

**REPORT TO THE LEGISLATURE**

**OCCUPATIONAL INJURIES, ILLNESSES  
AND FATALITIES IN MICHIGAN**

**Developed by**  
**Michigan Occupational Safety and Health Administration (MIOSHA)**  
**Michigan Department of Energy, Labor & Economic Growth**

**January 2010**

# **MICHIGAN OCCUPATIONAL INJURIES, ILLNESSES AND FATALITIES**

**JANUARY 2010**

## **INTRODUCTION**

The information that follows is presented in response to Section 317 of Public Act 251 of 2009. This section requires that the Department of Energy, Labor & Economic Growth, Michigan Occupational Safety and Health Administration (MIOSHA), provide an annual report by February 1 of each year "...to the appropriate house and senate appropriations subcommittees and the fiscal agencies on the number of individuals injured on the job within industries related to MIOSHA during the preceding calendar year."

## **"PROGRAM-RELATED" FATALITIES**

The agency records "program-related" fatalities. In general, this means that the incident related to the fatality may have resulted from a hazard or hazards that occurred based upon a failure to adhere to one or more Michigan Occupational Safety and Health Administration (MIOSHA) requirements. There were 24 such fatalities in Michigan during calendar year 2009. (See following table for data and definitions.)

## **WORKPLACE INJURIES AND ILLNESSES**

A complete census of occupational illnesses and injuries for Michigan does not exist. However, the agency cooperates with the U.S. Bureau of Labor Statistics to sample Michigan's employers to produce annual estimates of the number of occurrences of work-related illness and injuries. The 2009 survey collected the 2008 illness and injury occurrences of 7,000 Michigan employers. The employer sample was stratified by industry and the results were used to project total occurrence estimates. The seven-page table that follows the fatality data presents the results. Footnotes at the end of the table provide additional information about the methodology used. The sample excludes self-employed individuals, railroads, selected mining industries and the federal government.

## **INQUIRIES**

**Questions about these data may be directed to the Management Information Systems Section, MTSD, Michigan Occupational Safety and Health Administration (MIOSHA) (517) 322-1850.**

**MIOSHA Program-Related Fatalities  
Calendar Year 2009**

<b>General Industry Safety and Health</b>	<b>14</b>
<b><u>Construction Safety and Health</u></b>	<b><u>10</u></b>
<b>TOTAL</b>	<b>24</b>

**Note: Data current as of 01/31/10.**

**Source: Management Information Systems Section, MTSD, Michigan Department of Energy, Labor & Economic Growth**

**NOTE: A fatality is recorded as “program-related” if the deceased party was employed in an occupation included in MIOSHA jurisdiction as defined in Public Act 154 of 1974, as amended, and the fatality appears to be related to one or more of the following conditions:**

1. The incident was found to have resulted from violations of MIOSHA safety and health standards or the general duty clause.
2. The incident was considered to be the result of a failure to follow a good safety and health practice that would be the subject of a safety and health recommendation.
3. The information describing the incident is insufficient to make a clear distinction between a “program-related” and “non-program-related” incident, but the type and nature of the injury indicates that there is a high probability that the injury was the result of a failure to adhere to one or more MIOSHA standards, the general duty clause, or good safety and health practice.

Table 2. Numbers of nonfatal occupational injuries and illnesses by selected industries and case types, 2008

