

SMACNA SAFETY PROFILE 2012

Performance and Characteristics

July 2012

Introduction

Each year SMACNA conducts a Safety Awards Program to recognize SMACNA members with the lowest injury/illness rates in the prior calendar year. Awards are presented to participating contractors with the lowest injury/illness incidence rate (as computed using the OSHA incident rate formula). There are various award categories based upon a contractor's hours worked.

Information submitted for the contest provides a rich database for evaluating sheet metal industry safety performance. Findings are summarized in this report. In addition, contractors participating in the awards contest are provided with information to permit them to compare their own safety performance with other similar size contractors and those performing similar types of work.

The Safety Awards Program also profiles many aspects of SMACNA members' safety efforts. Information has been gathered on the prevalence and characteristics of safety programs and training and their impact on contractor safety performance. Some trend data are included. Particular attention is given to drug and alcohol abuse programs.

Summary of Findings

Safety performance for SMACNA contractors was superior in the following areas:

The OSHA incident rate was the lowest in at least the past 10 years at 3.11.

The average lost workdays per incident was the lowest since at least 2002 at 61 days.

Practically all contractors have a safety and health program, conduct safety inspections, and use toolbox talks/videos.

A strong majority of contractors conduct safety training at least weekly.

No sector had an incident rate above 4.0. Only three sectors were above 3.0.

The average EMR was .82, the second lowest score since at least 2003.

Other notable findings include:

Last year the number of participating companies was 350, the second highest number since 2002. For 2011 the number was 247.

The number of reported hours of work was nearly 59 million.

The prevalence of drug and alcohol abuse programs declined by 12 percent to 82 percent.

Use of SMOHIT safety products declined by 14 percent to 54 percent.

The OSHA incident rate generally declined as hours worked increased.

SMACNA Safety Summary

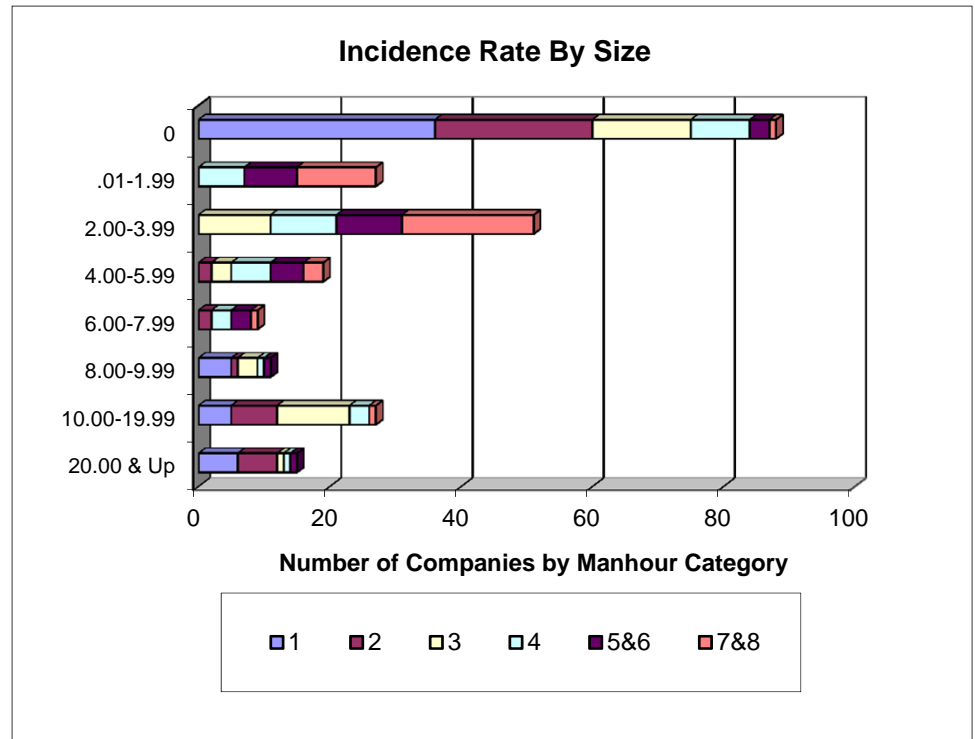
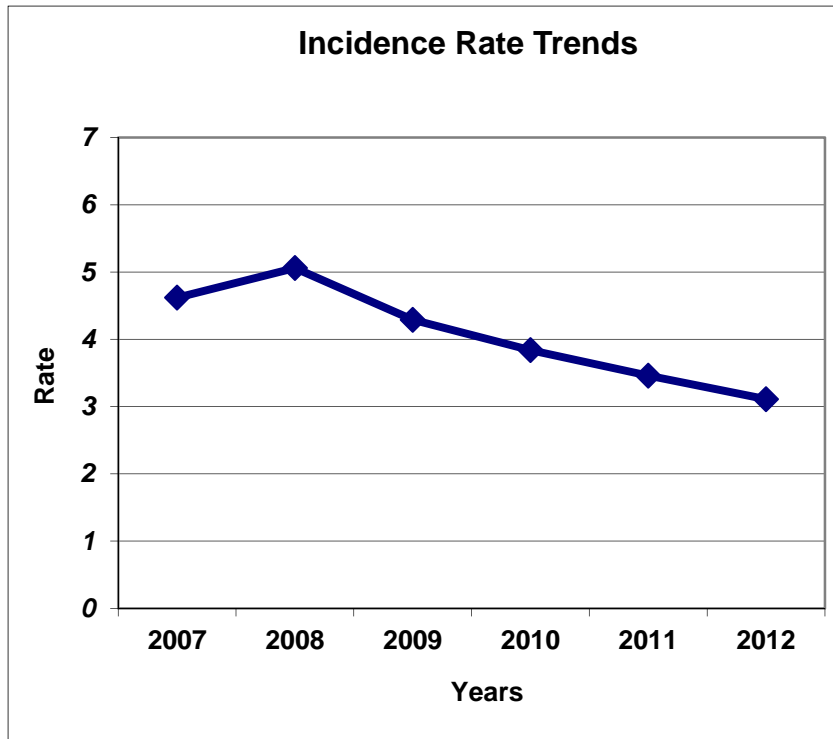
Class Size	Reports	Hours	Number of Incidents	Incidence Rate
1	52	749,547	24	6.40
2	42	1,449,470	47	6.49
3	44	3,106,524	93	5.99
4	40	5,627,657	112	3.98
5	17	4,286,495	75	3.50
6	14	5,023,405	92	3.66
7	8	3,462,052	52	3.00
8	30	35,011,278	417	2.38
Grand Total	247	58,716,428	912	3.11

