

Injury and Illness Survey Shows Rate Declines for Many Maryland Industries

In 2015, 65 thousand cases of occupational injury and illness were reported by Maryland's private and public sector employers, according to the latest results of the Survey of Occupational Injuries and Illnesses or (SOII) program. The number of injuries and illnesses for the combined private and public sectors decreased by 3,600 cases when compared with 2014. This count converts to a total recordable case (TRC) incidence rate of 3.2 injuries and illnesses per 100 equivalent full-time workers. The rate represents a 9 percent decrease from 2014 for the State and is the lowest total recordable incidence rate on record for Maryland's combined private and public sectors.

The Survey of Occupational Injuries and Illnesses is a cooperative program between the Maryland Department of Labor, Licensing and Regulation, Division of Labor and Industry and the U.S. Department of Labor, Bureau of Labor Statistics. In 2015 there were approximately 2.4 million workers in the State under the Maryland Occupational Safety and Health (MOSH) agency's regulatory oversight.¹

Maryland's Private Sector Reports Lowest Rate on Record

Maryland's private sector reported 2,000 fewer nonfatal injury and illness cases for 2015 when compared to 2014. Injuries and illnesses among in the private sector occurred at a rate of 2.9 cases per 100 equivalent full-time workers. This too, represents the lowest rate on record since the program first published occupational injury and illness data in 1972. Injuries and illnesses for cases of a more serious nature involving days away from work, job transfers, or restrictions -- commonly referred to as the DART rate, also decreased from 1.7 cases per 100 full-time equivalent workers in 2014 to 1.6 in 2015. Of private industry's 50,400 cases, nearly 20,000 cases were severe enough to require the employee to take at least one full day off work to recuperate. Ninety-seven percent of all cases in private industry were injuries while the approximately 1,700 cases remaining were illnesses.

Most injuries and illnesses occurred in the service-providing industries with 42,200 reported cases while goods-producing industries accounted for 8,200 cases. These injury and illness estimates for Maryland's private sector covered just over 2.1 million workers, based on the Maryland Department of Labor, Licensing and Regulation's labor market information and the Quarterly Census of Employment and Wages program.

Industry sectors showing declines in injury and illness rates in Maryland were mining, quarrying, and oil and gas extraction; retail trade; transportation and warehousing; utilities; real estate and rental and leasing; professional and business services; administrative and support and waste management and remediation services; health care and social assistance; accommodation and food services; and other services except public administration (See chart 2).

Industry sectors showing rate increases were construction; wholesale trade; information; finance and insurance; professional, scientific, and technical services; management of companies and enterprises; and arts, entertainment, and recreation. Industry sectors whose rates remained statistically unchanged from the previous year were manufacturing and educational services.

¹ Employment data derived from the Maryland Department of Labor, Licensing and Regulation, Office of Workforce Information and Performance, Quarterly Census of Employment and Wages Program, 2015.

Additional Key Findings for Maryland's Private Sector

- For the fourth year in a row, manufacturing's TRC rate remained statistically unchanged at 3.0 injuries and illnesses per 100 full-time equivalent workers. The rate is almost half of what this sector reported in 2004. Wide variation exist, however, between the rates reported by detailed industries within manufacturing. Animal slaughtering and processing (NAICS 31161) reported the highest incidence rate with 7.0 injuries and illnesses per 100 equivalent full-time workers, while Computer and electronic product manufacturing (NAICS 334) reported the lowest rate at 0.9 injuries and illnesses. For 2015, Maryland manufacturing's total recordable case incidence rate was 21 percent below the sector's U.S. average of 3.8.
- Construction's total recordable case incidence rate increased from 2.9 injuries and illnesses per 100 equivalent full-time workers recorded the previous year to 3.5 injuries and illnesses for 2015. There were approximately 5,000 new cases of occupational injury and illness reported, an increase of 1,000 additional cases when compared to 2014. Within the construction sector, roofing contractors (NAICS 23816) reported the highest rate at 10.3 while nonresidential building construction (NAICS 2362) reported the lowest rate with 1.3. Construction of buildings (NAICS 236) showed a slight decline in the incidence rate over the year; however, heavy and civil engineering construction (NAICS 237) and specialty trade contractors (NAICS 238) showed rate increases of 45 and 26 percent respectively. Differences in industry rates also exist based on the size of the reporting firm. Construction establishments with 10 or fewer employees had the highest collective rate at 4.4 injuries and illnesses while those firms with 11 to 49 employees experienced the lowest rate at 2.9.
- For every year since 2011, air transportation (NAICS 481) has recorded the highest total recordable case incidence rate for the State's private sector at the industry level. In 2015 air transportation reported 13.7 injuries and illnesses for every 100 equivalent full-time workers. Other industries with high rates were couriers and messengers (8.7); transit and ground passenger transportation (8.4); waste management and remediation services (7.1); nursing and residential care (6.7); accommodation (6.6); and hospitals (5.9).

