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June 1, 2010

2010 National Ready Mixed Concrete Association Safety Benchmarking Survey Results

Executive Summary

The National Ready Mixed Concrete Association surveyed member companies to compile the 2010 Safety Benchmarking Survey Report. The report is based on information contained in the OSHA 300A summary log of member companies that responded to the information request. Fifty one (51) member companies collectively reported 25,172,758 million employee hours. (This number of hours equals approximately 12,586 employees working for member companies). The 2009 Survey had forty seven (47) member companies reporting 29.61 million employee hours. This report includes a 3-year average based on all responses since calendar year 2007. Table 6 illustrates the metrics derived from this year’s survey responses, which summarizes calendar year 2009 along with the three year average for 2007, 2008 and 2009.

The companies are divided into three categories based on the number of employee hours: less than 1 million employee hours, 1 - 3 million employee hours and greater than 3 million employee hours. The lost-time incidence rate is termed *days away from work injury and illness (DAFWII)*, and *days away from work and restricted duty/job transfer* are combined to represent the *lost work days injury and illness (LWDII)*. *DAFWII* is a measure of the number of cases that involve days away from work, and *LWDII* includes cases with days away from work plus cases with job transfer, restricted and/or both.

The primary goal of the NRMCA Safety Benchmarking Survey is to ultimately reduce the incident rate in the ready mixed concrete industry. The latest data provided by the Bureau of Labor Statistics (BLS) (as of 1 June 2010) indicates that the ready mixed concrete industries overall incident rate at 5.2. Table 1 illustrates previous years for comparison:

Table 1 BLS Incident rate data for previous years

Year	2003	2004	2005	2006	2007	2008
BLS Incident Rate	6.8	7.2	7.5	6.4	5.7	5.2

Overall, the data shows a downward trend as the industry continues to stress safe and healthy workplaces along with the added emphasis on training and education. NRMCA, for example, conducts safety courses, safety webinars and is constantly publishing updated safety related training materials.

Collectively companies reported thirteen (13) illnesses, with the largest category being ‘hearing loss’ cases, which accounted for seven (7) illnesses. The combined industry severity rate (SR) was 64.82, which is an increase from last year’s survey (SR=57.7), indicating that injuries and illnesses required more time away from work in 2009 than in the prior year. This means that an average of 64.82 lost days occurred as a result of injury or illness in calendar year 2009 for every one hundred employees.

The most common types of injury are:

- slips, trips and falls
- strains and sprains
- being struck by an object.

Mixer accidents that meet the definition of DOT recordable accidents are also tracked. The definition of a DOT Recordable Accident is an occurrence involving a commercial motor vehicle on a public road in intrastate or interstate commerce, which results in:

- 1) a fatality;
- 2) injury to a person requiring immediate treatment away from the scene of the accident; or
- 3) disabling damage to a vehicle, requiring it to be towed.

Table 2 Mixer Truck Accident data for previous years

Year	2003	2004	2005	2006	2007	2008	2009
# Mixer Truck Accidents	105	181	290	291	133	87	86

This also shows a general downward trend for the past couple of years.

Definitions of terms used in tables

(All rates are based on incidents per 200,000 employee hours)

- The **total case incidence rate (TCIR)** represents the number of lost day injuries/illnesses, restricted duty day injuries/illnesses and medical case injuries/illnesses.
- The **days away from work injury/illness incidence rate (DAFWII)** illustrates the number of injuries/illnesses that result in the employee being away from work for one or more full day(s) of work.
- The **lost work days injury/illness incidence rate (LWDII)** shows the number of injuries/illnesses that result in either lost days, restricted duty days, or both.
- The **medical case incidence rate** is a measure of incidents where employees seek professional medical treatment and miss no work days and have no restricted duty days.

The following formula is used to arrive at **incidence rates**.

$$\frac{(Number\ of\ Incidents)(200,000)}{Number\ of\ Employee\ Hours}$$

The following formula is used to arrive at **severity rates**.

$$\frac{(Number\ of\ lost\ work\ days)(200,000)}{Number\ of\ Employee\ Hours}$$

Discussion of rates of companies reporting greater than 3 million hours

Zero (0) companies reported working greater than 3 million hours. During the 2009 survey, two (2) companies reported 7,017,176 employee hours. Companies will re-enter this category as the economy improves.