Class Size

- 1 1-25,000 hours
- 2 25,001-50,000 hrs.
- 3 50,001-100,000 hrs.
- 4 100,001-200,000 hrs.
- 5 200,001 - 300,000 hrs.
- 6 300,001-400,000 hrs.
- 7 400,001-500,000 hrs.
- 8 Over 500,000 hrs.

The most noteworthy result is that the incidence rate fell again in 2011, to 3.11. This is an improvement over last year's rate of 3.46.

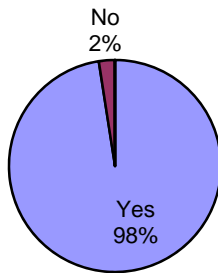
There were 247 participants in the *2012 SMACNA Safety Excellence Awards Program Survey*. These companies worked nearly 59 million hours in 2011. The largest number of respondents, 52 (21 percent) was from small contractors who work 25,000 hours or less (class size 1). However, over half of the hours (60 percent) were worked by companies with over 500,000 hours (class size 8). Nearly three fourths (71 percent) of the respondents had a zero incidence rate.



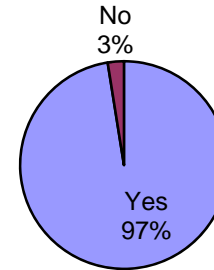
The average OSHA incidence rate fell to 3.11 in 2011, its lowest level in over a decade. Since 2002, the incidence rate increased over the previous year four times and decreased six times. As a reminder, OSHA incidence rate is a measure of frequency and does not necessarily reflect the severity of the cases (i.e., days away from work or restricted duty). There were 421 lost workday cases. Lost workday cases are a better measure of severity.

Zero was the most common incidence rate reported by far, consistent with past years. The remaining incidence rates were spread throughout the range of reported values.

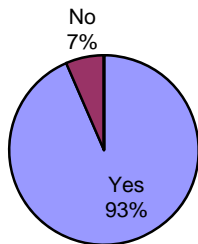
Safety and Health Program



Conduct Safety Inspections

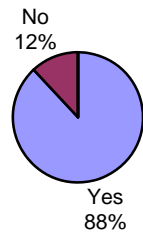


Designated Safety Coordinator

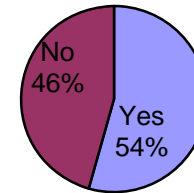


Nearly all companies have a written safety and health program, conduct safety inspections and have a designated safety coordinator. Those who do not have these safety program features typically are small companies. The safety coordinator is a full-time employee in 64 percent of the companies participating in the survey. These results are very consistent with last year's results.

Use Safety Products & Services from SMACNA

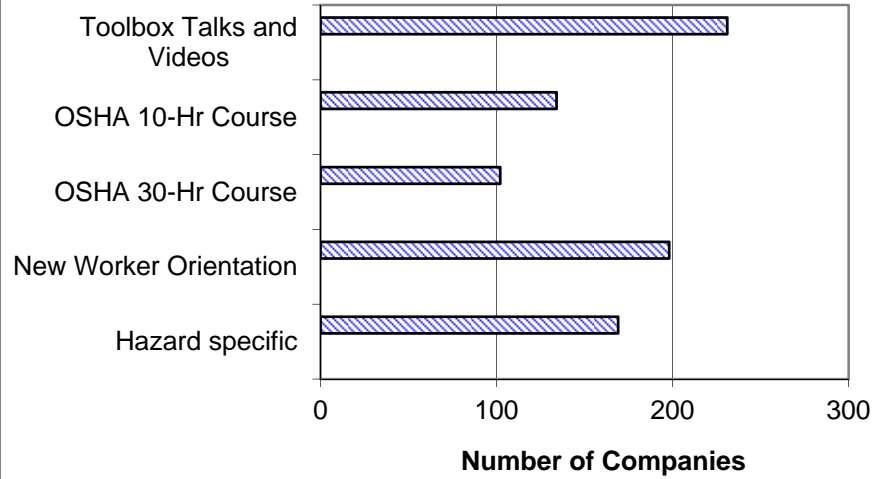


Use SMOHIT Safety Products

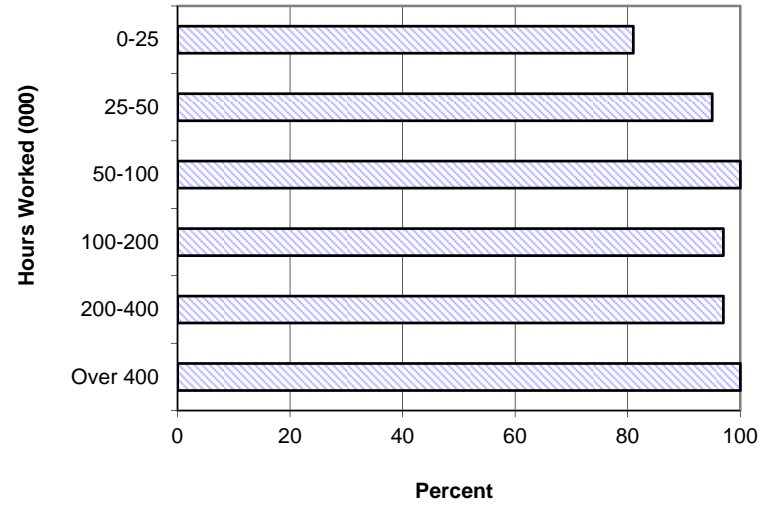


Most contractors use SMACNA's safety products and services, however, the percent that use SMOHIT safety products declined noticeably, from 68 percent in 2010 to 54 percent in 2011. Changes in the survey sample may account for some of the changes in the results from year to year.

