Occupational Health Indicators for Montana

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This presentation was prepared by the Montana Occupational Health and Safety Surveillance program in the Montana Department of Labor & Industry.

This work was funded by Grant Number 5U60OH010802-03 from the National Institute for Occupational Safety and Health of the Centers for Disease Control and Prevention (CDC/NIOSH).

Its contents are solely the responsibility of the author and do not necessarily represent the official views of CDC/NIOSH.
What is Occupational Health & Safety Surveillance?

• Occupational health & safety surveillance:
  • Uses data to track and study work-related injuries, illnesses, and fatalities, and their causes
  • Purpose: Identify and prevent unsafe workplace activities, hazards, and exposures

• Montana Occupational Health & Safety Surveillance program
  • Purpose:

[Image: MT Worker Health logo with text: Montana Occupational Health & Safety Surveillance]

[Diagram: MT Worker Health logo connected to text: inform Prevention and Safety Activities in Montana]
What data sources do we use?

Montana Workers’ Compensation Claims Data
• housed at Department of Labor & Industry

U.S. Bureau of Labor Statistics:
• Survey of Occupational Injuries and Illnesses (SOII)
• Census of Fatal Occupational Injuries (CFOI)
• Geographic Profiles of Employment and Unemployment
• Current Population Survey
• Quarterly Census of Employment and Wages (QCEW)

MT Department of Public Health and Human Services:
• Behavioral Risk Factor Surveillance System (BRFSS)
• Hospital Discharge Data System
• Office of Vital Records
• Central Tumor Registry
• Trauma Registry
• Blood lead levels – electronic lab data

Montana Department of Transportation
Montana Highway Patrol

OHSA Logs from Employers
Occupational Health Indicators, 2004-2014

Full Report Online @ www.mtworkerhealth.com
Occupational Health Indicators

Indicator 1: Non-Fatal Work-Related Injuries and Illnesses

Indicator 2: Work-Related Hospitalizations

Indicator 3: Fatal Work-Related Injuries

Indicator 4: Work-Related Amputations with Days Away From Work

Indicator 5: Workers’ Compensation Claims for Amputations with Lost Work-Time

Indicator 6: Hospitalizations for Work-Related Burns

Indicator 7: Work-Related Musculoskeletal Disorders with Days Away From Work

Indicator 8: Workers’ Compensation Claims for Carpal Tunnel Syndrome with Lost Work-Time

Indicator 9: Hospitalizations from or with Pneumoconiosis

Indicator 10: Mortality from or with Pneumoconiosis

Indicator 11: Acute Work-Related Pesticide-Associated Illness and Injury Reported to Poison Control Center

Indicator 12: Incidence of Malignant Mesothelioma, ages 15 and older

Indicator 13: Elevated Blood Lead Levels (BLL) Among Adults

Indicator 14: Percentage of Workers Employed in Industries at High Risk for Occupational Morbidity

Indicator 15: Percentage of Workers Employed in Occupations at High Risk for Occupational Mortality

Indicator 16: Percentage of Workers Employed in Industries and Occupations at High Risk for Occupational Mortality

Indicator 17: Occupational Safety and Health Professionals

Indicator 18: OSHA Enforcement Activities

Indicator 19: Workers’ Compensation Awards

Indicator 20: Work-Related Low Back Disorder Hospitalizations

Indicator 21: Asthma Among Adults Caused or Made Worse by Work

Indicator 22: Work-Related Severe Traumatic Injury Hospitalizations

Indicator 23: Influenza Vaccination Coverage Among Healthcare Personnel

Indicator 24: Occupational Heat-Related Emergency Department Visits
Risky Business – Risk of Injury

5.7% of MT workforce in **industries** with high risk for work-related injury.

- Nursing care facilities
- Retirement communities/assisted living facilities
- Couriers and express delivery services
- Veterinary services
- Skiing facilities

18.1% of MT workforce in **occupations** with high risk for work-related injury.

