



Commission on
Health and Safety and
Workers' Compensation

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

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Frank Neuhauser

Anita Mathur

Survey Research Center/

UC Data Archive and Technical Assistance

University of California, Berkeley

Overview

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

Background

Workers' compensation programs exist in all states

- Paid for by employers
- Average state premiums 2%-6% of payroll
- 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 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

- **Reville, et al. examined cross-subsidization between occupational and non-occupational health benefits**
- **But, this is the only study we know of, at least in US, that examines claiming across occupational and non-occupational disability systems simultaneously**
- **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.**

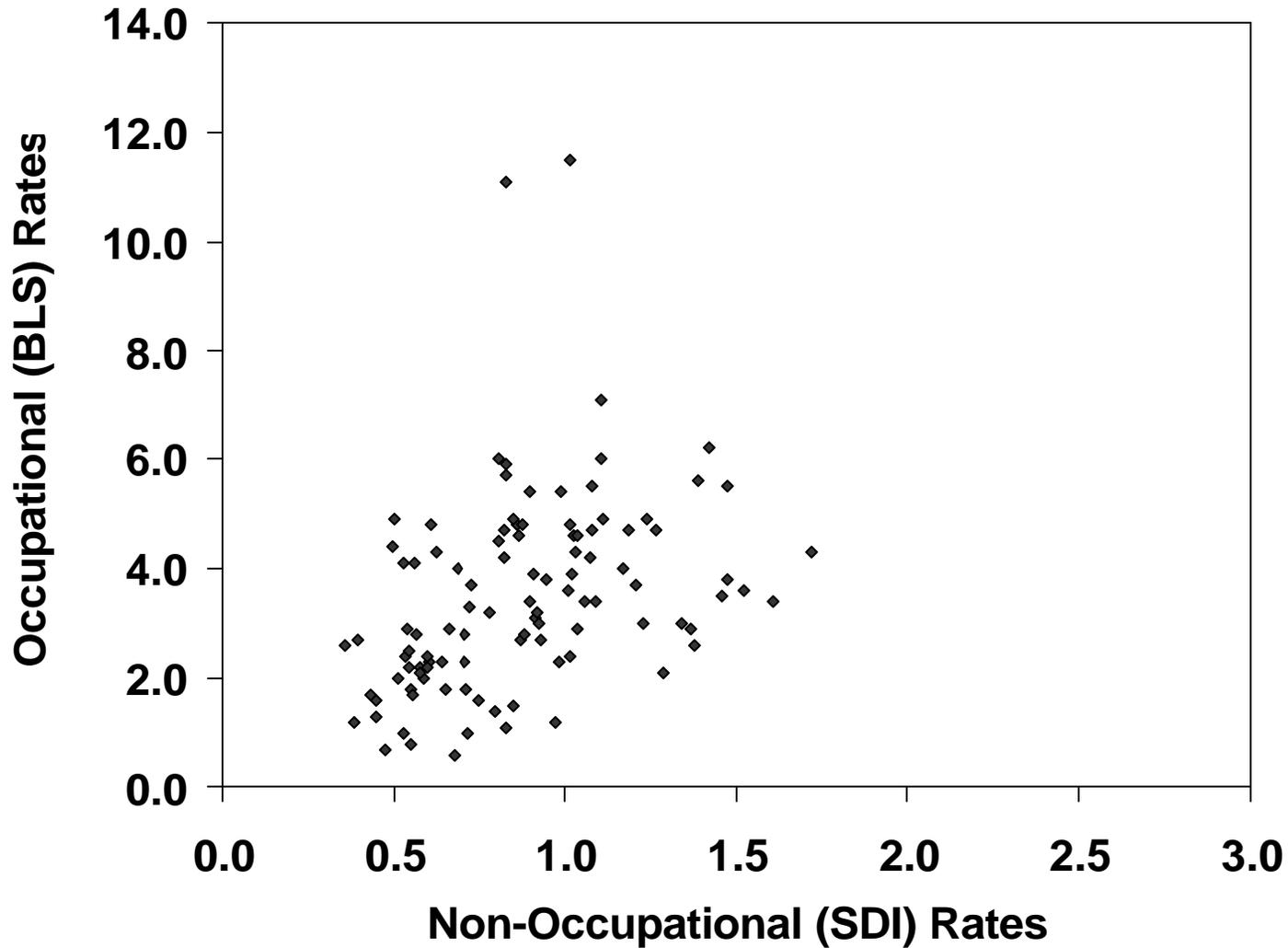
Data—National Health Interview Survey

- **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**

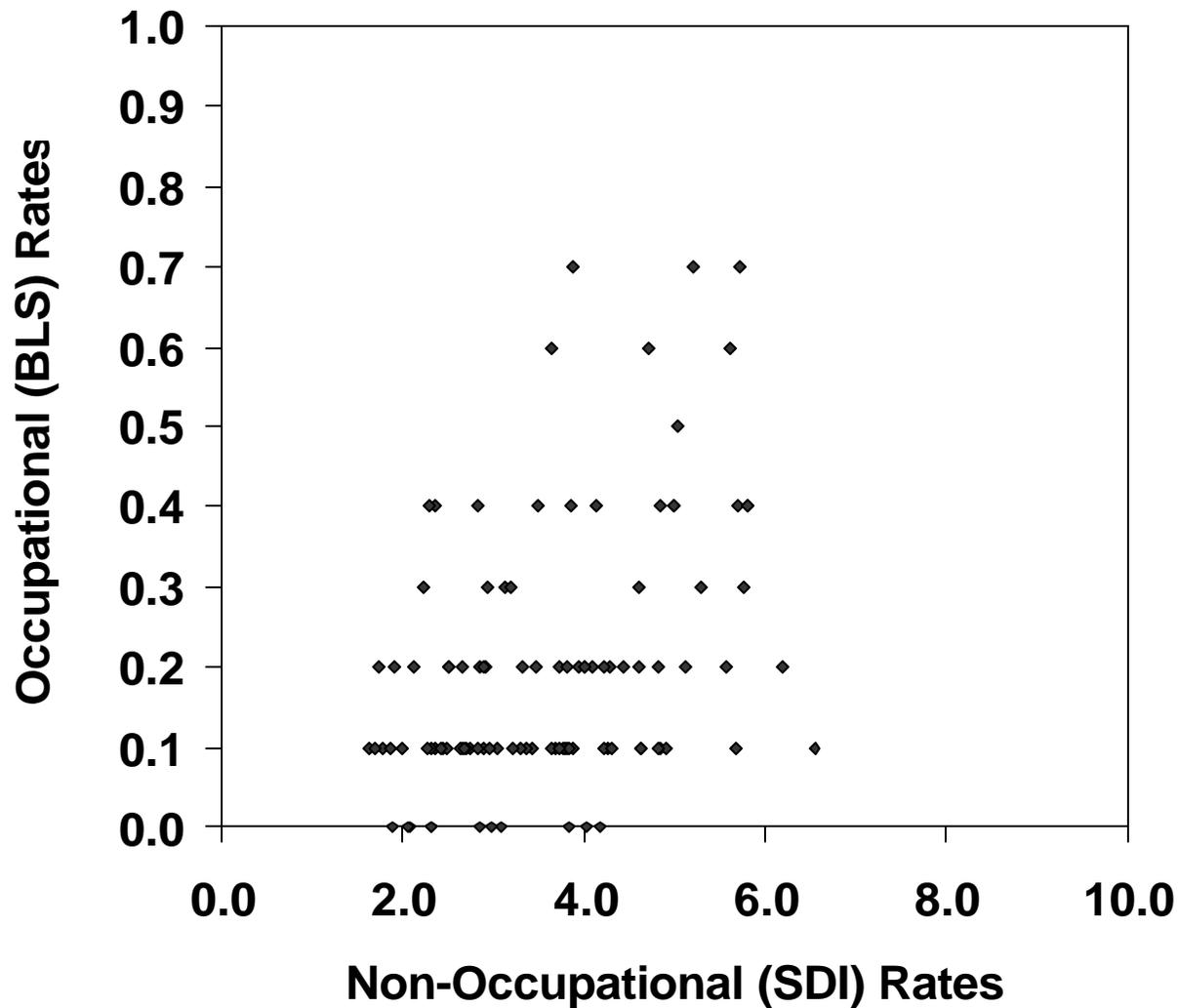
Data—National Health Interview Survey

- **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**