Table 3 Data for companies reporting greater than 3 million employee hours

Employee Hours	Total Injuries/Illnesses	Lost Work days Injuries/Illnesses	Lost Work days/Restricted duty days Injuries/Illnesses	TCIR	DAWFII	LWDII	Medical Case Incidence Rate	Severity Rate
0	0	0	0	0	0	0	0	0

Discussion of rates of companies reporting 1 – 3 million hours

Eight (8) companies reported more than one million employee hours but less than 3 million hours. There were 63 injuries/illnesses that incurred days away from work that resulted in 3,141 days lost. 129 cases resulted in the employee being either transferred to another job or on restricted duty. There were 99 incidents that required professional medical treatment but incurred no time away from work.

Table 4 Data for companies reporting 1 – 3 million employee hours

Employee Hours	Total Injuries/Illnesses	Lost Work days Injuries/Illnesses	Lost Work days/Restricted duty days Injuries/Illnesses	TCIR	DAWFII	LWDII	Medical Case Incidence Rate	Severity Rate
14,342,138	291	63	129	4.06	1.80	.88	1.38	43.80

Discussion of rates of companies reporting less than 1 million hours

Forty three (43) companies reported 10,830,620 employee hours. This group represents the largest category of respondents. There were 108 cases that incurred lost days that resulted in 5,018 days away from work. 85 incidents resulted in job transfer or restricted duty. There were 113 medical cases with no lost work days.

Table 5 Data for companies reporting less than 1 million employee hours

Employee Hours	Total Injuries/Illnesses	Lost Work days Injuries/Illnesses	Lost Work days/Restricted duty days Injuries/Illnesses	TCIR	DAFWII	LWDII	Medical Case Incidence Rate	Severity Rate
10,830,620	306	108	85	5.67	1.57	1.95	2.09	92.66

Number of Employee Hours	Category by Company Size	Number of Injuries/Illnesses	Number of Lost Workdays	Number of Lost Workday Injuries/Illnesses ¹	Number of Lost Workday and Restricted Duty Injuries/Illnesses ²	Total Case Incidence Rate (TCIR) ³	DAFWII ⁴	LWDII ⁵	Medical Case Incidence Rate ⁶	Severity Rate
25,172,758	All Industry Data	597	8,159	171	385	4.75	1.70	1.36	1.68	64.82
10,830,620	Less than 1 Million Employee Hours	306	5,018	108	193	5.67	1.57	1.99	2.09	92.66
14,342,138	1 – 3 Million Employee Hours	291	3,141	63	192	4.06	1.80	.88	1.38	43.80
0	Greater than 3 Million Employee Hours	0	0	0	0	0	0	0	0	0
Not available	<i>BLS Statistical Data for NACIS 32732 in 2008</i>	Not available	Not available	Not available	Not available	5.2	1.3	2.2	1.8	Not available
70,745,914	<i>All Industry Data – CY 2007, 2008, 2009</i>	1,927	23,661	593	873	5.47	2.46	1.68	1.76	66.89

Table 6 – All Industry Data 2009

¹ Lost work day injuries and illnesses are those cases where the individual employee was away from work for one day or more excluding the day of injury.

² Restricted duty injuries/illnesses occur when an employee cannot perform his/her normal work activities for one day or more excluding the day of injury.

³ The total case incidence rate is calculated by summing fatalities, lost day injuries/illnesses, restricted duty injuries/illnesses and medical cases, multiplying by 200,000, and then dividing by employee hours for the period of time, in this case for calendar year 2009.

⁴ DAFWII = (#cases with days away from work)(200,000)/employee hours in calendar year 2009.

⁵ LWDII = (#cases with days away from work plus those with job transfer, restricted duty, or both)(200,000)/employee hours in calendar year 2009

⁶ Medical Case Incidence Rate = (# of cases that required professional medical attention with no lost days or restricted duty)(200,000)

Employee hours, in this case for calendar year 2009