NEW MEXICO OCCUPATIONAL HEALTH SURVEILLANCE PROGRAM UPDATE

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New Mexico Chapter
American Society of Safety Engineers
November 8, 2012
The overall goal is to conduct occupational illness and injury surveillance and data analysis in order to identify opportunities for intervention and to communicate surveillance findings to those that can affect positive change for workers.
WHAT IS OCCUPATIONAL HEALTH SURVEILLANCE?

...the ongoing, systematic collection, analysis, interpretation, and dissemination of data regarding a health-related event for use in public health action to reduce morbidity and mortality and to improve health.

- Population-based surveillance
- Case-based surveillance
NEW MEXICO OCCUPATIONAL HEALTH REGISTRY

REPORTABLE OCCUPATIONAL CONDITIONS* INCLUDE:

(a) asbestosis;
(b) coal worker’s pneumoconiosis;
(c) hypersensitivity pneumonitis;
(d) mesothelioma;
(g) noise induced hearing loss;
(h) occupational asthma;
(g) occupational pesticide poisoning;
(h) burn hospitalization;
(i) injury death;
(j) traumatic amputation;
(k) silicosis;
(l) other illnesses or injuries related to occupational exposure

*7.4.13 New Mexico Administrative Code revised Feb. 29, 2012
Profile of Employment and Demographics
1. Non-fatal work related injuries and illness reported by employers
2. Work-related hospitalization
3. Fatal work-related injuries
4. Amputations with days away from work reported by employers
5. State Workers’ Compensation claims for amputations with lost work-time
6. Hospitalization for work-related burns
7. Work-related musculoskeletal disorders with days away from work reported by employers
8. Carpal tunnel syndrome cases filed with the state workers’ compensation system
9. Hospitalization from or with pneumoconiosis
STATE-BASED OCCUPATIONAL HEALTH INDICATORS*, CONTD.

11. Mortality from or with pneumoconiosis
12. Acute work-related pesticide-associated illness and injury reported to poison control centers
13. Incidence of malignant mesothelioma
14. Elevated blood-lead levels among adults
15. Percentage of workers in industries at high risk for occupational morbidity
16. Percentage of workers in occupations at high risk for occupational morbidity
17. Percentage of workers employed in industries and occupations at high risk for occupational mortality
18. Occupational safety and health professionals
19. OSHA enforcement activities
20. Workers’ compensation awards
21. Hospitalizations for low back disorders - New

*Council of State and Territorial Epidemiologists http://www.cste.org/dnn/
### Employment Demographics

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th></th>
<th>2010</th>
<th></th>
<th>2011</th>
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<td></td>
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<td>US</td>
<td>NM</td>
<td>US</td>
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<td>US</td>
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<tr>
<td>% Unemployed</td>
<td>7.6</td>
<td>9.3</td>
<td>8.5</td>
<td>9.6</td>
<td>7.4</td>
<td>8.9</td>
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<tr>
<td>Self Employed</td>
<td>8.4</td>
<td>7.0</td>
<td>7.2</td>
<td>7.0</td>
<td>8.3</td>
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<tr>
<td>Part-Time</td>
<td>19.4</td>
<td>19.5</td>
<td>19.7</td>
<td>19.7</td>
<td>21.3</td>
<td>19.5</td>
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<tr>
<td>Men</td>
<td>52.4</td>
<td>52.7</td>
<td>52.6</td>
<td>52.8</td>
<td>53.8</td>
<td>53.1</td>
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<tr>
<td>Women</td>
<td>47.6</td>
<td>47.3</td>
<td>47.4</td>
<td>47.2</td>
<td>46.2</td>
<td>46.9</td>
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<tr>
<td>Age 16-17</td>
<td>0.9</td>
<td>1.2</td>
<td>0.9</td>
<td>1.0</td>
<td>0.7</td>
<td>1.0</td>
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<tr>
<td>Age 65+</td>
<td>4.9</td>
<td>4.5</td>
<td>5.6</td>
<td>4.5</td>
<td>6.2</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Data source: Geographic Profiles, U.S. Bureau of Labor Statistics
Employment in High-morbidity Risk Occupations by Race and Ethnicity New Mexico, 2008-2010

*Percent of New Mexicans employed for wages in private industry, excludes those reporting more than one race. Excludes self-employed

OCCUPATIONAL INJURY DEATH RATES NEW MEXICO AND UNITED STATES, 2000-2011

Per 100,000 FTEs aged 16 and older


4.5 7.7 8.2 5.8 7.0 6.8 4.2 4.0 3.5 3.8 3.5 3.6 6.5

AMPUTATIONS IDENTIFIED IN STATE WORKERS’ COMPENSATION SYSTEMS

Annual Rate of Lost Work Time Claims for Amputation Identified in New Mexico Workers’ Compensation

Data sources: NM Workers Compensation Administration, National Academy of Social Insurance
Carpal Tunnel Syndrome Cases Identified in Workers’ Compensation Systems

Annual Rate of Lost Work Time Claims for CTS Cases Identified in New Mexico Workers’ Compensation

Data sources: NM Workers Compensation Administration, National Academy of Social Insurance
Age-standardized Rate of Hospital Discharges from or with Total Pneumoconiosis NM and US, 2000-2011

Data source: New Mexico Hospital Inpatient Discharge Data, NM Health Policy Commission
Hospitalizations from or with coal workers’ pneumoconiosis