Maryland's Public Sector

An estimated 14,500 injury and illnesses cases were reported by Maryland's State and local government agencies for 2015. This was 1,700 fewer cases compared to 2014's results. State and local government's rate declined 10 percent from 6.1 cases per 100 equivalent full-time workers down to 5.5. This is the lowest rate for Maryland's public sector since injury and illness estimates were first published for State and local government in 1979. Collectively, State and local government agencies employed some 341,557 workers during 2015. Over three-quarters of the reported injuries and illnesses in the State and local government sector occurred among local government workers.

Maryland State government reported 3,500 injuries and illnesses, 900 fewer than in 2014. State government's total recordable case (TRC) incidence rate also declined from 4.8 to 4.0. Local government reported 11,100 new cases, approximately 700 fewer from the previous year. Local government's TRC rate fell from 6.7 in 2014 to 6.3 for 2015.

Chart 1, Total recordable case incidence rates per 100 full-time equivalent workers for all nonfatal workplace injuries and illnesses, Maryland and the United States, 1998 - 2015

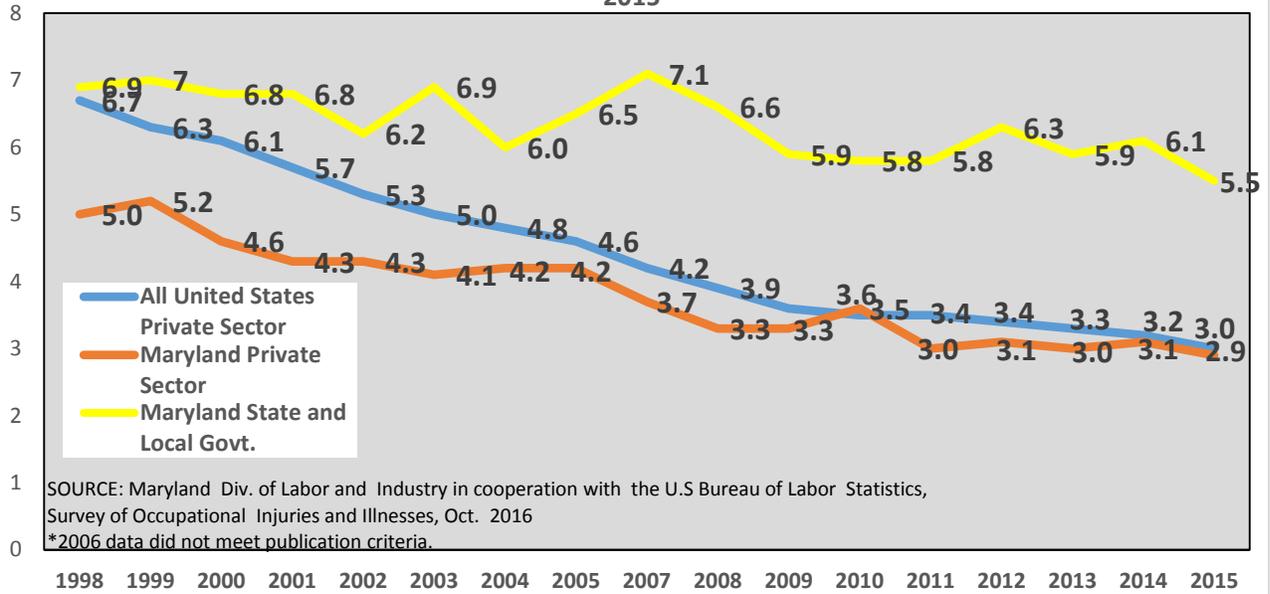
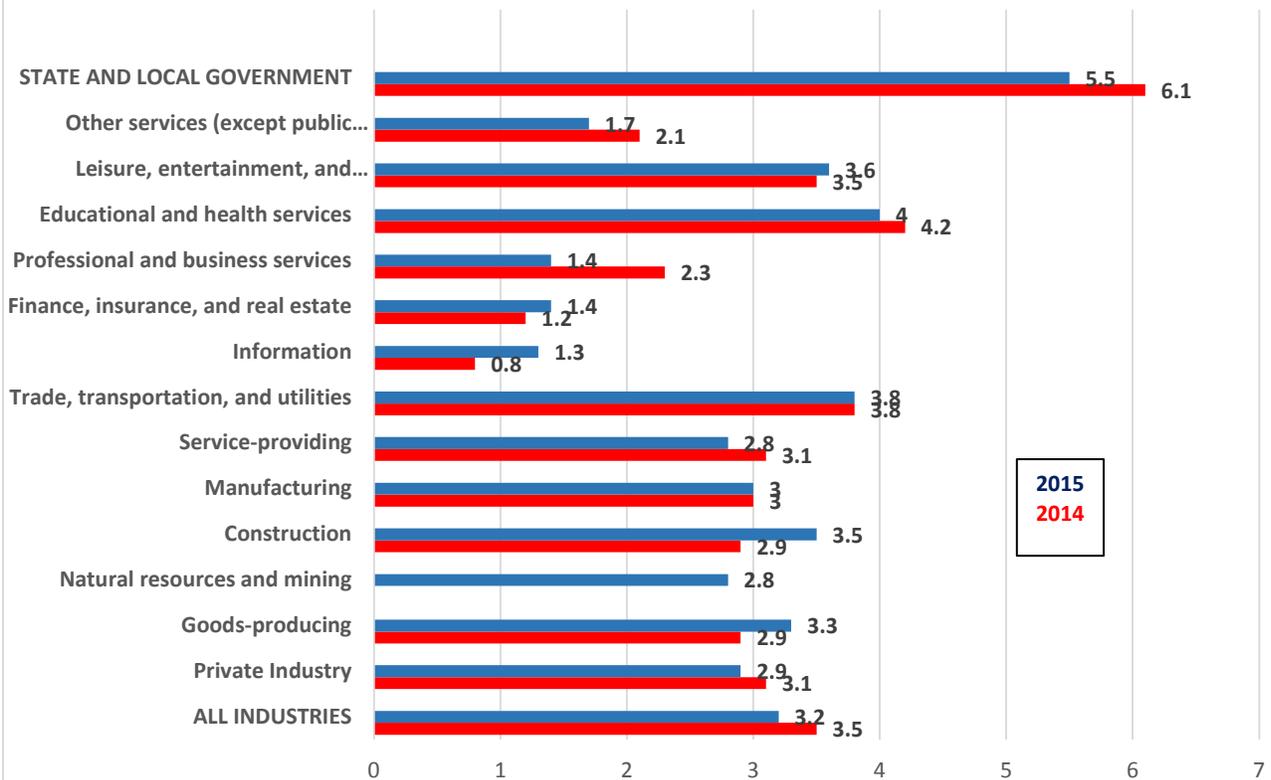


Chart 2, Incidence rates per 100 full-time equivalent workers for total nonfatal occupational injuries and illnesses by selected categories, Maryland, 2014-15



**Maryland Nonfatal Incidence Rates
Survey of Occupational Injuries and Illnesses, 2002-2015**

	Total Recordable Cases (TRC)	Cases with Days Away, Restriction, or Transfer (DART)	Other Recordable Cases (ORC)
Private industry			
2015	2.9	1.6	1.3
2014	3.1	1.7	1.4
2013	3.0	1.5	1.5
2012	3.1	1.6	1.5
2011	3.0	1.6	1.4
2010	3.6	1.9	1.7
2009	3.3	1.7	1.6
2008	3.3	1.7	1.6
2007	3.7	1.9	1.8
2006	3.8	2.0	1.8
2005	4.2	2.2	2.0
2004	4.2	2.3	1.9
2003	4.1	2.3	1.8
2002	4.3	2.4	1.9
State and local govt.			
2015	5.5	2.8	2.7
2014	6.1	2.9	3.1
2013	5.9	2.8	3.1
2012	6.3	2.8	3.6
2011	5.8	2.9	3.0
2010	5.8	3.1	2.7
2009	5.9	3.0	2.9
2008	6.6	3.3	3.3
2007	7.1	3.5	3.6
2006*	-	-	-
2005	6.5	2.9	3.6
2004	6.0	3.2	2.9
2003	6.9	3.9	3.0
2002	6.2	3.6	2.6

All industries including State & local govt.