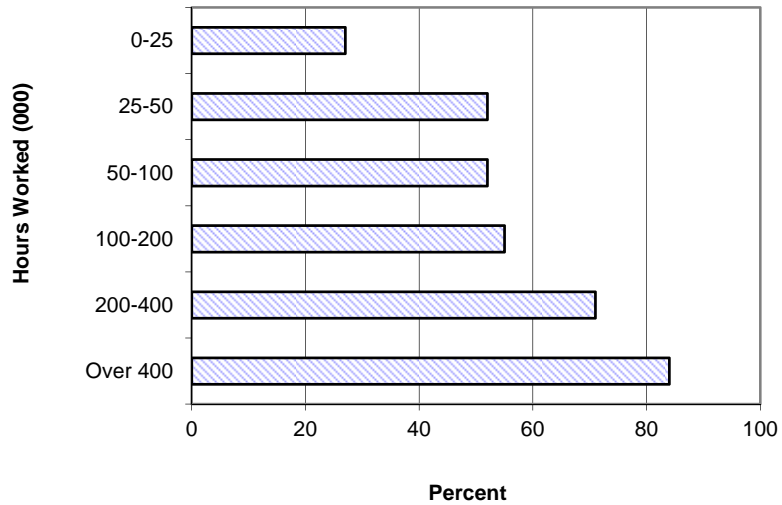
Type of Safety Training



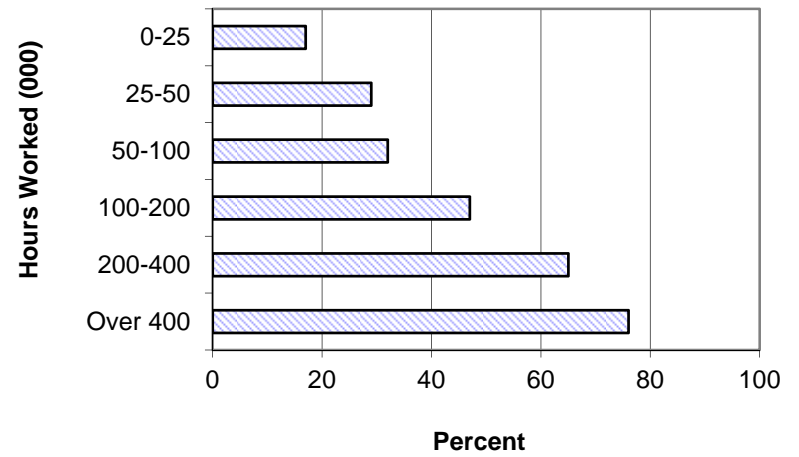
Toolbox Talks and Videos

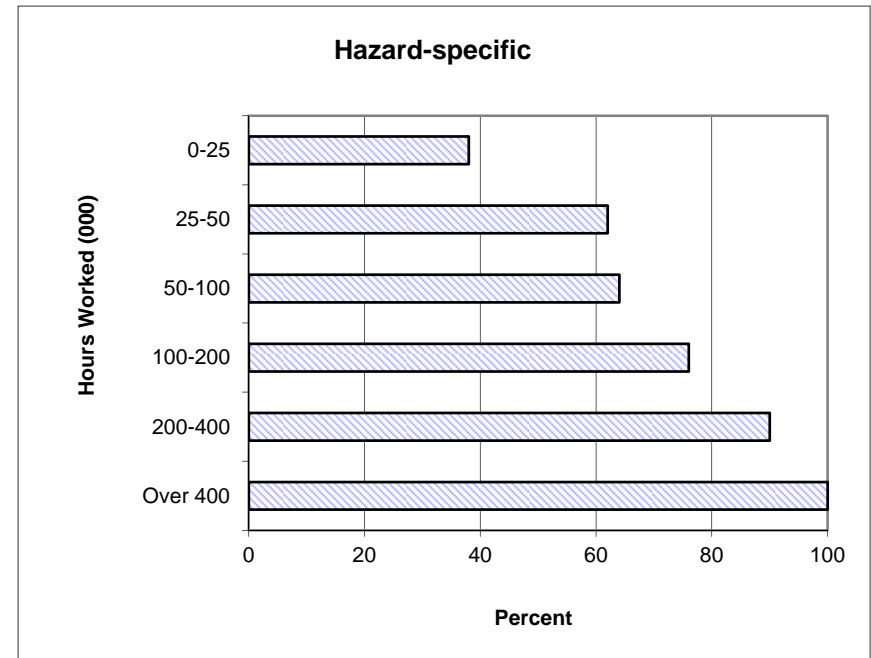
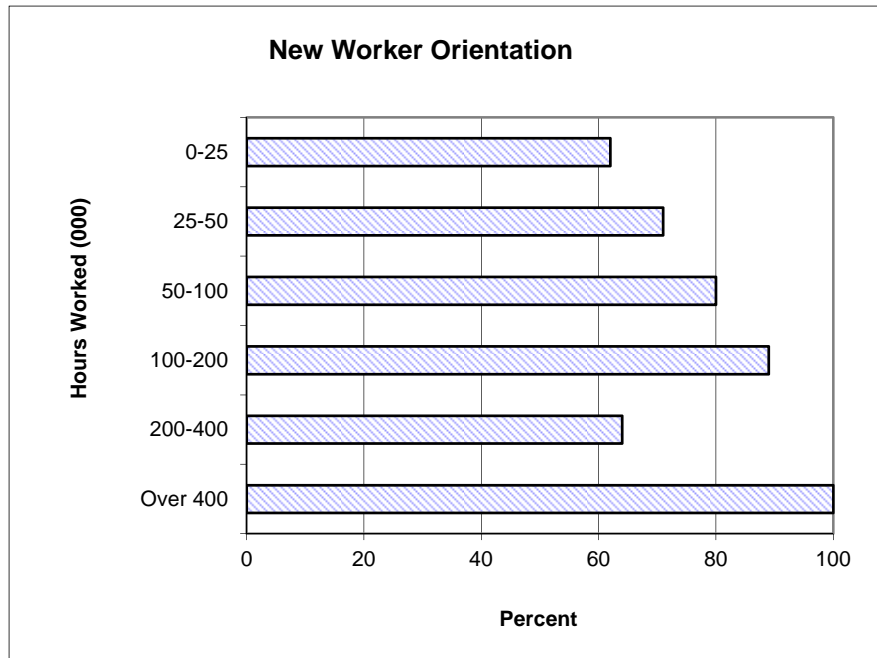