Age-standardized Rate of Hospital Discharges from or with Coal Workers’ Pneumoconiosis NM and US, 2000-2011

Per million residents age 15 years and older

Data source: New Mexico Hospital Inpatient Discharge Data, NM Health Policy Commission
HOSPITALIZATIONS FROM OR WITH ASBESTOSIS

Age-standardized Rate of Hospital Discharges from or with Asbestosis NM and US, 2000-2011

Per million residents age 15 years and older

Data source: New Mexico Hospital Inpatient Discharge Data, NM Health Policy Commission
HOSPITALIZATIONS FROM OR WITH SILICOSIS

Age-standardized Rate of Hospital Discharges from or with Silicosis NM and US, 2000-2011

Per million residents age 15 years and older

New Mexico Hospital Inpatient Discharge Data, NM Health Policy Commission
HOSPITALIZATIONS FROM OR WITH OTHER OR UNSPECIFIED PNEUMOCONIOSIS

Age-standardized Rate of Hospital Discharges from or with Other or Unspecified Pneumoconiosis NM and US, 2000-2011

Data source: New Mexico Hospital Inpatient Discharge Data, NM Health Policy Commission
ACUTE WORK-RELATED PESTICIDE-ASSOCIATED ILLNESS AND INJURY REPORTED TO POISON CONTROL CENTERS*

Calls per 100,000 workers aged 16 years and older

*Data source: American Association of Poison Control Centers
OCCUPATIONAL SAFETY AND HEALTH PROFESSIONALS, 2009

- Board-certified occupational physicians
- ACOEM members
- Board-certified occupational health registered nurses
- AAOHN members
- Board-certified industrial hygienists
- AIHA members
- Board certified safety health professionals
- ASSE members

Per 100,000 employees:

NM

- Board-certified occupational physicians: 3.3
- ACOEM members: 3.8
- Board-certified occupational health registered nurses: 4.2
- AAOHN members: 4.5
- Board-certified industrial hygienists: 13.7
- AIHA members: 11.4
- Board certified safety health professionals: 15.7

US

- Board-certified occupational physicians: 2.2
- ACOEM members: 3.0
- Board-certified occupational health registered nurses: 4.1
- AAOHN members: 4.6
- Board-certified industrial hygienists: 5.1
- AIHA members: 5.9
- Board certified safety health professionals: 8.6
- ASSE members: 21.5

NM: New Mexico
US: United States
WORKERS’ COMPENSATION COSTS

Average cost per claim

Data source: National Academy of Social Insurance
Hospitalizations for Work-Related Low Back Disorders

Work-Related Hospitalization Rates for Low-Back Surgeries and Non-Surgical Disorders* by Gender, New Mexico

*Data Sources: NM Hospital Inpatient Discharge Data where workers’ compensation is primary payer; Geographic Profiles, U.S. Bureau of Labor Statistics.
Collection of Industry and Occupation data
- Global measure of health by I/O groups to set priorities for surveillance
- Better address worker groups where data are lacking
- Behavioral health for targeting interventions to worksites
- Share data findings with NM-OSHA, others in OH illness/injury prevention
## Work-Related Asthma (BRFSS Asthma Call-Back Survey)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tbody>
<tr>
<td>Sample size</td>
<td>379</td>
<td>392</td>
<td>284</td>
<td>447</td>
</tr>
<tr>
<td>Number with current asthma</td>
<td>248</td>
<td>277</td>
<td>192</td>
<td>332</td>
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<tr>
<td>Asthma caused by chemicals, smoke, dust, or fumes in CURRENT job</td>
<td>9.7%</td>
<td>25.2%</td>
<td>13.3%</td>
<td>12.9%</td>
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<tr>
<td>Asthma made worse by conditions in CURRENT job</td>
<td>32.8%</td>
<td>39.5%</td>
<td>32.5%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Asthma caused by chemicals, smoke, dust, or fumes in PREVIOUS job</td>
<td>22.8%</td>
<td>26.2%</td>
<td>30.8%</td>
<td>21.6%</td>
</tr>
<tr>
<td>Asthma made worse by conditions in PREVIOUS job</td>
<td>41.4%</td>
<td>39.8%</td>
<td>41.3%</td>
<td>33.8%</td>
</tr>
</tbody>
</table>

2009-2010 Asthma Surveillance Data Summary, NM Asthma Program, NMDOH
Blood Lead Levels and Health Effects

**Danger!**
80 µg/dL* or higher
Severe health effects are likely. The damage may be permanent and may occur quickly.

**Alert**
20 to 79 µg/dL
Serious health problems may occur.

**Caution**
10 to 19 µg/dL
- Health effects may be occurring even if you have no symptoms.
- Adult blood lead levels should be kept below 10 ug/dL. However, no amount of lead is safe.
- Levels below 10 ug/dL can be harmful to children and developing fetuses.

* micrograms lead per deciliter blood
What is being done?

- Guidelines for health care providers
- Surveillance is focused on high-hazard industries
- Collection of occupation and industry in surveys
- Partnering with employers and regulators to disseminate worker exposure prevention messages

What needs to be done?

- Improve dissemination of worker health and safety information
- Continue cooperative efforts with other state agencies
- Evaluate program goals and focus areas to determine effectiveness.
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Grant funded by National Institute for Occupational Safety and Health (NIOSH) #U600H008486

THANK YOU