The Trade, Transportation and Utilities (TTU) industry employed the second largest amount of Massachusetts’ private sector workforce, representing 19.76% of private sector employees. The industry can be broken down into the following occupational categories: wholesale trade and retail trade, transportation and warehousing, and utilities. It is important to note that, while data were collected in 2009, there were not statistically significant and key findings could not be produced. Therefore, the 2010 data will be compared to the 2008 collection figures. This industry saw significant variance between 2008 and 2010 data: the number of total recordable incidents, total recordable injuries-only incidents, and total recordable illness-only incidents all decreased. Among recorded numbers of nonfatal occupational illnesses, these industries saw a drop in skin disorders, respiratory conditions and hearing loss. There was, however, a small increase in the incidence rate of skin disorders. Common examples of occupations in this industry are: merchant wholesalers, automotive dealers, couriers, bus and taxi drivers, truck drivers (small delivery and tractor-trailer), retail salespersons, baggage handlers, refuse system operators, oil and gas distributors, and electrical power installers and repairers.

Key Trade, Transportation & Utilities Industry Findings

- TTU had a total recordable case (TRC) incidence rate of 3.8 incidents per 100 full-time equivalent employees (FTEs) (down from 4.3 in 2008).
- The TRC rate for the subsector wholesale trade was 2.4; retail trade had a 4.1 rate; transportation and warehousing had a 5.3 TRC rate; and utilities had 6.0 TRC rate.
- The cases with days away or restricted/transferred duty (DART) rate was 2.2 (formerly 2.7 in 2008); the cases with days away from work rate (DAFW) was 1.6; the cases with job transfer or restricted duty (DJTR) was 0.6; and the other recordable rate (ORC) was 1.7.
- TTU employed approximately 19.76% (540,200 workers) of the private-sector workforce, and 22.86% of the service-providing sector workforce.
- Approximately 22.9% (123,900 workers) of TTU’s workforce was based in wholesale trade; 62.4%, or 337,000 workers, were employed in retail trade; 12.75% or 68,900 workers were employed in warehousing and transportation; and 1.9% (10,300 workers) were employed in utilities.
- Of the 16,200 total recordable cases, 17.28% (2,800 cases) occurred in the wholesale trade group; 60.5% (9,800 cases) occurred in the retail trade group; transportation and warehousing accounted for 19.1% (3,100 cases); and utilities accounted for 3.7% (600 cases) of the total recordable cases.
- Of the 16,200 recordable cases, DART cases accounted for 56.17% (9,100 cases) of the total; cases with days away from work-only (DAFW) accounted for approximately 41.36% (6,700 cases); cases with job transfer or restriction-only (DJTR) accounted for 14.8% (2,400 cases); while other recordable case (with no missed work or transfer/restriction) accounted for 43.8% (7,100 cases) of the total.
- Approximately 97.5% (15,800) of all incidents were injury-only incidents.
- Approximately 400 cases were illness-only incidents.
Case and Demographic Findings
Based on 6,730 cases with days away from work

**GENDER:** Males accounted for approximately 74.7% (5,030 cases) of all DAFW cases; females accounted for 23.8% (1,600 cases).

**AGE:** The 35 to 44 age group accounted for 24.2% (1,630) of all cases; the 45 to 54 age group accounted for 23.2% (1,560) cases; the 25 to 34 age group accounted for 18.6% (1,250) of cases; the 55 to 64 age group accounted for 16.2% (1,090) of all cases; the 20 to 24 age group accounted for 9.4% (630) of cases; and the 16 to 19 age group, along with the 65 and over age group, both accounted for approximately 4.8% (320) and 2.7% (180), respectively.

**NATURE:** The most common injuries in this industry were those resulting in sprains, strains and tears, which accounted for 2,890 DAFW cases, or 42.9% of all cases. Bruises and contusions accounted for 660 cases, or 9.8% of all DAFW cases. Cuts and lacerations represented the third most common type of injury with 500 cases, or 7.4% of all cases. Fractures accounted for 410 cases, or 6.1% of all cases. Finally, puncture injuries represented 200 cases, or 3% of all DAFW cases.

