

# MANUFACTURING INDUSTRY

## Massachusetts Occupational Injuries and Illnesses Report 2010

*The manufacturing industry employed the largest percentage of workers in the goods-producing sector. Between 2008 and 2010, this industry saw little measurable change in incidence of non-fatal occupational injuries and illnesses. In fact, there was even a slight rise in incidence of cases that resulted in days on restricted duty. As a percentage of total recordable injuries and illnesses, this industry also either remained the same or increased between 2008 and 2010. It is important to note that, while data were collected in 2009, they were not statistically significant and key findings could not be produced. Therefore, the 2010 data will be compared to the 2008 collection figures. Common examples of occupations in the manufacturing industry are as follows: machine operators, assemblers, lithographers, printing press operators, chemical technicians, laborers and material handlers, millwrights, machinists, and shipping and receiving clerks.*

### Key Manufacturing Findings

- The Manufacturing industry had a total recordable case (TRC) incidence rate of 3.4 incidents per 100 full-time equivalent employees (FTEs). This rate is relatively unchanged from 2008's 3.5 TRC rate.
- The cases with days away or restriction or transferred (DART) rate was 2.0 cases per 100 FTEs; the days away from work only (DAFW) rate was 1.4; the days of job transfer or restriction (DJTR) rate was 0.6; and the other recordable case (ORC) rate was 1.4.
- The industry reported 8,700 recordable cases, which is approximately 12.5% of the total private sector and 69% of the goods-producing sector. In 2008, these numbers were 12% and 60%, respectively.
- The industry employed approximately 254,300 employees which is approximately 9.3% of the private sector workforce and 68.5% of the goods-producing sector.
- DART cases represented 57.5%, or 5,000 of all cases; DAFW-only cases accounted for approximately 3,400 cases (39% of TRC) while DJTR-only cases accounted for 1,600 (18.4%); ORC cases accounted for 3,700 cases or 42.5% of the total.
- Approximately 8,000 incidents were injury-only cases, which is roughly 92% of the total.
- Approximately 700 incidents were illness-only cases, which is roughly 8%.



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## Case and Demographic Findings Based on 2,590 cases with days away from work

**OCCUPATION:** Workers in the occupation of production workers (all other) experienced the most injuries/illnesses within the Manufacturing industry with 560 injuries or illnesses involved DAFW, representing 16.2% of total DAFW cases in this industry. Laborers and freight, stock, and material movers (hand) had 330 incidents resulting in DAFW or 9.6% of the total. Assemblers and fabricators (all other) accounted for 180 cases or 5.2% of the total. Metal and plastic workers accounted for 140 cases or 4.1%. Cutting, punching, and press machine setters, operators, and tenders (metal and plastic) also accounted for 140 cases or 4.1% of the total. Janitors and cleaners (except for maids and housekeeping cleaners) accounted for 100 cases or 2.9%. Cutting and slicing machine setters, operators, and tenders along with machinists accounted for 90 cases each or 2.6% of the total each. Industrial machinery mechanics, along with shipping, receiving, and traffic clerk, both accounted for 80 cases, or 2.3% of the total.

**GENDER:** Approximately 85.5% (2,950 cases) of the Manufacturing industry's DAFW incidents affected men; 14.2% (490 cases) affected women.

**AGE:** 30.7% (1060 cases) of all DAFW cases affected workers in the 45 to 54 age group. 22.9% (790 cases) affected workers in the 35 to 44 age group. 20.9% (720) of the cases affected the 25 to 34 age group. 13.9% (480 cases) affected workers in the 55 to 64 age group. 6.1% of the cases affected workers in the 20 to 24 age group.

**NATURE:** The most common nature of injury in the Manufacturing industry was sprains, strains and tears which accounted for 37.4% (1,290 cases) of all cases. Cuts and lacerations accounted for 15.4% (530 cases) of all cases; fractures accounted for 8.7% (300 cases). Finally, bruises and contusions accounted for 7% (240 cases).

**EVENT:** The most frequent event resulting in DAFW cases was struck by object or equipment which resulted in 710 cases, or 20.6% of all cases. It is followed by overexertion in lifting which accounted for 400 cases or 11.6% of the total. Falls on same level and caught in or compressed by equipment or objects both accounted for 320 cases each, or 9.3% each of the total.

**SOURCE:** Parts and materials were the source of the greatest number of cases, causing 600 (17.4% of DAFW cases). Containers were the second most frequent source of DAFW cases with 480 cases or approximately 13.9% of cases. Bodily motion or position of the injured or ill worker accounted for 450 cases or 13%. Machinery caused 440 cases, or 12.8%, of all DAFW cases in this industry.