2015	3.2	1.7	1.5
2014	3.5	1.8	1.6
2013	3.4	1.7	1.7
2012	3.5	1.7	1.8
2011	3.4	1.8	1.6
2010	3.9	2.1	1.8
2009	3.7	1.9	1.8
2008	3.7	1.9	1.8
2007	4.1	2.1	2.1
2006*	-	-	-
2005	4.5	2.3	2.2
2004	4.5	2.4	2.1
2003	4.5	2.5	1.9
2002	4.6	2.6	2.0

*2006 data did not meet publication criteria.

Background of the Survey

The Survey of Occupational Injuries and Illnesses (SOII) is a cooperative program between the State of Maryland's Department of Labor, Licensing and Regulation, Division of Labor and Industry and the U.S. Department of Labor, Bureau of Labor Statistics. SOII provides estimates of the number and frequency (incidence rates) of nonfatal occupational injuries and illnesses by industry code as defined by the 2007 North American Industry Classification System (NAICS) manual. The SOII program also provides details on the circumstances and characteristics of the more seriously injured and ill workers. These injury and illness estimates are based on safety and health logs that, by law, employers are required to keep. Occupational injury and illness statistics have been published for Maryland's private sector every year since 1972 and for Maryland state and local government from 1979 forward. The SOII program utilizes an employer-based questionnaire to collect occupational injury and illness data. Questionnaires are mailed to a scientifically selected random sampling of businesses in Maryland. The responses are compiled, tabulated and published annually.

Statistical sampling techniques are used to produce the estimates. Because the results are based on a random sampling of establishments in the universe file (the universe is all operating in-scope establishments in Maryland's unemployment insurance tax file), the estimates probably differ from the figures that would be obtained if every establishment in the State had participated. To determine the precision of each data estimate, a standard error is calculated. The standard error defines a range (confidence interval) around each estimate. Relative standard errors are calculated for every SOII estimate produced.

The quality of the data is dependent on the employer's understanding of which cases are recordable under the Occupational Safety and Health Administration's recordkeeping regulation.

Maryland State agencies and all local government municipalities and jurisdictions are required by law to keep records of occupational injuries and illnesses. Additionally, many private sector establishments are required to keep injury and illness records. In order to have a complete picture of the occupational injury and illness experience for the economy, many establishments normally exempt from OSHA's recordkeeping requirements are included in the survey. The OSHA recordkeeping system is designed to measure the incidence, rather than the prevalence, of occupational injury and illness. Prevalence measures capture all injuries and illnesses that occur in a given year including ongoing or unresolved cases from previous years. The intent of the OSHA recordkeeping system is to measure each occupational injury and illness only once. The SOII, therefore, provides estimates of the number and rate of only new injuries and illnesses in a given year.

Excluded from the SOII are the self-employed, farming operations with fewer than 11 employees, private households and federal government agencies. Occupational injury and illness data for coal, metal and nonmetal mining, and for railroad activities were provided by the U.S. Department of Labor's Mine Safety and Health Administration and the U.S. Department of Transportation's Federal Railroad Administration, respectively.

Collecting occupational illness statistics remains a challenge with the true number and rate difficult to measure. Unlike injuries, which result from sudden, acute events that are easily observed, reported and documented, many types of occupational disease are not diagnosed until long after the initial exposure to workplace carcinogens or other toxins have taken place. It may be years before the cumulative effects of these exposures present as occupational disease and the employee may no longer be in the workforce. Because of this, it is believed the incidence of certain long-term, latent forms of occupational disease is understated by the SOII. The overwhelming majority of the reported illness cases are those that are easier to directly relate to the workplace such as contact dermatitis or carpal tunnel syndrome.

The Bureau of Labor Statistics' Survey of Occupational Injuries and Illnesses is the U.S government's primary source for charting the nature and magnitude of the occupational injury and illness problem across the country.

