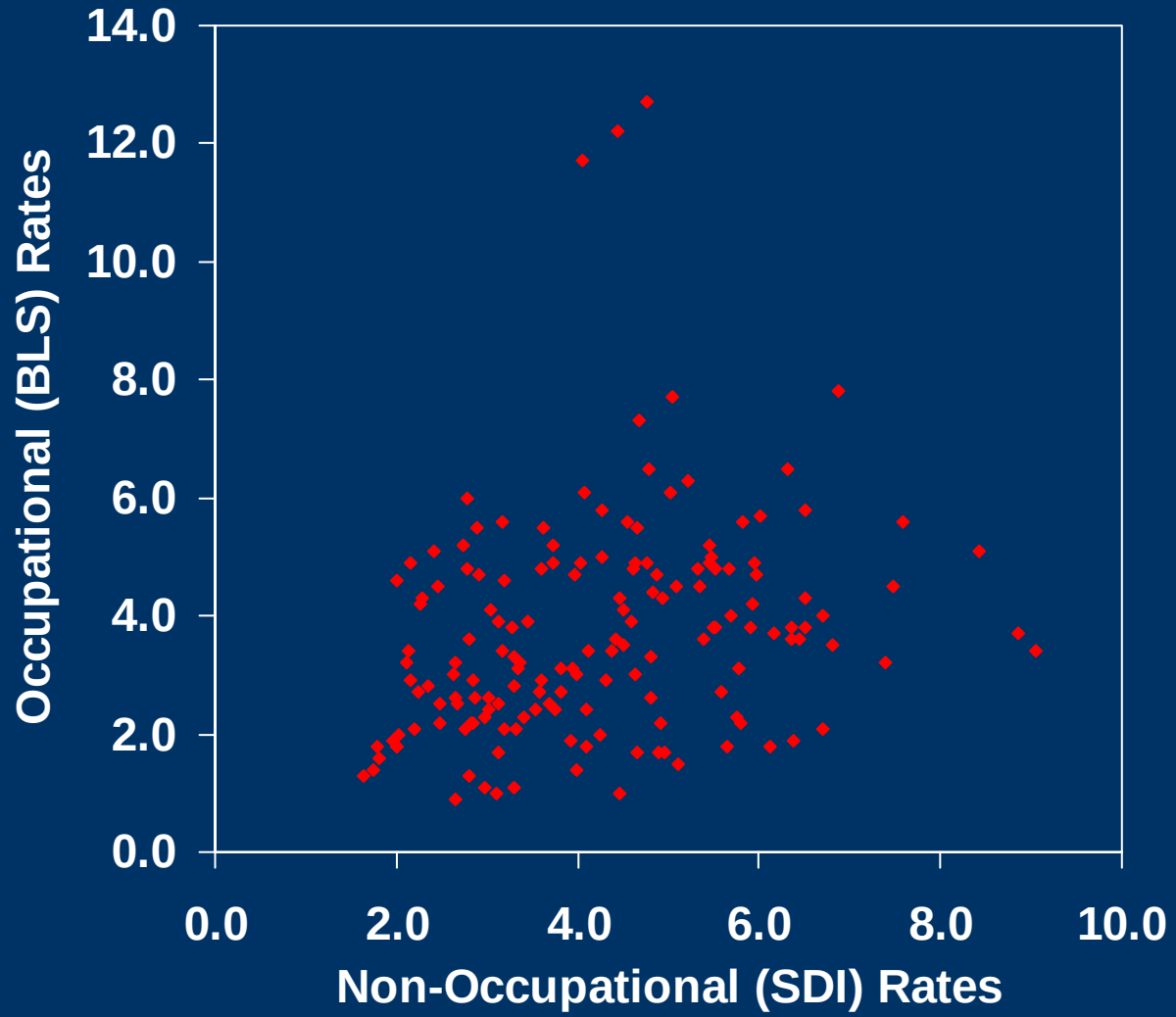
- Constructed estimates for a range of worker characteristics
- Adjusted each California industry group to reflect injury/illness risk of workforce
- After adjustment, each industry should have the same non-occupational injury/illness rate
  - Except, if occupational injury/illness rates affect non-occupational injury/illness rates

Occupational and Non-Occupational Incidence Rates for Injuries by Industry, 2000-2001



Occupational and Non-Occupational Incidence Rates for Illnesses by Industry, 2000-2001

Occupational and Non-Occupational Incidence Rates for Injuries and Illnesses by Industry, 2000-2002



Correlations Between Occupational and Non-Occupational Incidence Rates

	Injury	Illness	Injury or Illness
Pearson Correlation	.374**	.394**	.268**
N	105	105	161

**Correlation is significant at the 0.01 level (2-tailed)

Average Incidence Rate All Industries (incidence/100 FTE)

	Injury Rate	Illness Rate	Injury or Illness Rate
Non-Occupational (SDI)	0.84	3.04	4.08
Occupational (BLS)	2.95	0.20	3.20

Regressions Predicting Non-Occupational Incidence Rates from Occupational Incidence Rates

	Injury	Illness	Injury or Illness
Year	0.014 (0.056)	0.198 (0.209)	0.257 (0.143)
BLS Rate	0.064** (0.016)	2.849** (0.647)	0.217** (0.063)

**Significant at the .01 level of confidence

Percentage of Non-Occupational Incidence Rates Explained by Occupational Incidence Rates

Injury	Illness	Injury or Illness
25%	20%	19%

Implications

- Substantial subsidization of employer supported workers' compensation by employee financed State Disability Insurance
- Approximately 20-25% of injuries/illnesses may be misclassified as non-occupational
- Integration could save substantial administrative costs
- Employers might pick up larger percentage of combined program with costs offset by administrative savings

Implications

- Impact on employer cost would be 0.13% of payroll, on average
- High-risk industries might pay substantially more
- Cross-subsidization may also imply substantial misclassification in both directions
- Any cross-subsidization and/or misclassification will lead to under investment in safety
  - Applies to both parties

Further Study Necessary

- Do these data accurately reflect final disposition of disputed cases?
  - Check by matching SDI⇔WCAB
- Do these data accurately reflect longer-term overlap between SDI and Workers' Compensation
  - Recent changes in benefit levels
  - Recent changes in premium levels
  - Long-term trends in illness, apportionment, causation standards etc.

Future Work—Some Requirements

- Extend SDI data through 2005
- Extend EDD employment data for full period, 1993-2005
- Link EDD and WCAB
- Link WCIS and other data systems
  - First effort, MediCal/SSI
- This model could be come standard for California and example for other states