

NIOSH CENTER FOR WORKERS' COMPENSATION STUDIES

Board of Scientific Counselors Meeting
September 18, 2013

Steve Wurzelbacher, srw3@cdc.gov

“The findings and conclusions in this report/ presentation have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.”



What is Workers' Compensation?

- Insurance systems to provide medical care and partial income protection to employees with work-related injuries/illnesses
- Provide employers financial incentives to improve safety/health
- Coverage through private insurers, state-agency compensation insurance funds, or self-insurance
- Complex systems governed by laws in each state

Types of Workers' Compensation Data

- **Claims Information**

- Injury/illness narrative
- Nature, event/ exposure, source of injury/ illness
- Costs of medical care and partial wage replacement
- Length and type of disability, medical treatment, hospitalizations
- Injured worker characteristics (occupation, age, gender, time with the employer, etc.)

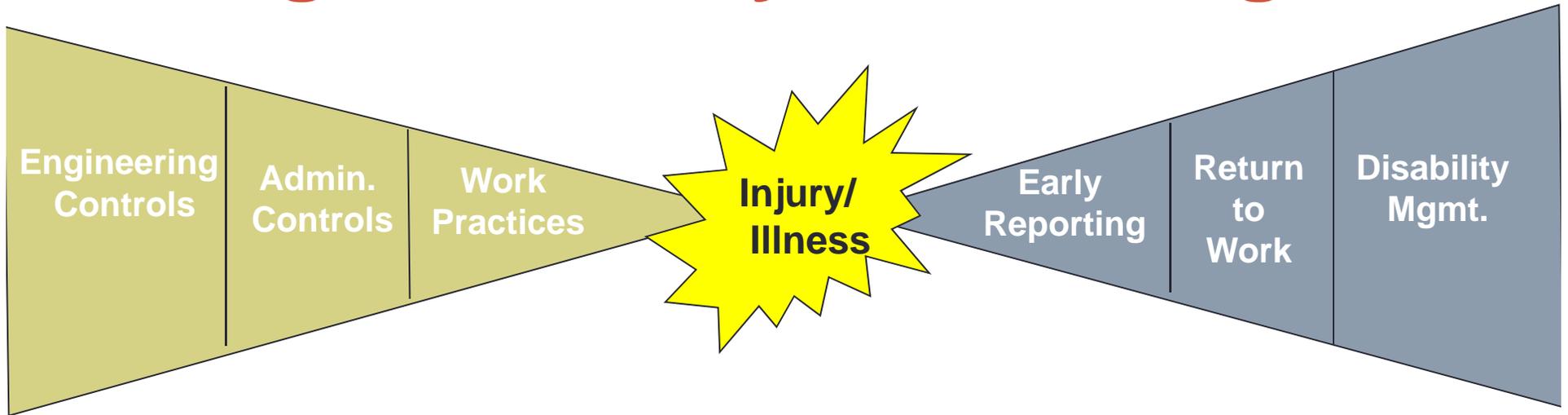
- **Employer Information**

- Workplace hazards
- Safety/ health prevention programs and controls
- Return-to-work programs to reduce injury/ illness severity

CWCS Unique Role

- Established 2013 to:
 - *Integrate* NIOSH's traditional research efforts to prevent worker injury/illness with WC efforts to provide medical care and wage benefits to workers
 - *Coordinate* WC research across NIOSH
 - Prior studies usually driven by individual researchers
- Protect the health and safety of the American worker and the economic vitality of the Nation
 - OSHA Act 1970
 - “Personal injuries and illnesses arising out of work situations impose a substantial burden upon, and are a hindrance to, interstate commerce in terms of lost production, wage loss, medical expenses, and disability compensation payments”

Integrated Safety-Health Program



*Reduce
Injury/illness
frequency*

LOSS PREVENTION

*Reduce
Injury/illness
severity*

LOSS REDUCTION

CWCS Goals

- **Strategic Goal 1:** Use workers' compensation (WC) data to identify and track work-related health conditions
 - Understand the use and limits of WC data for public health
 - Identify trends in work-related injuries-illnesses
 - Focus research and prevention- *injury causation/ nature, industry, occupation*
 - Provide benchmarking data for employers and insurers
- **Strategic Goal 2:** Understand and reduce risk factors for injuries/illnesses through economic and intervention research
 - Identify evidence-based prevention approaches (primary to tertiary)
 - Identify trailing and leading indicators predictive of future injuries-illnesses
 - Starting point to understand the total economic impact of work-related injury-illness