OSHA 10-Hour Course



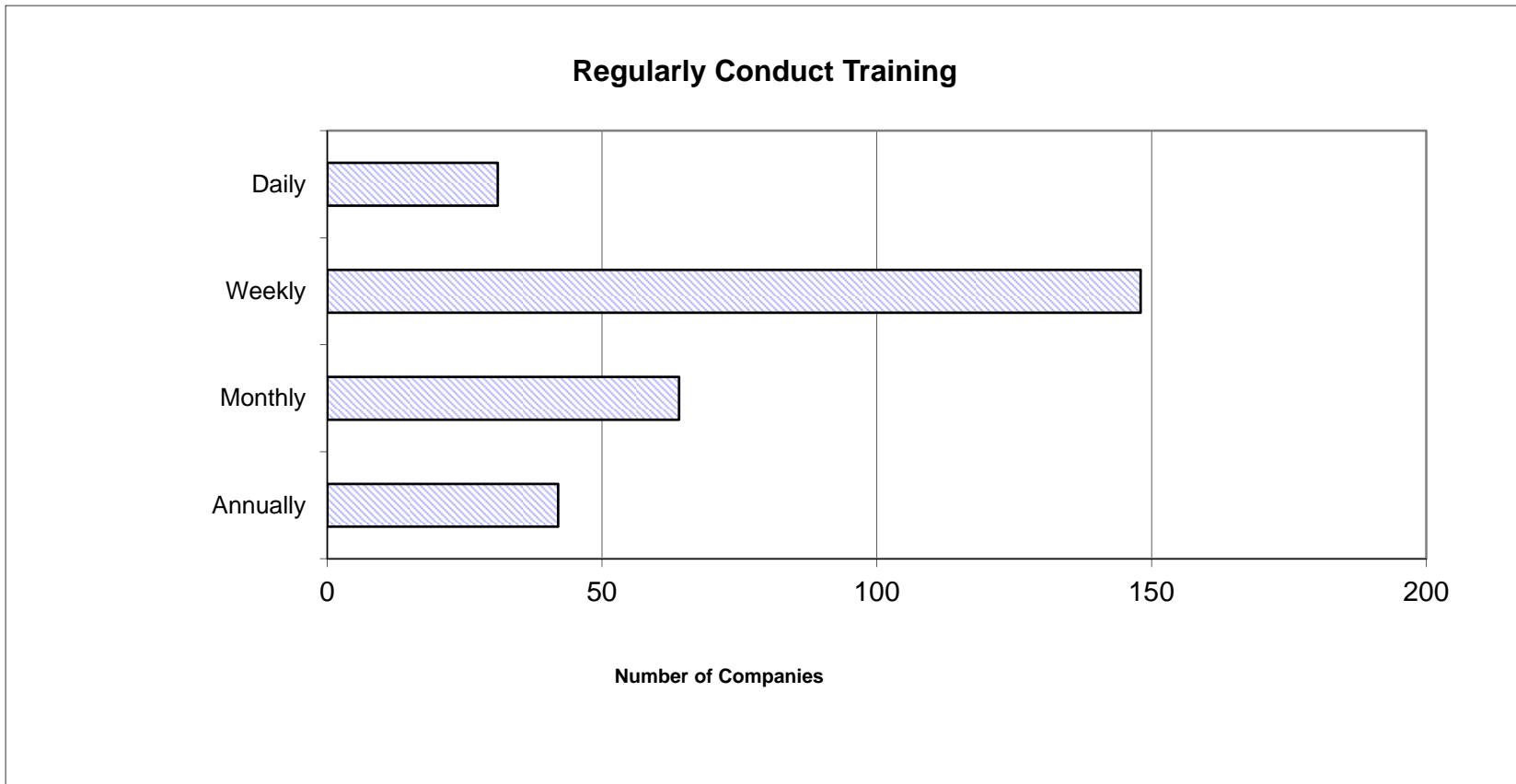
OSHA 30-Hour Course



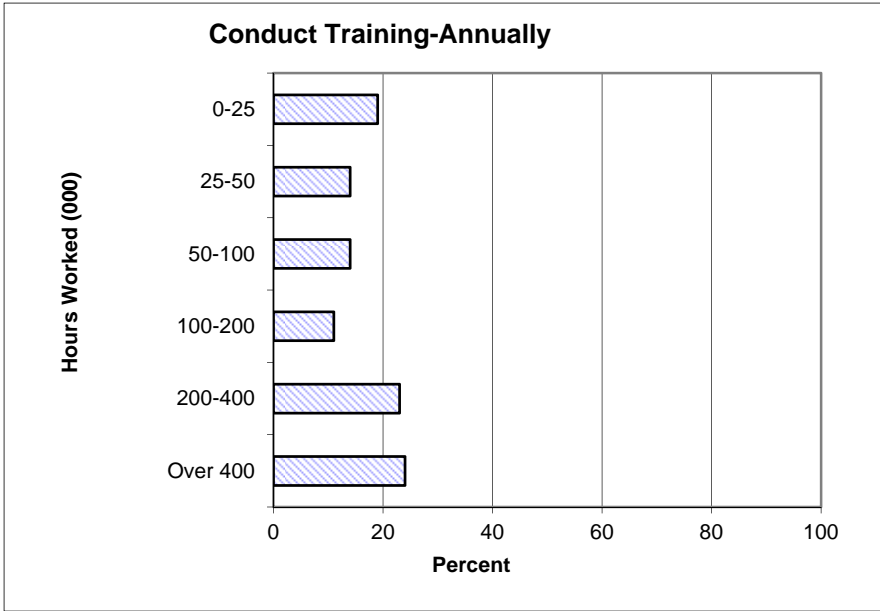
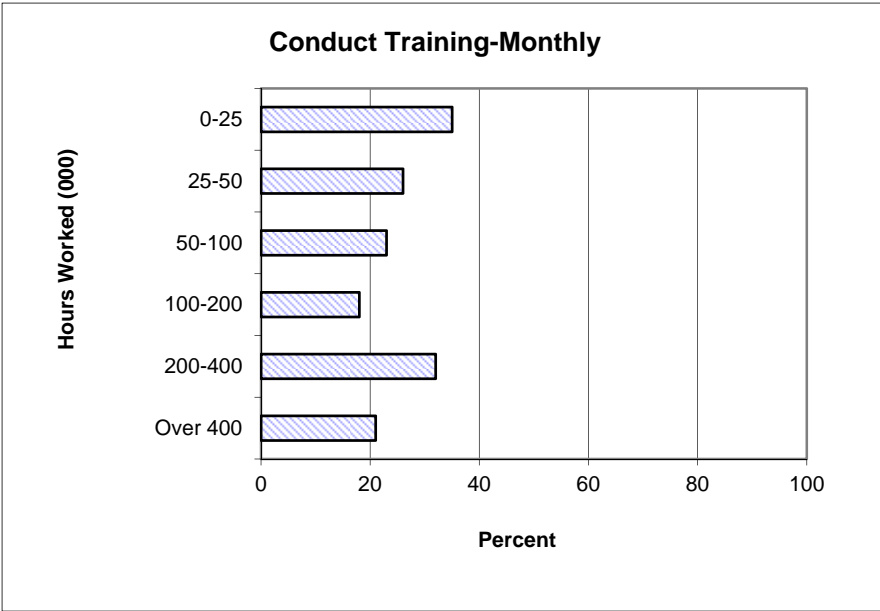
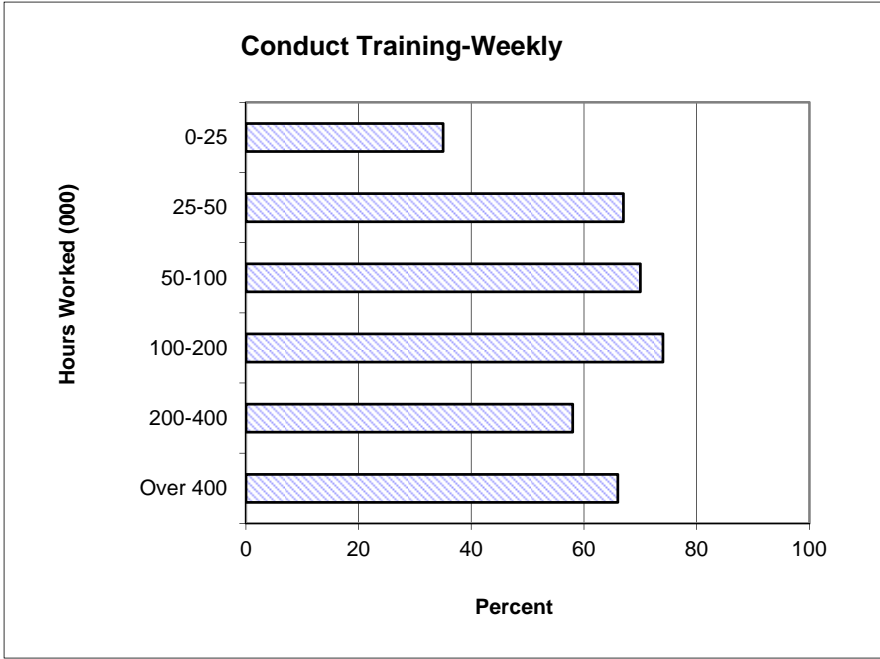
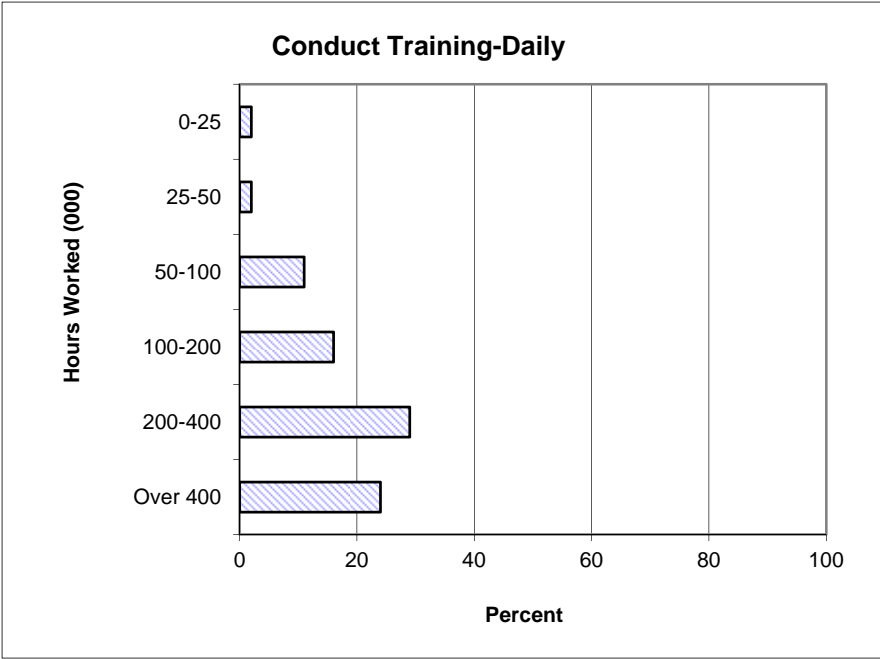


Contractors used a variety of training methods. Last year an additional response option, the OSHA 30-Hour Course, was added to the survey. This course was used by 41 percent of the respondents both last year and this year.