- Driver/sales workers and truck drivers
- Freight, stock, and material movers
- Construction laborers
- Nursing, psychiatric, and home health aides
- Janitors or building cleaners

**High risk industries and occupations determined by national list (BLS data)**
Risky Business – Risk of Fatality

High Risk for Work-Related Fatalities

**High risk industries and occupations determined by national list (BLS data)**

(Comparable data is within grey vertical lines)

**Large job losses in Construction during recession**
Non-Fatal Work-Related Injuries & Illnesses

Rates of non-fatal injuries for both the U.S. and Montana declined from 2004 to 2014.

- Montana: 4th highest rate of injuries in 2014

Rate of non-fatal work-related injuries, 2004-2014

Source: Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses (SOII) (private industry)
Non-Fatal Injuries by Occupation, Montana 2014

Number of injuries with days away from work, Montana 2014

- Nursing assistants: 240
- Heavy & tractor trailer truck drivers: 210
- Retail salespersons: 210
- Building cleaning workers: 200
- Construction laborers: 160
- Cooks and food preparation workers: 150
- Laborers and freight, stock, and material movers, hand: 150
- Cashiers: 120
- Light truck or delivery services drivers: 110
- Personal care aides: 110

Total Number of Injuries Involving Days Away From Work in 2014 = 4,540

Source: BLS Survey of Occupational Injuries and Illnesses (SOII) (private industry)
Days Away From Work, Montana

Median # Days Away From Work in Montana, 2014 = 6 days

Source: BLS Survey of Occupational Injuries and Illnesses (SOII)
Work-Related Fatalities, Montana and U.S.

Number and rate of fatal work-related injuries, 2004-2014

- Number of deaths
- Rate - MT
- Rate - U.S.

Source: BLS Census of Fatal Occupational Injuries (CFOI)
Work-Related Fatalities by Event - Montana

Fatalities by Event/Exposure for Montana, 2004-2014

- Transportation incidents: 51.4%
- Contact with objects and equipment: 14.5%
- Violence and other injuries by persons or animals: 12.7%
- Falls, slips, trips: 11.9%
- Exposure to harmful substances or environments: 5.5%
- Fires and explosions: 0.2%

Source: BLS Census of Fatal Occupational Injuries (CFOI)
Work-Related Fatalities by Industry - Montana

Fatalities by Industry in Montana, 2004-2014

- Agriculture, Forestry, Fishing and Hunting: 33.6%
- Trade, Transportation, and Utilities: 20.2%
- Construction: 12.3%
- Government: 8.4%
- Leisure and Hospitality: 2.9%
- Mining, quarrying, and oil and gas extraction: 2.4%
- Professional and Business services: 2%
- Manufacturing: 2%
- Other Services, except public administration: 1.1%
- Information: 0.9%
- Educational Services: 0.2%
- Financial Activities: 0.2%

Source: BLS Census of Fatal Occupational Injuries (CFOI)
**Indicator: Work-Related Hospitalizations**

**Work-Related Hospitalizations in Montana**

- **Number**: The number of inpatient hospitalizations from 2004 to 2014.
- **Rate**: The rate of hospitalizations per 100,000 covered workers.

Source: Montana Hospital Discharge Data *(Comparable data is within grey vertical lines)*

**Montana Department of LABOR & INDUSTRY**
Indicator: Amputations Identified in Workers’ Comp

Data: Amputation Claims with “Lost Work Time”

- at least 4 days or 32 hours missed from work

Amputation Claims with Lost Work Time, Montana

Source: Montana Workers’ Compensation Database (DLI WCAN)
Indicator: Musculoskeletal Disorders with Days Away From Work

- Muscles, joints, tendons, nerves, ligaments
- Repetitive motion, awkward body movements, bending and twisting, lifting heavy objects → develop over time

Work-Related Musculoskeletal Disorders, Montana

Source: BLS Survey of Occupational Injuries and Illnesses (SOII) (private industry)
Musculoskeletal Disorder Types

Musculoskeletal Disorders by Type, Montana

- Neck, shoulder & upper extremities
- Back
- Other MSDs

Source: BLS Survey of Occupational Injuries and Illnesses (SOII) (private industry)
Indicator: Work-Related Pesticide Poisonings

Source: Poison Control Center data
Our Aging Workforce in Montana

2004:
• Almost 50% of employed Montanans were between 35-54 years of age,
  • < 20% of employed Montanans worked beyond 55 years of age.