**PART OF BODY:** The part of body most affected in DAFW cases was the trunk region, where approximately 33% (1,140 cases) cases occurred. Another 33.3% (1,150 cases) affected the upper extremities (arms, wrists, hands, fingers) region. Approximately 18.8% (650 cases) of DAFW cases affected the lower extremities (legs, ankles, feet, toes); 6.4% (220 cases) affected the head region (including the face).

**Data source:** Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, in cooperation with participating State agencies, 2011.



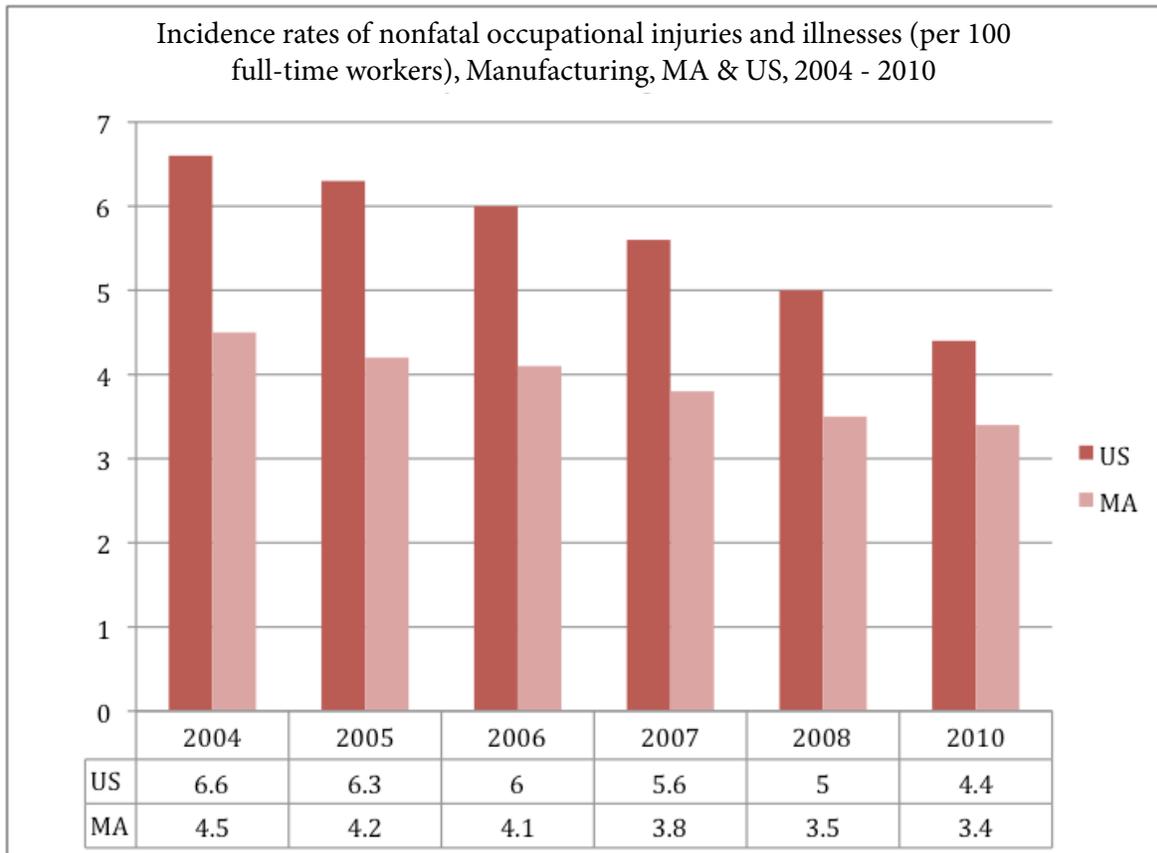
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## Non-Fatal Occupational Injury and Illness Data Charts

While data were collected in 2009, they were not statistically significant and therefore not publishable. These graphs represent data from 2004 to 2010, excluding 2009

