



Executive Summary

In recognition of the need for state-based occupational health surveillance programs, the Council of State and Territorial Epidemiologists (CSTE) and the National Institute for Occupational Safety and Health (NIOSH) developed a set of “*Occupational Health Indicators*” that could be used to measure the baseline health of working populations, track occupational health trends over time and compare state data to national data. The Occupational Health Indicators (OHIs) are 19 specific measures of work-related illnesses, injuries and other factors associated with occupational health that can be generated using state-specific data. This report contains data and information on occupational injuries and illnesses in Colorado, which marks a vital first step on the path to a safer and healthier work environment for Coloradans. The report format is based on the CSTE/NIOSH document, “*Occupational Health Indicators: A Guide for Tracking Occupational Health Conditions and Their Determinants.*”

Council of State and Territorial Epidemiologists and the National Institute for Occupational Safety and Health Occupational Health Indicators

1. Non-fatal injuries reported by employees
2. Work-related hospitalizations
3. Fatal work-related injuries
4. Amputations reported by employers
5. Amputations identified in state workers’ compensation systems
6. Hospitalizations for work-related burns
7. Musculoskeletal disorders reported by employers
8. Carpal tunnel syndrome cases identified in state workers’ compensation systems
9. Pneumoconiosis hospitalizations
10. Pneumoconiosis mortality
11. Acute work-related pesticide poisonings reported to poison control centers
12. Incidence of malignant mesothelioma
13. Elevated blood lead levels among adults
14. Workers employed in industries with high risk for occupational morbidity
15. Workers employed in occupations with high risk for occupational morbidity
16. Workers in occupations with high risk of occupational mortality
17. Occupational health and safety professionals
18. OSHA enforcement activities
19. Workers’ compensation awards

In Colorado, priorities and future directions for prevention and intervention should focus on industries and occupations experiencing a disproportionately high rate of fatal work-related injuries and illnesses. Between 2001 and 2008, approximately 2.4 million individuals were employed in the Colorado workforce. For the years 2001 to 2008, rates of work-related fatalities in Colorado were higher than overall US rates. The average fatality rate for the eight years for Colorado was 5.0 per 100,000 workers, whereas the US rate was 3.9 per 100,000 workers. The percent of workers employed in industries at high risk for occupational mortality was higher than the US rate (15% in Colorado and 14% in the US from 2003-2007). Colorado's ability to accurately characterize the types of risks that are associated with these industries will be a first step in planning interventions for prevention.

The rates of acute pesticide poisonings reported to poison control centers are higher in Colorado compared to the overall US rates. Although these data have not been analyzed by demographic variables, such as industry and occupation, it is anticipated that many of the poisonings may be occurring in high-risk industries, such as agriculture, where workers can be exposed to fungicides, herbicides and insecticides used on farms in Colorado. Additional data are needed to better characterize work-related pesticide poisonings in Colorado, including demographic and occupational characteristics and chronic exposure data from workers' compensation and hospital discharge datasets.

Four of the OHIs for Colorado could not be collected using the CSTE and NIOSH framework because they are based on data collected in the Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses (SOII) or the NIOSH supported Adult Blood Epidemiology and Surveillance (ABLES) program.

Colorado is one of eight states that do not participate in the SOII. This survey collects data on non-fatal work-related injuries and illnesses reported by employers. Although Colorado does not participate in this survey, Colorado Department of Public Health and Environment (CDPHE) has partnered with the Colorado Department of Labor and Employment, Division of Workers' Compensation, to gather occupational injury and illness data based on reported workers' compensation claims. This has enabled the measurement of Occupational Health Indicator #1: *Number of nonfatal work-related injuries and illnesses*. Colorado is also researching possible funding sources, in conjunction with the Colorado Department of Labor and Employment, which would allow for Colorado's participation in the SOII in future years.

Colorado is also one of 10 states that does not participate in the ABLES program. The ABLES program is a state-based surveillance program of laboratory-reported adult blood lead levels aimed to build state capacity to initiate, expand or improve adult blood lead surveillance programs. Although Colorado isn't an ABLES state, CDPHE is collecting and analyzing data on laboratory reported adult elevated blood levels in Colorado and is currently seeking funding from NIOSH to become an ABLES state in fiscal year 2010.

Using the CSTE and NIOSH framework, this report includes available Colorado data on 17 of the established OHIs (15 following the OHI guidance, one using Colorado workers' compensation data rather than data from the SOII, and one using the Colorado Blood Lead Database (PBDB) rather than ABLES data). These indicators provide a baseline characterization of occupational health in Colorado and will be used to determine future surveillance and prevention efforts aimed at eliminating or reducing these work-related events and exposures. Updated supplemental reports will be forthcoming annually as data become available. Copies of the current report can be obtained from the CDPHE Occupational Health Surveillance Program website at: (<http://www.cdphe.state.co.us/dc/OH/reports.html>).