Michigan							
(In thousands)							
Industry <sup>1</sup>	NAICS code <sup>2</sup>	2008 Average annual employment <sup>3</sup>	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work <sup>4</sup>	Cases with job transfer or restriction	
<b>All industries including State and local government<sup>5</sup></b> .....		4,069.5	145.0	72.2	36.7	35.5	72.8
<b>Private industry<sup>5</sup></b> .....		3,527.5	124.4	61.6	30.1	31.5	62.8
<b>Goods-producing<sup>5</sup></b> .....		786.9	44.5	22.2	10.4	11.8	22.2
<b>Natural resources and mining<sup>5,6</sup></b> .....		27.1	1.2	0.5	0.4	0.2	0.6
<b>Agriculture, forestry, fishing and hunting<sup>5</sup></b> .....	11	20.8	1.0	0.4	0.3	0.2	0.5
Crop production <sup>5</sup> .....	111	12.2	0.3	0.1	0.1	( <sup>9</sup> )	0.2
Animal production <sup>5</sup> .....	112	4.6	0.4	0.2	0.1	( <sup>9</sup> )	0.2
Support activities for agriculture and forestry .....	115	2.3	0.2	0.1	0.1	0.1	( <sup>9</sup> )
<b>Mining<sup>6</sup></b> .....	21	6.3	0.2	0.1	0.1	( <sup>9</sup> )	0.1
<b>Construction</b> .....		160.5	6.3	3.2	2.5	0.8	3.0
<b>Construction</b> .....	23	160.5	6.3	3.2	2.5	0.8	3.0
Construction of buildings .....	236	36.9	1.0	0.5	0.3	0.2	0.5
Heavy and civil engineering construction .....	237	16.3	0.6	0.3	0.2	0.1	0.4
Specialty trade contractors .....	238	107.3	4.6	2.4	2.0	0.4	2.2
<b>Manufacturing</b> .....		599.3	37.1	18.5	7.6	10.9	18.6
<b>Manufacturing</b> .....	31-33	599.3	37.1	18.5	7.6	10.9	18.6
Food manufacturing .....	311	34.0	2.0	1.2	0.5	0.7	0.8
Beverage and tobacco product manufacturing .....	312	4.6	0.4	0.3	0.1	0.2	0.1
Textile product mills .....	314	2.2	0.2	0.2	--	( <sup>9</sup> )	( <sup>9</sup> )
Leather and allied product manufacturing .....	316	1.0	0.1	0.1	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
Wood product manufacturing .....	321	9.8	0.8	0.5	0.3	0.2	0.3

See footnotes at end of table.

**Table 2. Numbers of nonfatal occupational injuries and illnesses by selected industries and case types, 2008 -- Continued**

Michigan							
(In thousands)							
Industry <sup>1</sup>	NAICS code <sup>2</sup>	2008 Average annual employment <sup>3</sup>	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work <sup>4</sup>	Cases with job transfer or restriction	
Paper manufacturing . . . . .	322	13.4	0.7	0.4	0.2	0.2	0.3
Printing and related support activities . . . . .	323	17.3	0.6	0.3	0.2	0.2	0.3
Petroleum and coal products manufacturing . . . . .	324	1.5	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
Chemical manufacturing . . . . .	325	27.9	0.7	0.4	0.2	0.2	0.3
Plastics and rubber products manufacturing . . . . .	326	38.9	2.2	1.2	0.4	0.8	1.0
Nonmetallic mineral product manufacturing . . . . .	327	12.9	0.7	0.4	0.2	0.2	0.3
Primary metal manufacturing . . . . .	331	24.3	1.8	0.8	0.5	0.3	1.0
Fabricated metal product manufacturing . . . . .	332	79.6	6.3	3.0	1.5	1.5	3.3
Machinery manufacturing . . . . .	333	69.0	4.5	2.0	0.8	1.2	2.5
Computer and electronic product manufacturing . . . . .	334	21.1	0.5	0.2	0.1	0.1	0.3
Transportation equipment manufacturing . . . . .	336	186.9	12.6	5.9	2.0	3.9	6.6
Furniture and related product manufacturing . . . . .	337	24.5	1.4	0.8	0.3	0.5	0.7
Miscellaneous manufacturing . . . . .	339	18.2	0.8	0.4	0.1	0.2	0.4
<b>Service-providing . . . . .</b>		<b>2,740.6</b>	<b>79.9</b>	<b>39.3</b>	<b>19.7</b>	<b>19.6</b>	<b>40.6</b>
<b>Trade, transportation, and utilities<sup>8</sup> . . . . .</b>		<b>777.2</b>	<b>28.4</b>	<b>16.5</b>	<b>8.6</b>	<b>7.9</b>	<b>11.9</b>
<b>Wholesale trade . . . . .</b>	<b>42</b>	<b>168.7</b>	<b>5.2</b>	<b>2.9</b>	<b>1.8</b>	<b>1.1</b>	<b>2.4</b>
Merchant wholesalers, durable goods . . . . .	423	96.0	3.1	1.6	1.3	0.3	1.5
Merchant wholesalers, nondurable goods . . . . .	424	48.1	1.8	1.1	0.4	0.8	0.7
Wholesale electronic markets and agents and brokers . . . . .	425	24.6	0.4	0.2	0.1	0.1	0.2
<b>Retail trade . . . . .</b>	<b>44-45</b>	<b>484.8</b>	<b>15.7</b>	<b>8.9</b>	<b>4.4</b>	<b>4.5</b>	<b>6.7</b>
Motor vehicle and parts dealers . . . . .	441	56.6	1.8	0.7	0.4	0.3	1.2
Electronics and appliance stores . . . . .	443	16.8	0.2	0.1	( <sup>9</sup> )	0.1	0.1
Building material and garden equipment and supplies dealers . . . . .	444	42.7	1.9	1.2	0.4	0.8	0.7
Food and beverage stores . . . . .	445	80.7	4.2	2.5	1.4	1.0	1.7
Gasoline stations . . . . .	447	24.8	0.3	0.1	0.1	( <sup>9</sup> )	0.2
Clothing and clothing accessories stores . . . . .	448	41.5	0.7	0.3	0.2	0.1	0.4
Sporting goods, hobby, book, and music stores . . . . .	451	23.8	0.4	0.3	0.1	0.1	0.2
General merchandise stores . . . . .	452	111.7	4.1	2.7	1.0	1.6	1.4
Miscellaneous store retailers . . . . .	453	26.5	0.5	0.3	0.2	( <sup>9</sup> )	0.3
Nonstore retailers . . . . .	454	9.5	0.2	0.1	0.1	( <sup>9</sup> )	0.1