CWCS Activities to Date

- Established virtual center with researchers across NIOSH Divisions
- Web page <http://www.cdc.gov/niosh/topics/workercomp/cwcs>
 - Established goals
 - Shared current activities/ research and published workshop proceedings
- Publishing WC primer for public health professionals
 - Introduction to complex data and systems
- Offered support to NIOSH Programs:
 - All Sectors and Health Cross-Sectors
 - Total Worker Health
 - Center for Motor Vehicle Safety
 - Prevention through Design, Surveillance and Economics

Outreach Opportunities

- CWCS will work with public and private partners to:
 - Maximize the use of WC data
 - Communicate new study findings
 - Develop new research collaborations
 - Share best study practices in WC
- Several opportunities for new partners:
 - Conferences/ Work Shops
 - 2009 <http://www.cdc.gov/niosh/docs/2010-152/>
 - 2012 <http://www.cdc.gov/niosh/docs/2013-147/>
 - Work Groups- based on CWCS goals
 - Webinars- WC Denominators, 8/20/13
 - Peer to peer networking

Current and Potential Collaborators

- State-Fund and Private WC Insurers
- State WC Bureaus
- WC Organizations
- Self-Insured Funds
- Self-Insured Private Employers
- Health Care Providers
- Other Organizations
- Academic Researchers
- Unions

State-Fund WC Insurers

- Twenty-six states have state-fund insurers represented by the American Association of State Compensation Insurance Funds (AASCIF)
 - Four states are exclusive markets for state funds
 - ND, OH, WA, and WY
 - Data on both WC claims and employer safety/ health exposures and control programs
- **Partner Strengths:**
 - Within-State data trending by industry/ occupation, employer benchmarking
 - Willingness to share data
 - Prevention effectiveness studies with long-term insured employers
 - Safety/ health consulting outreach

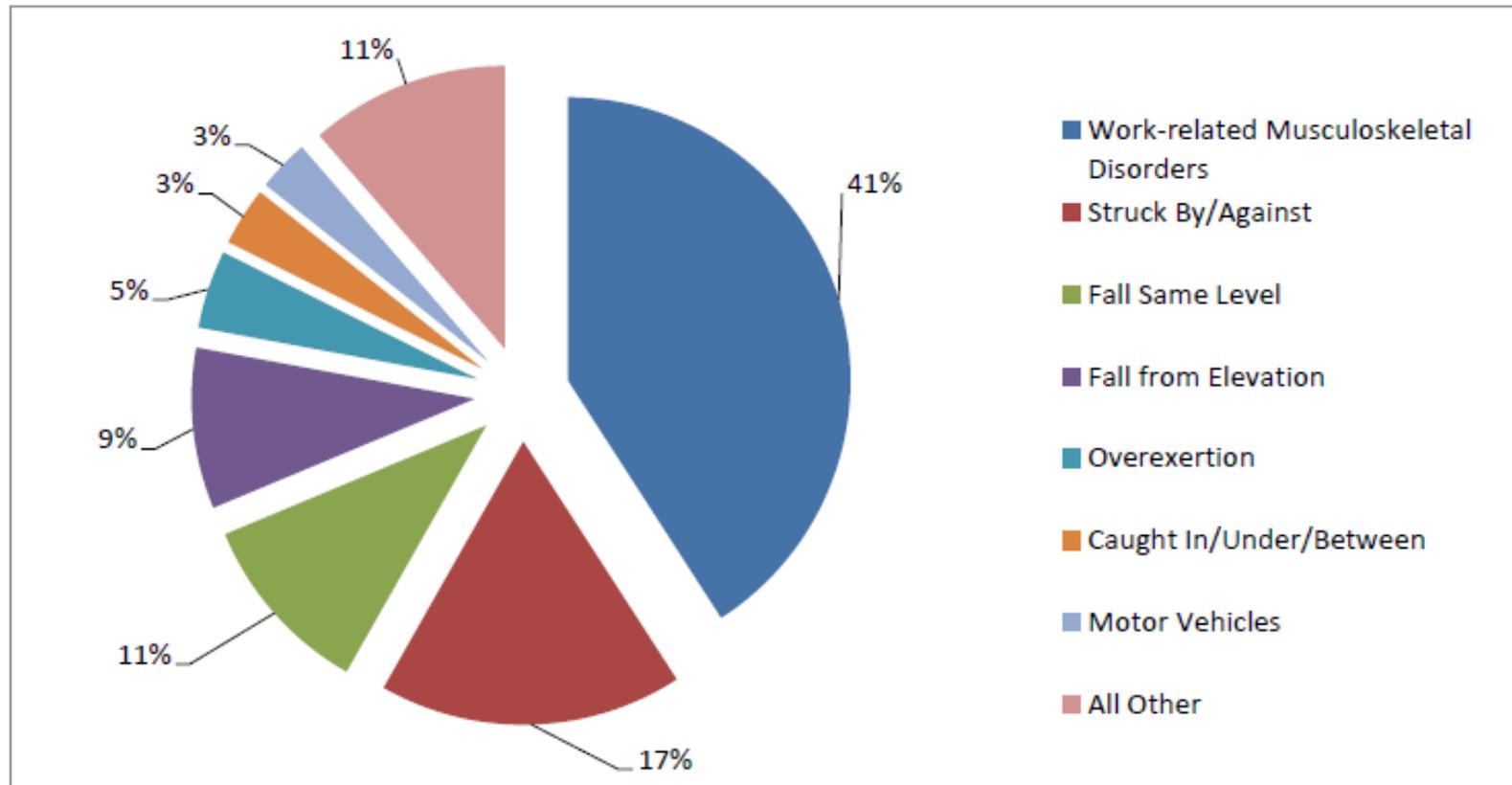
State-Fund WC Insurer Example: Washington State