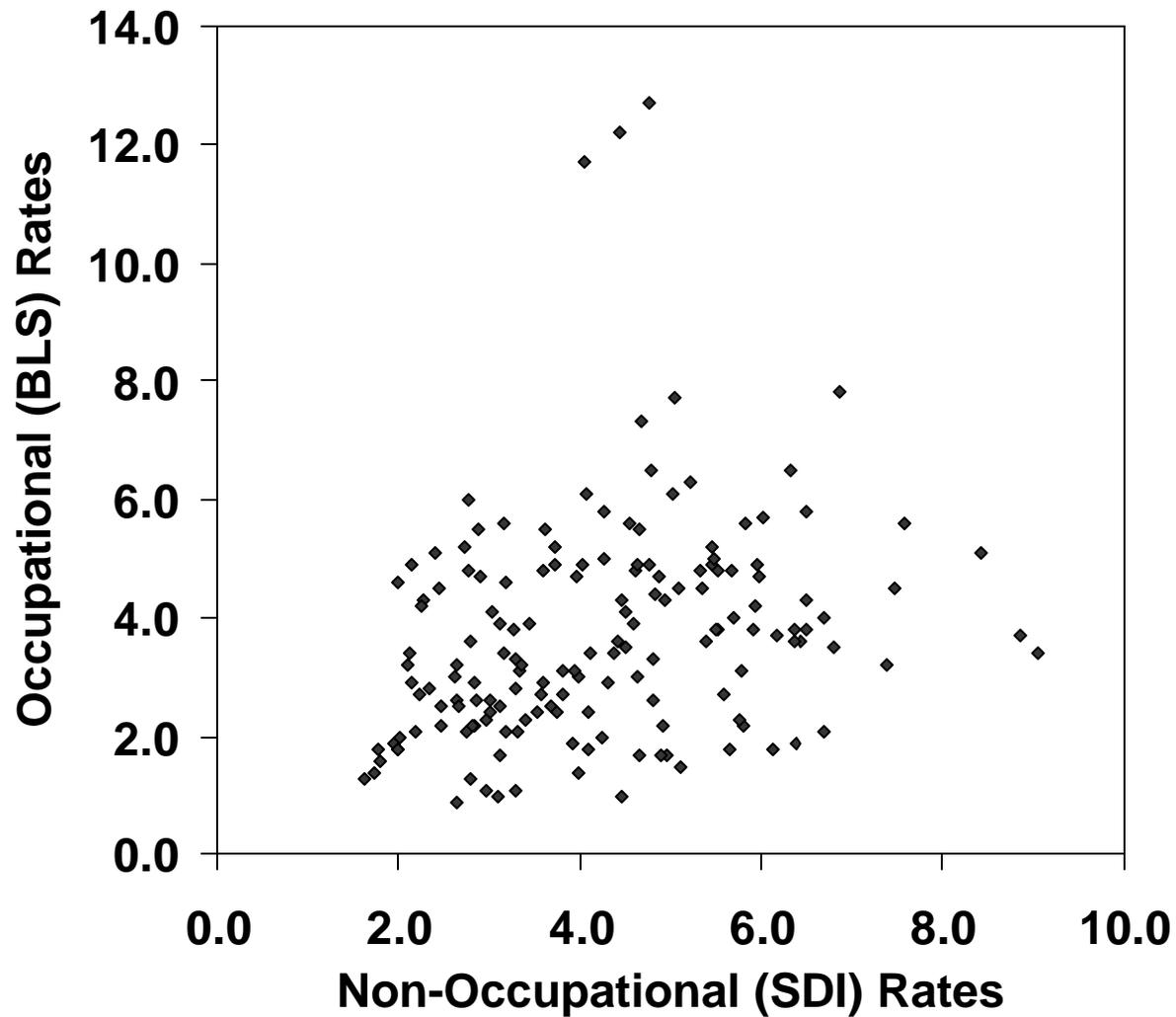
Occupational and Non-Occupational Incidence Rates for Injuries by Industry, 2000-2001



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	.372**	.394**	.265**
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)	0.87	3.66	4.11
Occupational (BLS)	3.51	0.20	3.73

Regressions Predicting Non-Occupational Incidence Rates from Occupational Incidence Rates

	Injury	Illness	Injury or Illness
Year	0.015 (0.056)	0.229 (0.215)	0.261 (0.144)
BLS Rate	0.063** (0.016)	2.941** (0.666)	0.215** (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
22%	16%	20%