See footnotes at end of table.

**Table 2. Numbers of nonfatal occupational injuries and illnesses by selected industries and case types, 2008 -- Continued**

**Michigan**

(In thousands)

Industry <sup>1</sup>	NAICS code <sup>2</sup>	2008 Average annual employment <sup>3</sup>	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work <sup>4</sup>	Cases with job transfer or restriction	
<b>Transportation and warehousing<sup>8</sup></b> .....	48-49	103.4	6.8	4.4	2.2	2.1	2.5
Air transportation .....	481	14.5	1.3	1.0	0.4	0.6	0.4
Rail transportation <sup>8</sup> .....	482	--	0.1	0.1	0.1	( <sup>9</sup> )	( <sup>9</sup> )
Water transportation .....	483	0.6	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
Truck transportation .....	484	40.7	2.4	1.4	1.1	0.4	0.9
Transit and ground passenger transportation .....	485	5.4	0.2	0.1	0.1	0.1	( <sup>9</sup> )
Support activities for transportation .....	488	15.0	1.0	0.6	0.2	0.4	0.4
Couriers and messengers .....	492	12.3	0.9	0.5	0.2	0.3	0.4
Warehousing and storage .....	493	13.3	1.0	0.7	0.2	0.5	0.3
<b>Utilities</b> .....	22	20.3	0.7	0.4	0.2	0.2	0.3
Utilities .....	221	20.3	0.7	0.4	0.2	0.2	0.3
<b>Information</b> .....		61.4	1.6	1.1	0.6	0.5	0.5
<b>Information</b> .....	51	61.4	1.6	1.1	0.6	0.5	0.5
Publishing industries (except Internet) .....	511	21.8	0.3	0.1	0.1	0.1	0.1
<b>Financial activities</b> .....		203.0	3.5	1.6	1.1	0.5	1.9
<b>Finance and insurance</b> .....	52	150.2	2.3	1.0	0.9	0.1	1.3
Insurance carriers and related activities .....	524	55.1	0.7	0.4	0.3	0.1	0.2
<b>Real estate and rental and leasing</b> .....	53	52.7	1.2	0.7	0.3	0.4	0.6
Real estate .....	531	36.2	0.7	0.4	0.2	0.2	0.3
Rental and leasing services .....	532	15.7	0.6	0.3	0.1	0.2	0.3
Lessors of nonfinancial intangible assets (except copyrighted works) .....	533	0.8	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
<b>Professional and business services</b> .....		570.5	7.5	3.4	1.6	1.8	4.1

See footnotes at end of table.

