

The Most Disabling Workplace Injuries

Cost Industry an Estimated \$48.3 Billion

Between 1998 and 2005, the real (inflation-adjusted) cost of the most disabling workplace injuries increased nearly four percent, despite a concurrent 21 percent decrease in the frequency of occupational injuries.* These findings, and many others, are presented in the 2007 Liberty Mutual Workplace Safety Index.

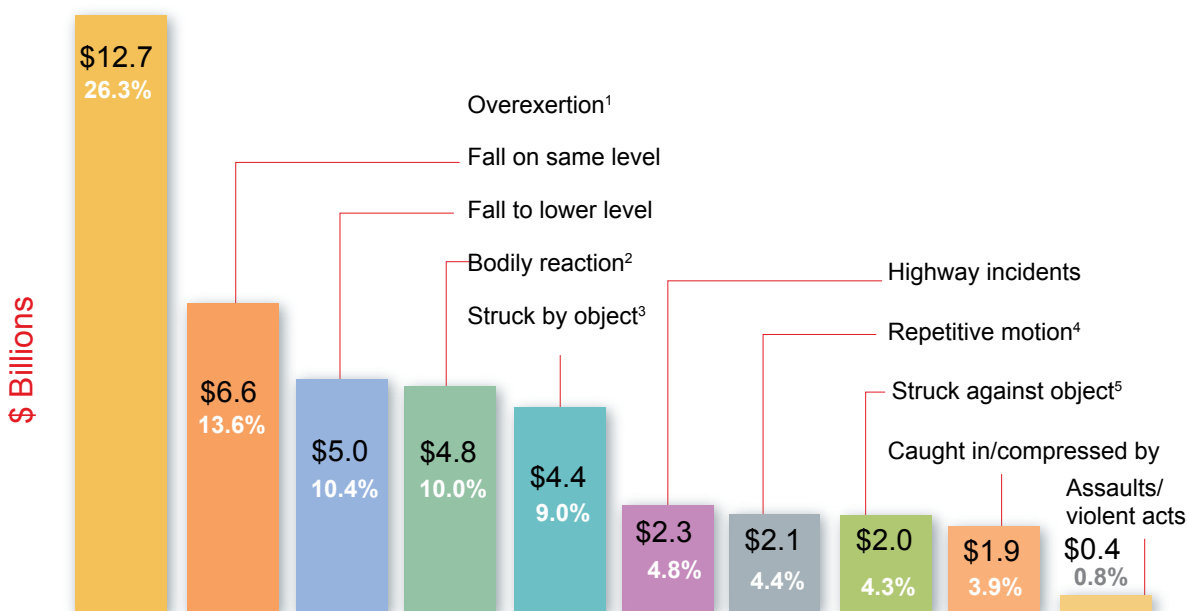
Produced annually, the Workplace Safety Index identifies the leading causes of the most disabling U.S. workplace injuries based on data reported from 1998 (the baseline year for Workplace Safety Index data) through the most recent year for which data are available – in this case 2005. The 2007 Index also captures cost trends for the overall and leading causes of the most disabling injuries from 1998 through 2005, with “most disabling” defined as those injuries that cause an employee to miss six or more days from work.

According to the 2007 Index, the estimated direct U.S. workers compensation costs for the most disabling workplace injuries and illnesses in 2005 were \$48.3 billion. After adjusting for inflation, the overall cost figures represent a 3.9 percent increase compared to the baseline year (1998).

To develop the 2007 Index, researchers applied Liberty Mutual 2005 workers compensation claims costs to the workplace injury frequency information reported by the U.S. Department of Labor’s Bureau of Labor Statistics for injuries occurring that year. The relative proportions of each injury type were then applied to the national estimates of the cost of workers compensation benefits from the National Academy of Social Insurance, which includes information from a broad range of insurance providers.

* Frequency as reported by the U.S. Department of Labor Bureau of Labor Statistics.

The Top 10 Causes of the Most Disabling Workplace Injuries in 2005



1 Overexertion – Injuries caused from excessive lifting, pushing, pulling, holding, or throwing

2 Bodily reaction – Injuries caused from slipping or tripping without falling

3 Struck by object – Such as a tool falling on a worker from above

4 Repetitive motion – Injuries due to repeated stress or strain

5 Struck against object – Such as a worker walking into a door

Note: The “most disabling work-related injuries and illnesses” consist of those causing an employee to lose six or more workdays. The above chart does not reflect the category “all other” which accounts for 12.5% of the total costs (\$6 billion).

2007 Workplace Safety Index

2005 Top Ten Injury Causes

The top 10 causes of the most disabling work-related injuries remained essentially the same as in prior years. *Overexertion* maintained its first place ranking. This event category, which includes injuries related to lifting, pushing, pulling, holding, carrying, or throwing, has historically accounted for more than one-quarter of the overall national burden each year. In 2005, these injuries cost businesses \$12.7 billion in direct costs.

Also consistent with past years, *fall on same level* ranked second as a leading cause of disabling injury. In 2005, this category claimed direct costs of \$6.6 billion and accounted for 13.6 percent of the total burden of injury. However, for the first time in the history of the Workplace Safety Index, *fall to lower level* moved ahead of *bodily reaction* into the third-place ranking. With \$5 billion in direct costs, this category accounted for 10.4 percent of total costs, slightly higher than its next-place contender. Notably, *fall on same level* and *fall to lower level* combined, accounted for nearly a quarter of the total cost of all disabling injuries in 2005. This demonstrates that *falls*, as a single event category, are comparable to *overexertion* in terms of the impact on the overall cost burden.

Bodily reaction, which includes injuries resulting from an incident of free bodily motion (such as bending, climbing, reaching, standing, sitting, or slipping or tripping without falling), ranked fourth in 2005 with \$4.8 billion in costs and 10 percent of the total injury burden. *Struck by object* took the fifth place ranking, accounting for 9 percent of the total injury cost burden at \$4.4 billion.

The remaining five injury events each accounted for less than 5 percent of the direct cost of disabling injuries in 2005. These included *highway incidents*, representing 4.8 percent of the total injury burden at \$2.3 billion; *repetitive motion*, with related injuries accounting for 4.4 percent of the burden at \$2.1 billion; *struck against object*, which accounted for 4.3 percent at \$2 billion; *caught in/compressed by* (injuries resulting from workers being caught in or compressed by equipment or objects), which accounted for 3.9 percent of the total injury burden at \$1.9 billion; and *assaults/violent acts*, which accounted for 0.8 percent at \$4 million.

Overall, the top 10 categories produced 87.5% of the entire cost burden of disabling work related injuries in 2005.

Real Growth Trends 1998 to 2005

The overall real costs of disabling workplace injuries increased 3.9 percent between 1998 and 2005. During this same period, the cost of injuries from the top five causes of disabling injuries, *overexertion*, *fall on same level*, *fall to lower level*, *bodily reaction*, and *struck by object* grew by 1.2, 25.6, 16.4, 12.8, and 12.4 percent, respectively. (See the chart below for complete top ten growth rates.)

As has been the case since 1998, more than half of the \$48.3 billion costs of serious workplace injuries stem from the top three injury causes – *overexertion* (26.3%), *fall on same level* (13.6%) and *fall to lower level* (10.4%). *Repetitive motion* and *assaults/violent acts* showed the most significant cost declines from 1998 to 2005, down 27.5 percent and 19.4 percent, respectively.