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

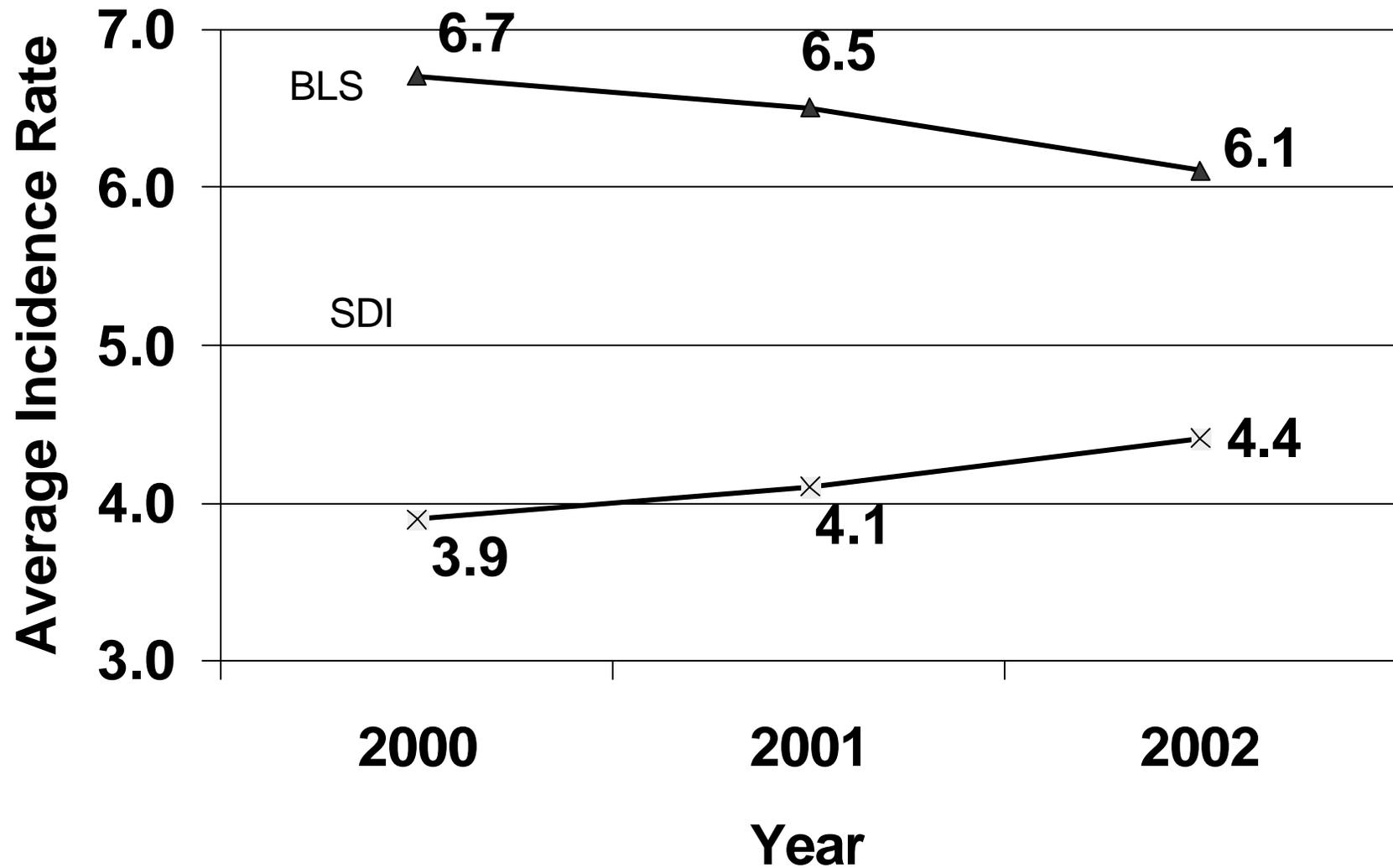
Employers might pick up larger percentage of combined program with costs offset by administrative savings

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.