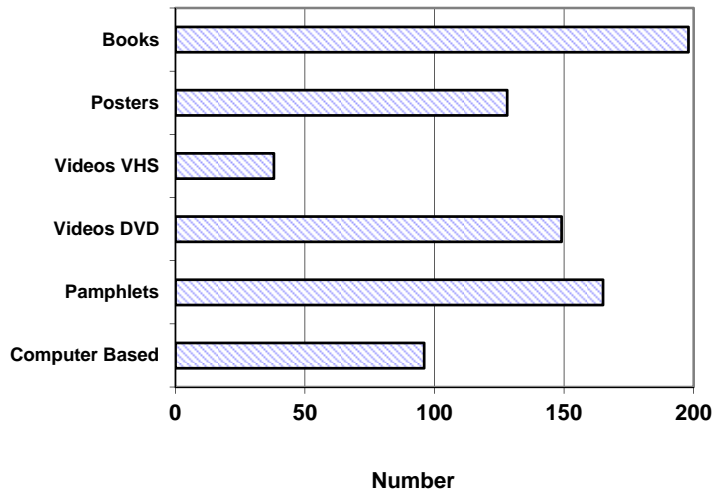
The pattern of usage was similar to 2010. Toolbox talks and videos again were the most popular types of safety training. For the most part, as contractors get larger, the percent using the various training methods increases. For example, 27 percent of the smallest companies (up to 25,000 hours) utilized OSHA 10-hour courses while 84 percent of the largest contractors (over 400,000 hours) used this course.



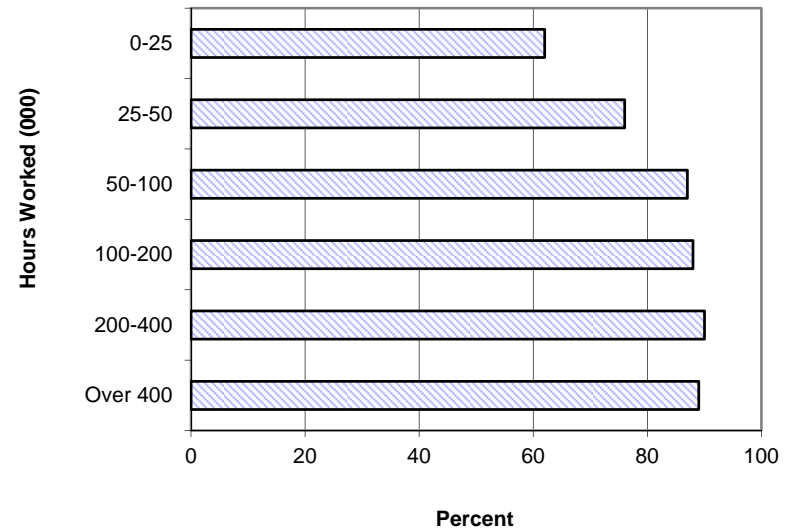
As shown by the bar chart above, the most common training frequency was weekly, with nearly 150 of the 247 respondents selecting this option. Nearly 75 percent (72 percent) of the contractors conduct safety training once a week or more.



