

Indicator 5: Amputations with Lost Work-Time Identified in Workers' Compensation System

Significanceⁱ

It is estimated that, each year, between 16,000 and 21,000 workers in the United States experience a work-related amputation. Most work-related amputations involve full or partial loss of fingers. Less common amputations involve the arm, leg, foot, toe, nose or ear. Work-related amputations can be prevented through the identification and control of occupational hazards and the implementation of safety procedures and regulations.

Methods

The Colorado Department of Labor and Employment, Division of Workers' Compensation, reports the number of compensation claims admitted for amputations that resulted in lost work time. Amputation counts are coded as "02" as per the Workers' Compensation Insurance Organization (WCIO) coding scheme on the First Report of Injury (FRI).

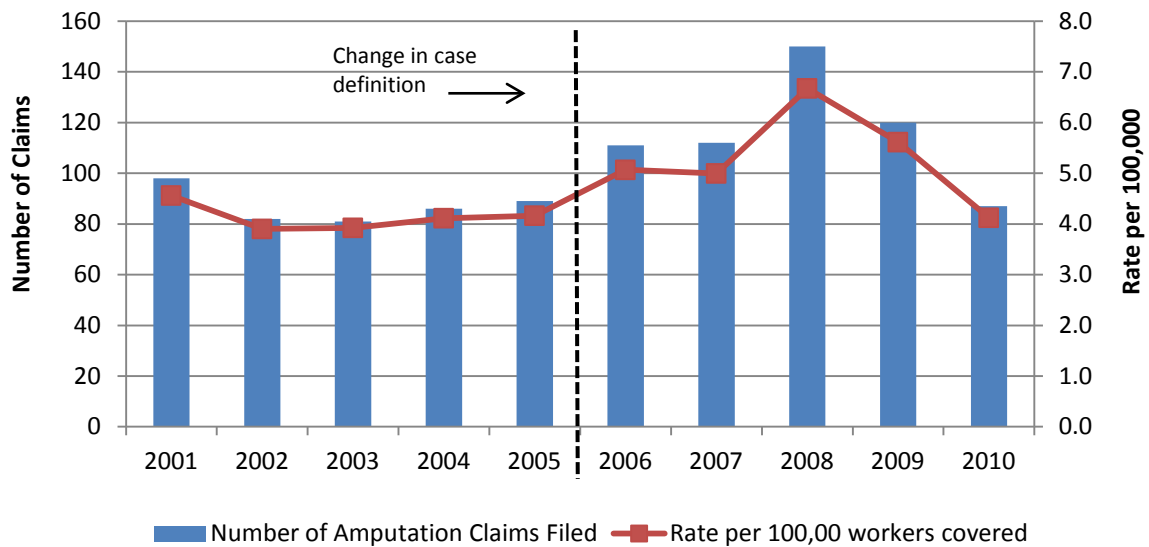
Only amputation claims which were accepted, resulted in more than three days (or three shifts) of lost work-time, and closed in the calendar year were included. Claims were included regardless of employer size, claimant age or claimant state of residence. Claims admitted by employees of self-insured employers were also included. Incidence rates were calculated using the numbers of workers covered by workers' compensation provided by the National Academy of Social Insurance (NASI).

Of note, data for 2001-2005 were collected with lost-time defined as > 10 days away from work.³ Beginning with 2006 data, lost-time claims were defined as those resulting in > 3 days or shifts away from work. This later definition of lost-time matches the definition used by the CSTE OHI guidanceⁱ and the Colorado Department of Labor and Employment, Division of Workers' Compensation.

Results

ⁱ Council of State and Territorial Epidemiologists. *Occupational Health Indicators: A Guide for Tracking Occupational Health Conditions and Their Determinants*. Last updated April 2012.

Figure 5.1: Annual incidence rate of amputation claims filed with State Workers' Compensation per 100,000 workers covered, Colorado, 2001-2010*



Numerator: Closed claims from the Colorado Department of Labor, Division of Workers' Compensation

Denominator: National Academy of Social Insurance (NASI) estimate of workers covered by workers' compensation

**Beginning with 2006, the case definition was modified to follow the NIOSH/CSTE Occupational Health Indicator guidance*

Table 5.1 State Worker's Compensation Claims for Amputations with Lost Work Time, Colorado, 2001-2010*		
Year	Number of claims filed	Annual incidence rate per 100,000 workers covered
2001	98	4.6
2002	82	3.9
2003	81	3.9
2004	86	4.1
2005	89	4.2
Average 2001-2005	87	4.1
2006	111	5.1
2007	112	5.0
2008	150	6.7
2009	120	5.6
2010	87	4.1
Average 2006-2010	116	5.3

*Numerator: Claims from the Colorado Department of Labor, Division of Workers' Compensation
Denominator: National Academy of Social Insurance (NASI) estimate of workers covered by workers' compensation*

**Beginning with 2006 data, case definition was modified to follow the NIOSH/CSTE Occupational Health Indicator guidance*

Limitations

- Workers' compensation (WC) data are largely based on FRI reports, which are completed by employers or workers and thus might not capture latent amputations (i.e., a crush injury resulting in an amputation days or weeks later).
- The number of claims filed and admitted in the Colorado WC system might be underestimated because not all individuals with work-related injuries and illnesses file for WC.
- Those workers who are self-employed or Federal employees are not covered by Colorado WC insurers and therefore are not included in these estimates. However, the NASI covered worker data used for rate calculations do include government workers.
- Differences in eligibility criteria and availability of data from different state's WC programs limit these data from being compared with other states or with overall United States data.

Recommendations and Next Steps

- Further analyze existing WC data at CDPHE to report amputations by occupation, industry, age, gender and other available characteristics to determine risk factors, causes and patterns. (See Employment Demographic Profile Recommendations for more information about analyzing WC FRI data.)