2014:
• More employed Montanans worked beyond age 55
  • About 20% of the workforce falling between 55-64 years of age.

Employed Workers by Age Group, Montana

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2004</th>
<th>2014</th>
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<tbody>
<tr>
<td>16-24</td>
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<td>25-34</td>
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<td>35-44</td>
<td>18.7</td>
<td>23.6</td>
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<tr>
<td>45-54</td>
<td>19.4</td>
<td>24.9</td>
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<td>55-64</td>
<td>14.0</td>
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<tr>
<td>65-74</td>
<td>6.0</td>
<td>3.1</td>
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<td>75+</td>
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Industry Spotlights

Fact Sheets Online @ www.mtworkerhealth.com
Health Care & Social Assistance

Of **700** total injuries involving days away from work in 2015:

- **76%** - women
- **51%** - nursing aides, psychiatric aides, and home health aides
- **36%** - patients
- **24%** - back injuries, including spine
- **9%** - intentional hitting, kicking, beating, or shoving by other person

Source: Bureau of Labor Statistics data
Of 630 total injuries involving days away from work in 2015:

- **97%** - men
- **41%** - workers aged 20-34
- **33%** - sprains, strains, or tears
- **30%** - falls to same or lower level
- **22%** - back injuries, including spine
- **14%** - head injuries
Transportation and Warehousing

Of 300 total injuries involving days away from work in 2015:

80% - men
50% - heavy/tractor-trailer truck drivers
40% - workers aged 55-64
40% - sprains, strains, or tears
23% - cranial region of head
20% - jack-knifed or overturned vehicle events on roadways

23 – median days away from work

Source: Bureau of Labor Statistics data
Agriculture, Forestry, Fishing, and Hunting

Of 70 total injuries involving days away from work in 2015:

86% - men
57% - workers over age 45
43% - farmworkers, farm, ranch, and aquaculture occupations
43% - sprains, strains, or tears
29% - falls, slips, or trips
29% - overexertion

Source: Bureau of Labor Statistics data
Recommendations
“Big Four” Industries

- Every year for the last 10 years, these industries had injury rates above the overall private industry rate in Montana:
  - Agriculture, Forestry, Fishing, & Hunting
  - Health Care & Social Assistance
  - Manufacturing
  - Construction
Emphasize Young Worker Safety

- The Montana workforce is aging.
- Younger workers will fill the employment gaps created as older workers retire or leave work
  - Apprenticeships, training programs
- Young workers are faced with **different workplace challenges** compared to more experienced coworkers.
  - How do these challenges can affect worker health?
- Comprehensive **safety training** should be **tailored** to Montana’s young worker population.
Transportation Safety in All Jobs

- Over 50% of all work-related fatalities in Montana involved transportation incidents in the last decade.
  - Not limited to the transportation industry:
  - Agriculture and construction industries involved most frequently.

- Safety issues in daily life extend into the workplace.
  - Workers and employers need to adopted practices that emphasize transportation safety, such as encouraging seatbelt use and driving at safe speeds.
Safety Resources - DLI

Safety & Health Bureau at Department of Labor & Industry:

• Consultation Program
  • Confidential, no fines, no cost, on-site consultations
• Outreach Program
  • SafetyFestMT trainings
  • Free on-site workplace safety trainings
  • OSHA 10-Hour: colleges and high schools

Request a Free On-Site Consultation:
  ➢ (406) 494–0324
  ➢ Online: Montana DLI Safety and Health website
So, what’s next?
Upcoming Research

- “The Big Four” Industry Reports:
  - Construction
  - Manufacturing
  - Healthcare and social assistance
  - Agriculture, forestry, fishing & hunting

- Transportation Report

- Firefighter Exposures and Health Outcomes Report

- Any requests?
Additional Resources
New Website!

www.mtworkerhealth.com
New Occupational Health Newsletter!

- Quarterly newsletter on occupational health topics in Montana, starting with industry-specific information

March - Overview

June - Construction

September’s Newsletter: Health Care Industry
Questions?

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Visit our program @
www.mtworkerhealth.com!