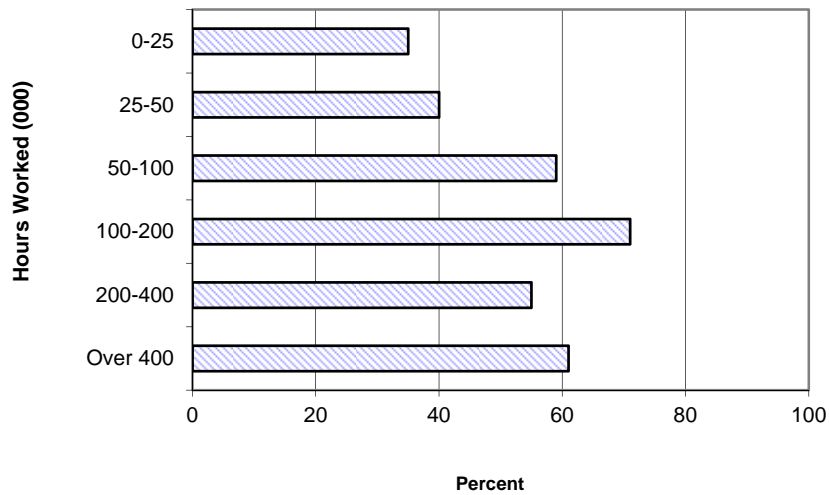
Types of Training Materials Used



Safety Training Materials-Books/Manuals



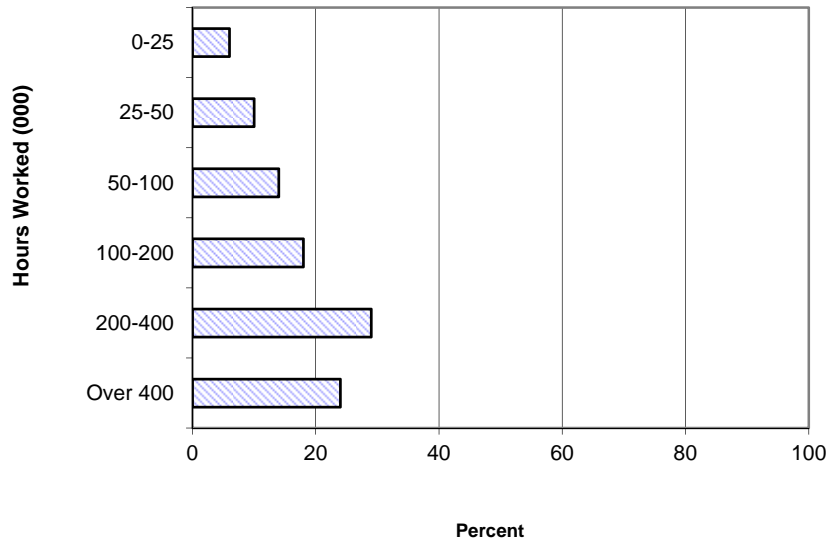
Safety Training Materials-Posters



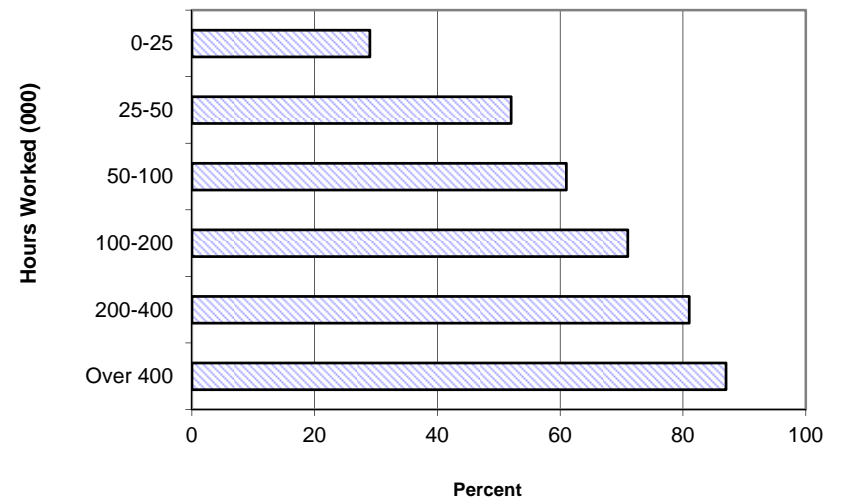
Generally, smaller companies conduct safety training less frequently than larger companies. To illustrate, just 2 percent of the companies with 50,000 or fewer hours conducted safety training daily but 31 percent of these small contractors conduct it monthly. For large contractors, safety training is conducted both daily and monthly in 26 percent of the companies.

Books are the most common type of training material, followed by pamphlets and DVD's. As would be expected, VHS videos are the least common type of training material used. There is a strong positive correlation between the use of computer-based training and organization size. In other words, larger contractors tend to use computer-based training more than smaller contractors.