**Table 2. Numbers of nonfatal occupational injuries and illnesses by selected industries and case types, 2008 -- Continued**

**Michigan**

(In thousands)

Industry <sup>1</sup>	NAICS code <sup>2</sup>	2008 Average annual employment <sup>3</sup>	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work <sup>4</sup>	Cases with job transfer or restriction	
<b>Professional, scientific, and technical services . . . . .</b>	54	245.5	2.7	0.7	0.2	0.5	1.9
<b>Management of companies and enterprises . . . . .</b>	55	55.3	0.8	0.4	0.2	0.2	0.4
<b>Administrative and support and waste management and remediation services . . . . .</b>	56	269.7	4.0	2.3	1.2	1.1	1.8
Administrative and support services . . . . .	561	258.3	3.2	1.9	0.9	0.9	1.3
Waste management and remediation services . . . . .	562	11.4	0.8	0.4	0.3	0.2	0.4
<b>Education and health services . . . . .</b>		583.3	25.2	10.8	5.0	5.8	14.4
<b>Educational services . . . . .</b>	61	62.1	0.8	0.3	0.2	0.1	0.6
Educational services . . . . .	611	62.1	0.8	0.3	0.2	0.1	0.6
<b>Health care and social assistance . . . . .</b>	62	521.2	24.3	10.5	4.8	5.7	13.8
Ambulatory health care services . . . . .	621	179.4	3.3	1.4	0.7	0.7	1.9
Hospitals . . . . .	622	188.9	13.1	4.5	2.2	2.3	8.6
Nursing and residential care facilities . . . . .	623	94.1	6.3	4.0	1.5	2.5	2.3
Social assistance . . . . .	624	58.9	1.6	0.6	0.4	0.2	1.0
<b>Leisure and hospitality . . . . .</b>		414.4	11.0	4.7	2.1	2.6	6.3
<b>Arts, entertainment, and recreation . . . . .</b>	71	64.4	1.3	0.6	0.4	0.3	0.6
Performing arts, spectator sports, and related industries . . . . .	711	9.6	0.2	0.1	0.1	( <sup>9</sup> )	0.1
Museums, historical sites, and similar institutions . . . . .	712	4.3	0.2	0.1	( <sup>9</sup> )	( <sup>9</sup> )	0.1
Amusement, gambling, and recreation industries . . . . .	713	50.5	0.9	0.5	0.3	0.2	0.4
<b>Accommodation and food services . . . . .</b>	72	350.0	9.7	4.1	1.8	2.3	5.7
Accommodation . . . . .	721	40.9	2.0	1.1	0.5	0.5	0.9
Food services and drinking places . . . . .	722	309.1	7.7	3.0	1.2	--	4.8
<b>Other services . . . . .</b>		130.9	2.8	1.1	--	0.5	1.6

See footnotes at end of table.

**Table 2. Numbers of nonfatal occupational injuries and illnesses by selected industries and case types, 2008 -- Continued**

**Michigan**

(In thousands)

Industry <sup>1</sup>	NAICS code <sup>2</sup>	2008 Average annual employment <sup>3</sup>	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work <sup>4</sup>	Cases with job transfer or restriction	
<b>Other services, except public administration</b> .....	81	130.9	2.8	1.1	--	0.5	1.6
Personal and laundry services .....	812	39.7	0.8	0.3	0.1	0.2	0.5
Religious, grantmaking, civic, professional, and similar organizations .....	813	47.5	0.7	0.2	0.1	0.2	0.5
<b>State and local government</b> .....		542.0	20.6	10.6	6.6	4.0	10.0
<b>State government</b> .....		140.1	5.1	2.4	1.4	1.0	2.7
<b>Service-providing</b> .....		140.1	5.1	2.4	1.4	1.0	2.7
<b>Education and health services</b> .....		97.7	3.6	1.2	0.6	0.6	2.4
<b>Educational services</b> .....	61	72.7	1.9	0.5	0.3	0.2	1.3
Educational services .....	611	72.7	1.9	0.5	0.3	0.2	1.3
<b>Health care and social assistance</b> .....	62	25.0	1.7	0.7	0.3	0.4	1.0
Hospitals .....	622	--	1.4	0.5	0.2	0.3	0.9
Nursing and residential care facilities .....	623	--	0.2	0.2	0.1	( <sup>9</sup> )	0.1
<b>Public administration</b> .....		40.4	1.5	1.1	0.8	0.3	0.3
<b>Public administration</b> .....	92	40.4	1.5	1.1	0.8	0.3	0.3
Justice, public order, and safety activities .....	922	18.7	1.1	0.8	0.6	0.3	0.2
<b>Local government</b> .....		401.9	15.4	8.2	5.1	3.1	7.2
<b>Goods-producing<sup>5</sup></b> .....		5.3	0.5	0.3	0.3	( <sup>9</sup> )	0.2
<b>Service-providing</b> .....		396.6	14.9	7.9	4.9	3.0	7.0
<b>Trade, transportation, and utilities<sup>8</sup></b> .....		5.3	0.4	0.2	0.2	0.1	0.2