**EVENT:** The most common event that caused injury in this industry was contact with equipment; causing 33.6% (2,260 cases) of the total DAFW cases. Overexertion accounted for 2,120 cases or 31.5%; falls accounted for 820 cases, or 12.2%; and transportation accidents accounted for 400 cases 5.9% of the total number of DAFW cases in this industry.

**SOURCE:** Containers were the most common source of DAFW cases with 1,640 cases or 24.4% of the total. Vehicles accounted for 1,000 cases or 14.9% of injuries. Part and materials caused 920 cases, or 13.7% of injuries. The injured party accounted for 810 cases or 12.9%. Lastly, the floor and ground surfaces caused 780 cases, or 11.6% of injuries.

**PART OF BODY:** The part of body region most affected in DAFW cases was the trunk which accounted for 2,620 cases, or 38.9% of the total cases; within the trunk region, the back- including spine and spinal cord- accounted for 1,600 cases while shoulders accounted for 580 cases. The upper extremities (arms, wrists, hands, fingers) region accounted for 1,500 cases, or 22.3% of all DAFW cases. The lower extremities (legs, ankles, feet, toes) accounted for 1,390 cases. The head region (including the face) accounted for 530 cases, or approximately 8% of the total.

**OCCUPATION:** It is interesting to note that, of the 6,730 cases that resulted in DAFW in this field, 2,740 (40.7%) were transportation and material moving employees. 1,120 (16.6%) were to employees who worked in sales and related occupations and 930 (13.8%) were caused to office and administrative support employees. Installation, maintenance and repair employees had 620 (9.2%) of the cases and 480 (7.1%) of cases were to employees working in food preparation and serving related occupations. Management occupations accounted for 240 (3.6%) of the DAFW cases in this industry.

**TIME AND DAY OF INCIDENT:** The most common day of incident was Thursday with 20.2% (1,360 cases) of the injuries and illnesses that resulted in DAFW in this industry taking place on a Thursday. The most common time of incident was between 8:01 am and 12:00 noon during which 25.6% (1,720 cases) of the cases occurred.

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.

Incidence rates of nonfatal occupational injuries and illnesses (per 100 full-time workers), Trade, Transportation, and Utilities, MA & US, 2004 - 2010

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Numbers of nonfatal injuries and illnesses, Trade, Transportation, and Utilities, 2004 - 2010

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<td>2010</td>
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</table>

Number of DART cases\(^1\) vs. other recordable cases (ORC) of nonfatal occupational injuries and illnesses, Trade, Transportation, and Utilities, 2004 - 2010

\(^1\) DART Cases involve days away from work, or days of job transfer or restriction or both.
Selected occupations with the highest number of nonfatal injuries and illnesses with days away from work, Trade, Transportation, and Utilities, 2010

Number of cases involving days away from work, by age of worker, Trade, Transportation, and Utilities, 2010

- **65 and over**: 180
- **55 to 64**: 1090
- **45 to 54**: 1560
- **35 to 44**: 1630
- **25 to 34**: 1250
- **20 to 24**: 630
- **16 to 19**: 320
Percent distribution of nonfatal injuries and illnesses involving days away from work by nature of injury or illness, Trade, Transportation, and Utilities, 2010

- Sprains and Strains: 43%
- All other: 32%
- Bruises and Contusions: 10%
- Cuts and Lacerations: 7%
- Fractures: 6%
- Amputations: 1%
- Multiple Traumatic Injuries: 1%

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

- Contact With Objects and Equipment: 34%
- Overexertion: 31%
- Fall To Lower Level: 9%
- Fall On Same Level: 3%
- Repetitive Motion: 3%
- Exposure to Harmful Substances: 2%
- Transportation Accidents: 6%
- All Other: 7%
- Slips, trips: 5%
Percent distribution of nonfatal injuries and illnesses involving days away from work by source of injury or illness, all private industries, Trade, Transportation, and Utilities, 2010

Percent distribution of nonfatal injuries and illnesses with days away from work by part of the body, all private industries, Trade, Transportation, and Utilities, 2010