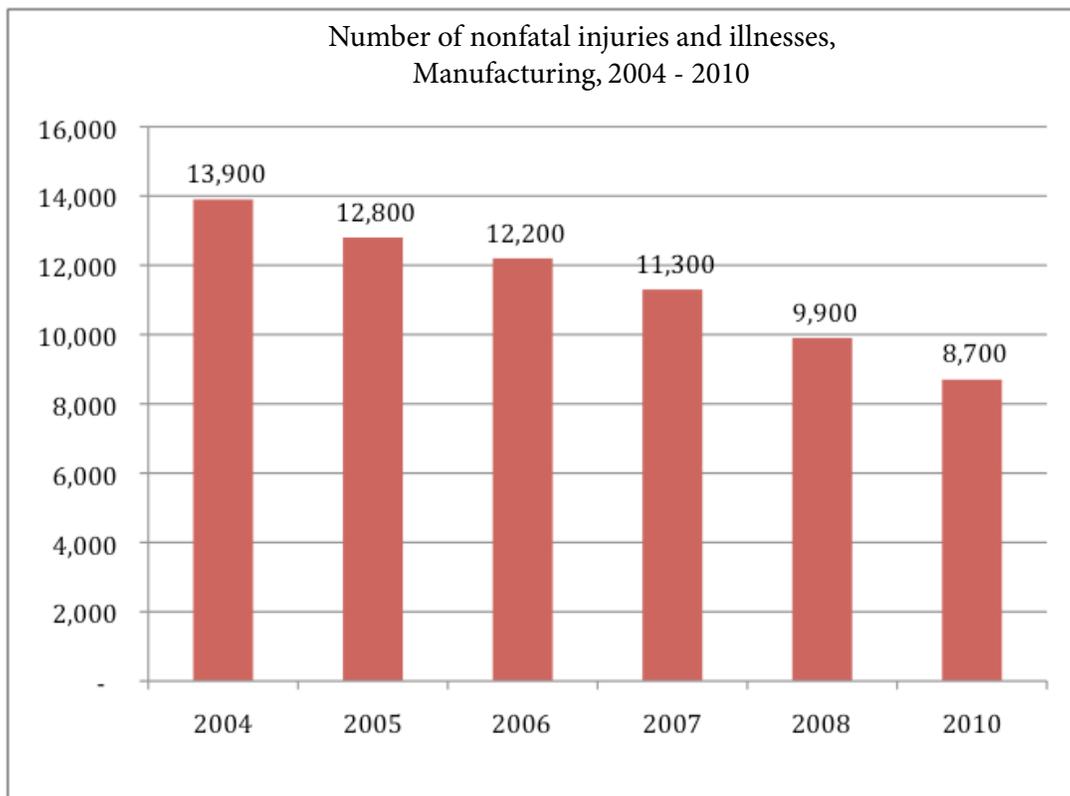


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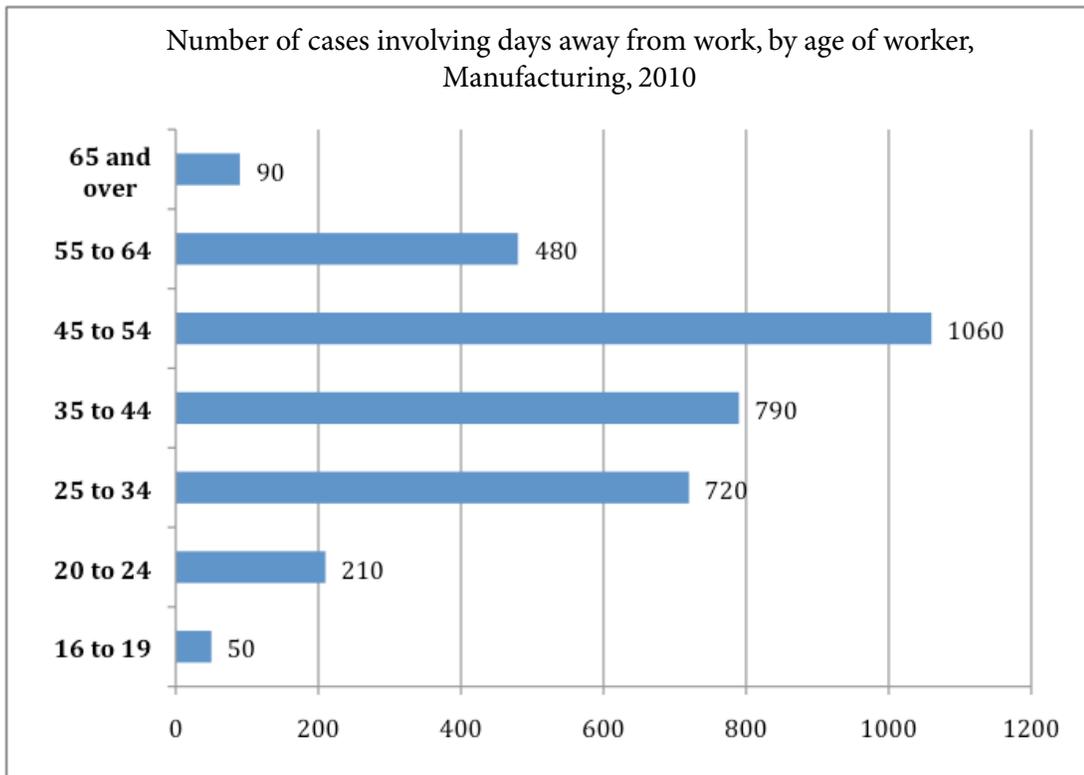
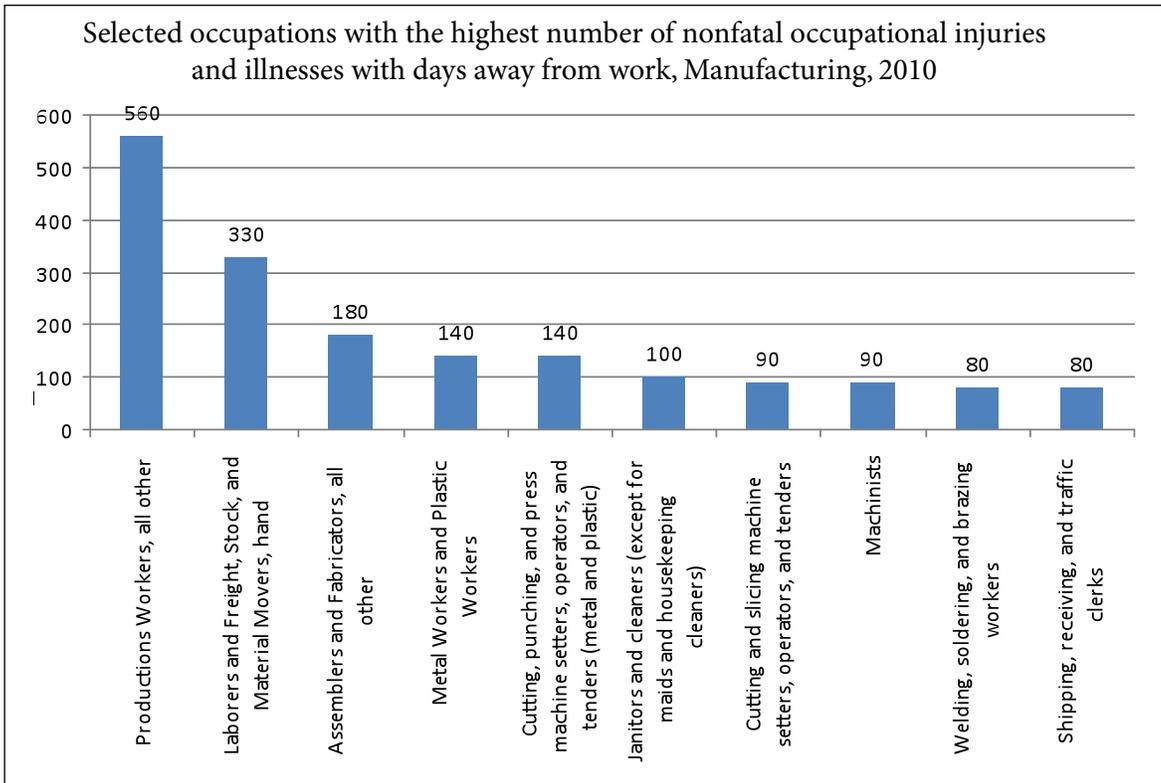
Number of cases with days away from work, restricted or transferred duty (DART<sup>1</sup>) cases vs. other recordable cases (ORC) of nonfatal injuries and illnesses, Manufacturing, 2004 - 2010