See footnotes at end of table.



**Table 2. Numbers of nonfatal occupational injuries and illnesses by selected industries and case types, 2008 -- Continued**

**Michigan**

(In thousands)

Industry <sup>1</sup>	NAICS code <sup>2</sup>	2008 Average annual employment <sup>3</sup>	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work <sup>4</sup>	Cases with job transfer or restriction	
<b>Transportation and warehousing<sup>8</sup></b> .....	48-49	4.0	0.3	0.2	0.1	--	0.1
Transit and ground passenger transportation .....	485	3.8	0.3	0.2	0.1	--	0.1
<b>Utilities</b> .....	22	1.3	0.1	0.1	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
Utilities .....	221	1.3	0.1	0.1	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
<b>Education and health services</b> .....		259.9	8.4	4.4	2.8	1.6	4.1
<b>Educational services</b> .....	61	237.1	7.0	3.7	2.3	1.4	3.3
Educational services .....	611	237.1	7.0	3.7	2.3	1.4	3.3
<b>Health care and social assistance</b> .....	62	22.7	1.4	0.7	0.4	0.2	0.8
Hospitals .....	622	13.7	0.7	0.2	0.2	0.1	0.5
Nursing and residential care facilities .....	623	6.6	0.7	0.4	0.3	0.1	0.3

See footnotes at end of table.

**Table 2. Numbers of nonfatal occupational injuries and illnesses by selected industries and case types, 2008 -- Continued**

**Michigan**

(In thousands)

Industry <sup>1</sup>	NAICS code <sup>2</sup>	2008 Average annual employment <sup>3</sup>	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
				Total	Cases with days away from work <sup>4</sup>	Cases with job transfer or restriction	
<b>Public administration . . . . .</b>		123.7	5.8	3.1	1.9	1.2	2.6
<b>Public administration . . . . .</b>	92	123.7	5.8	3.1	1.9	1.2	2.6

<sup>1</sup> Totals include data for industries not shown separately.

<sup>2</sup> *North American Industry Classification System* -- United States, 2002 Edition

<sup>3</sup> Employment is expressed as an annual average and is derived primarily from the BLS-State Quarterly Census of Employment and Wages.

<sup>4</sup> Days-away-from-work cases include those that result in days away from work with or without job transfer or restriction.

<sup>5</sup> Excludes farms with fewer than 11 employees.

<sup>6</sup> Data for mining (Sector 21 in the *North American Industry Classification System* -- United States, 2002) include establishments not governed by the Mine Safety and Health Administration (MSHA) rules and reporting, such as those in oil and gas extraction and related support activities. Data for mining operators in coal, metal, and nonmetal mining are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries. These data do not reflect the changes the Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable to estimates in other industries.

<sup>7</sup> Data for mining operators in this industry are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor. Independent mining contractors are excluded. These data do not reflect the changes the Occupational Safety and Health Administration made to its recordkeeping requirements effective January 1, 2002; therefore estimates for these industries are not comparable to estimates in other industries.

<sup>8</sup> Data for employers in rail transportation are provided to BLS by the Federal Railroad Administration, U.S. Department of Transportation.

<sup>9</sup> Data too small to be displayed.

NOTE: Because of rounding, components may not add to totals. Dash indicates data do not meet publication guidelines.

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