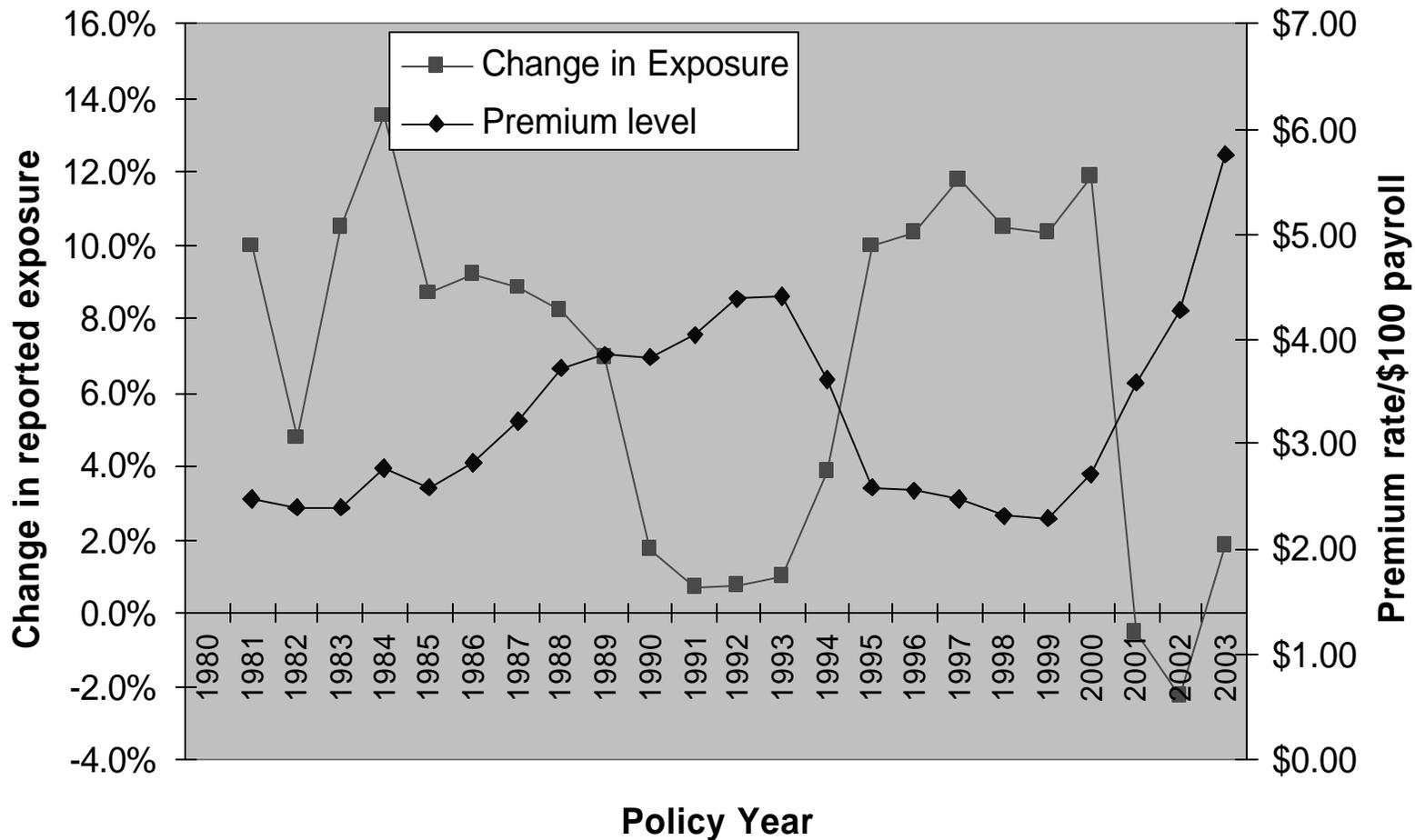
Average BLS and SDI Incidence Rates for Injuries and Illnesses, by year

*BLS rates are for total cases, not for lost workday cases only



Premium Level May Affect Reporting

Change in Reported Exposure vs. Premium Rates



Future Work—Some Questions

- **Have recent changes in WC benefit levels increased the pressure on SDI?**
- **Have very high WC premiums increased pressure on SDI? Will this abate with recent decline?**
- **When benefit levels differ, does reporting shift between two systems?**
- **Can we extend research to a broader range of social insurance (e.g., group health) and social welfare programs (e.g., MediCal, SSI, 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**