- **SHARP (Safety and Health Assessment for Research and Prevention)**
 - Since 1990, has advanced workplace health and safety by conducting numerous research, monitoring and demonstration projects
 - <http://www.lni.wa.gov/Safety/Research/About/default.asp>
 - **Key leader in WC prevention research**
 - Trucking Injury Reduction Emphasis (TIRES) Initiative
 - WC trending analyses
 - Prioritizing Industries for Occupational Injury and Illness Prevention and Research, Washington State Workers' Compensation Claims Data, 2002-2010
http://www.lni.wa.gov/Safety/Research/Files/bd_3F.pdf



WA State WC Data by Injury Type

Figure 1. Distribution of claims by Injury Type in the Washington State Fund, 2002-2010.



Prioritizing Industries for Occupational Injury and Illness Prevention and Research,
Washington State Workers' Compensation Claims Data, 2002-2010
http://www.lni.wa.gov/Safety/Research/Files/bd_3F.pdf

WA State WC Data by NIOSH NORA Sector

NORA Sector (# Industry Groups)	FTE	% of SF Workforce	# Claims (COUNT)	Claim Rate / 10,000 FTE (RATE)	Median Cost	Median days TL	Severity: TL
All (262)	13,994,560	-	267,420	191.1	\$9,532	43	37,926
Construction (10)	1,126,376	8.0	53,781	477.5	\$14,828	69	116,759
Transportation, Warehousing & Utilities (23)	529,193	3.8	18,588	351.3	\$9,586	42	65,310
Manufacturing (67)	1,056,569	7.5	25,259	239.1	\$9,786	36	42,640
Wholesale & Retail Trade (46)	2,625,104	18.8	46,045	175.4	\$9,001	39	32,762
Services (84)	6,786,626	48.5	85,985	126.7	\$8,173	38	23,326
Agriculture, Forestry & Fishing (15)	426,917	3.1	12,364	289.6	\$9,785	53	58,932
Healthcare & Social Assistance (17)	1,422,208	10.2	24,762	174.1	\$8,043	39	34,190
<p>State Fund (SF) compensable claims only; FTE = (hours/2000); Severity TL = (TL days/10,000 FTE). Abstracted from Table 17. Prevention Index by NORA Sector for All Injury Types, WA SF, 2002-2010.</p>							



Prioritizing Industries for Occupational Injury and Illness Prevention and Research,
 Washington State Workers' Compensation Claims Data, 2002-2010
http://www.lni.wa.gov/Safety/Research/Files/bd_3F.pdf



State-Fund WC Insurer Example: Ohio Bureau of Workers' Compensation

- **NIOSH-OBWC Partnership**

- All-industry database of WC claims 2001-2009
 - WC trends by industry, employer size, causation, part of body, and injury/illness diagnoses
- Evaluate effectiveness of over 15 OBWC prevention programs
 - Safety Intervention Grant
 - Matching funds to implement engineering controls since 1999
 - Program significantly reduced affected employee claims and costs
 - OBWC expanding annual budget in FY 2014 from \$3M to \$12M; match now 3:1
 - Workplace Wellness Grant
 - \$4 million over four years to implement wellness programs in 200+ employers
- Leading indicators study- injury illness prevention programs (I2P2)



Private WC Insurers

- Several insurers currently partner with NIOSH
 - NORA council members
 - Collaborative research projects
- Liberty Mutual
 - Research Institute for Safety
 - Injury Epidemiology, Physical Ergonomics, Behavioral Sciences, and Disability Research
 - Workplace Safety Index
- CNA
 - Ergonomic Guidelines for Manual Material Handling
 - <http://www.cdc.gov/niosh/docs/2007-131/pdfs/2007-131.pdf>
- **Partner Strengths:**
 - Across-State data trending by industry/ occupation, employer benchmarking
 - Prevention effectiveness studies
 - Safety/ health consulting outreach