Number of nonfatal injuries and illnesses, Manufacturing, 2004 - 2010

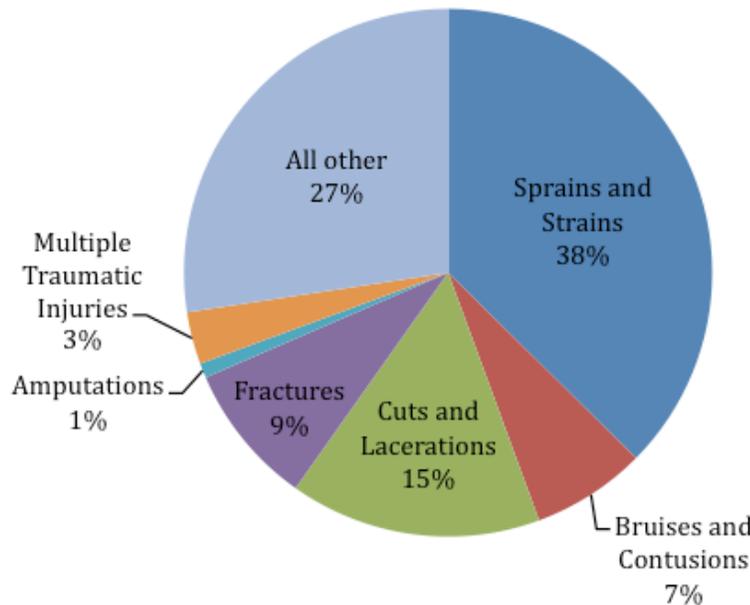


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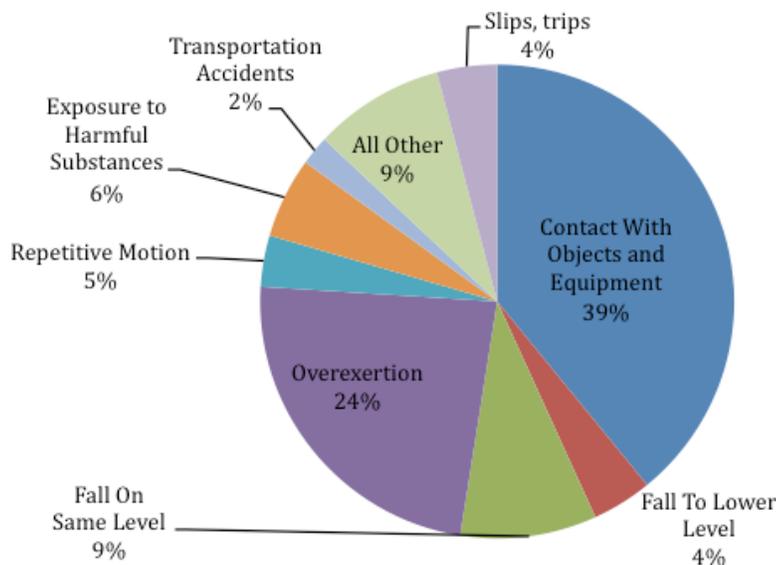


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Percent distribution of nonfatal injuries and illnesses involving days away from work by nature of injury or illness, Manufacturing, 2010

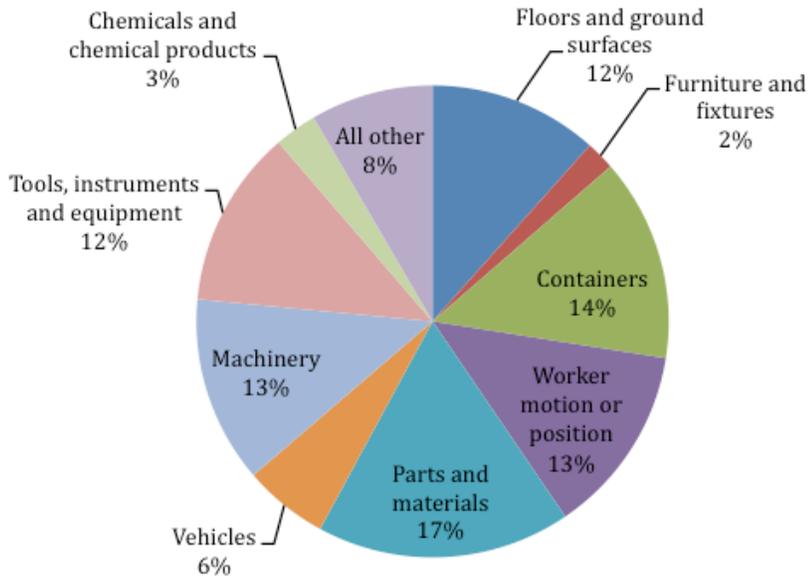


Percent distribution of nonfatal injuries and illnesses involving days away from work by event or exposure, all private industries, Manufacturing, 2010



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Percent distribution of nonfatal injuries and illnesses involving days away from work by source of injury or illness, all private industries, Manufacturing, 2010



Percent distribution of nonfatal injuries and illnesses involving days away from work by part of body, all private industries, Manufacturing, 2010