State WC Bureaus

- All US states collect WC claims data from employers in their state, typically by industry type
 - Several states couple WC data with industry denominator data:
 - QCEW (Quarterly Census of Employment and Wages)
 - CPS (Current Population Survey)
 - ACS (American Community Survey)
 - Bureau of Labor Statistics CES (Current Employment Survey)
 - Partner with State Departments of Health (DOH)
- **Partner Strengths:**
 - Within-State population data trending by industry/ occupation, employer benchmarking
 - Safety/ health policy effectiveness studies

WC Organizations

- **NCCI** (National Council on Compensation Insurance):
 - Acquires WC data from 36 states for developing experience modification ratings and maintaining risk classes
 - NCCI has shared data with NIOSH and offered to work on future collaborations
- **IAIABC** (International Association of Industrial Accident Boards and Commissions):
 - Coordinates standardized reporting for 40 states
 - IAIABC is currently working with NIOSH to share a sample of mining industry data for analysis
- **Partner Strengths:**
 - Across-State data trending by industry/ occupation, employer benchmarking
 - Communications with WC industry (State regulators, actuarial staff)



Self-Insured Funds

- Groups of employers may choose to self-insure in several states
 - Self-insured fund representing 455 trucking companies recently offered to share 20 years of WC data with CWCS
- **Partner Strengths:**
 - Within-Industry data trending by occupation, employer benchmarking
 - Intervention effectiveness analyses

Self-Insured Private Employers

- Large employers often self-insure
 - NIOSH has partnerships with several large employers already and another approached the CWCS for potential research ideas
- **Partner Strengths:**
 - Within-Employer data trending by occupation/ task
 - Intervention effectiveness analyses

Health Care Providers

- Medical clinics track WC data for employer and employee clients
 - A large CA occupational medicine group treating over 8,000 injuries a year approached CWCS for collaboration
- **Partner Strengths:**
 - Within-Provider data trending by
 - Types of medical treatment
 - Return to work approaches
 - Intervention effectiveness analyses
 - Primary prevention and disability management

Other Organizations

- **CSTE** (Council of State and Territorial Epidemiologists)
 - Open to working with CWCS to:
 - Develop state-specific WC primers and training
 - Create CSTE WC consultancy for state DOHs
 - Develop reference database of prior state-based WC studies
- **ACOEM** (American College of Occupational and Environmental Medicine)
 - Developing additional guidance on number of WC topics
 - Interested in effects of states using treatment guidelines
- **CPWR** (Center for Construction Research and Training)
 - Solutions Database- include study on Ohio Safety Interventions Grant
 - Similar prevention effectiveness studies with other insurers

Academic Researchers

- **Center for Worker Health and Environment (CWHE)**
 - Partnership with largest WC insurer in CO
 - Prevention effectiveness studies and WC trending
 - Offered to host WC related meeting in role as an ERC
- **U. of Illinois**
 - Manage IL WC databases
- **U. of Washington**
 - Prevention of re-injury of disabled workers
- **Oregon State**
 - Prevention effectiveness studies, WC trending with OR WC bureau
- **Vanderbilt U.**
 - WC trending with CA WC bureau data



CWCS Next Steps

- **Encourage internal and external WC research studies**
 - Identify priority areas for proposals
- **External outreach**
 - **Develop work groups aligned with CWCS goals**
 - Surveillance (State outreach)
 - Prevention Effectiveness
 - Total Economic Impact
 - Disability Management
 - **Conduct 1-2 webinars per work group per year**
 - **Plan 2015 3rd NIOSH WC Workshop**

CWCS Next Steps Continued

- **FY14-15 internal funding for fellow position and data management**
- **Continue analyses of Ohio BWC data**
 - Detailed cause/ diagnoses analysis by NORA industry sector, high cost cases
 - Effectiveness of OBWC sponsored programs
 - Develop database of industrial hygiene exposure assessment data
- **Investigate utility of WC data from:**
 - WC Organizations (IAIABC, NCCI)
 - State-Agency WC Insurers (AASCIF members)
 - State WC Bureaus
 - Self-Insured Funds
- **Collaborate on specific projects**
 - Internal – External collaborators
 - External – External collaborators

Seeking Input

- **What should be priority areas for the CWCS?**

- Surveillance (State outreach)
- Prevention Effectiveness
- Total Economic Impact
- Disability Management
- Others?



- **Ideas for increasing impact?**