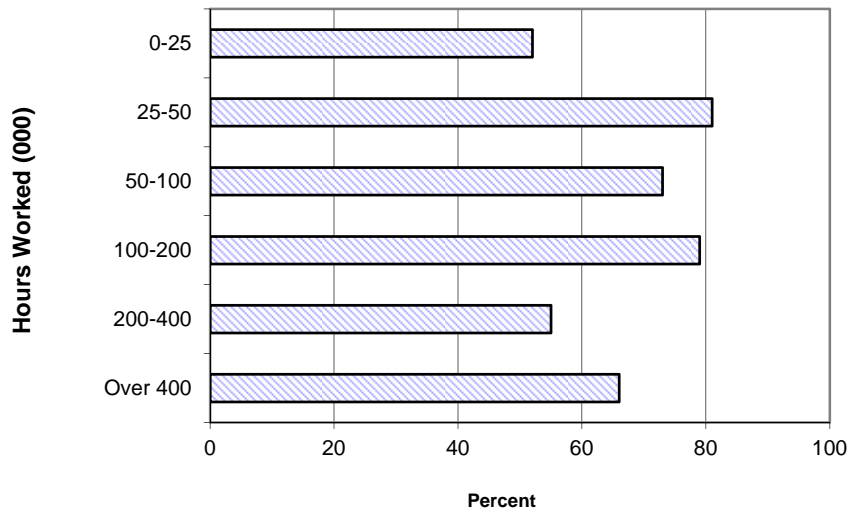
Safety Training Materials-VHS



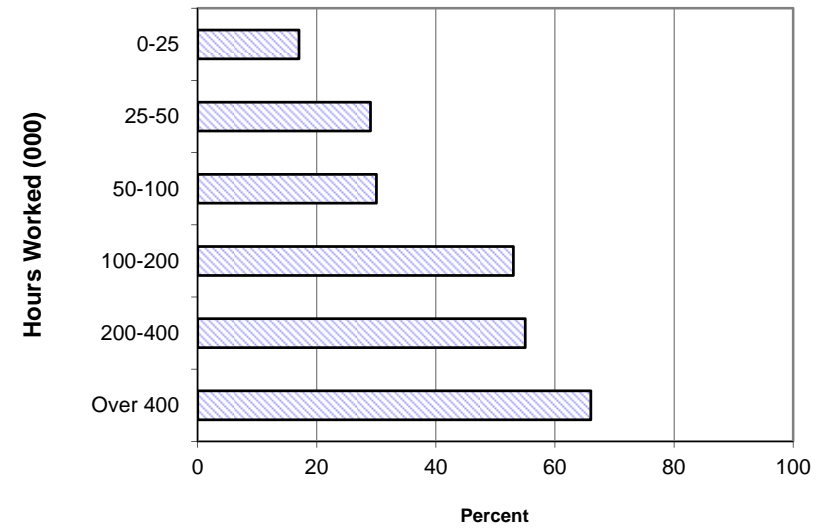
Safety Training Materials-Videos DVD

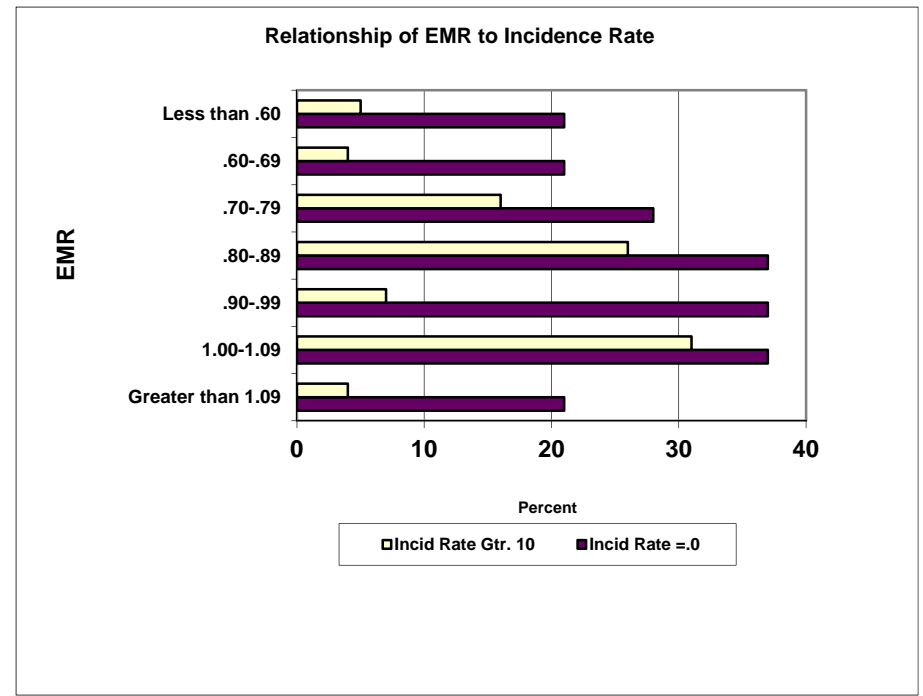
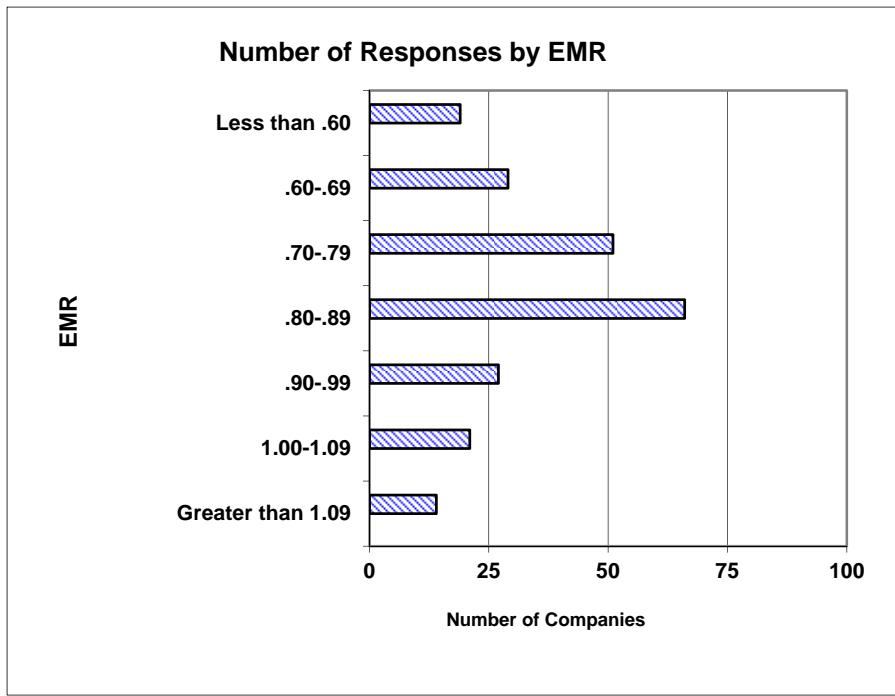


Safety Training Materials-Pamphlets



Safety Training Materials-Computer Based Training





About 85 percent of the contractors had an experience modification rate (EMR) less than 1.0. An EMR in the 0.80 – 0.89 range was most common, followed by the 0.70 – 0.79 range. There was little, if any, relationship between EMR and OSHA incidence rates.

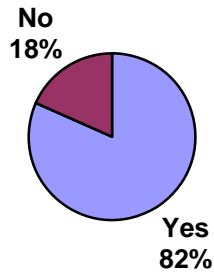
As shown in the Relationship of EMR to Incidence Rate chart, the percent of contractors with a 0.00 incidence rate was higher for all EMR scores than the percent of contractors with an incidence rate greater than 10. In other words, a zero incidence rate is much more common than a large incident rate, regardless of the EMR score.

Industry Segment Safety

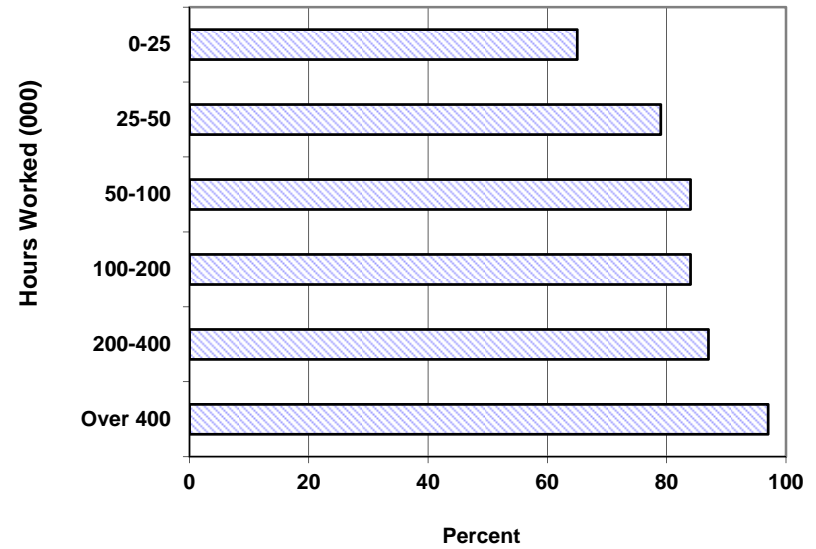
	Number	Hours	Incidents	Incident Rate
Commercial HVAC	107	16,237,187	242	2.98
Residential HVAC	28	403,013	4	1.99
Architectural Sheet Metal	44	952,525	12	2.61
Industrial Sheet Metal	87	7,028,535	112	3.19
Kitchen Equipment/Food Svs.	20	170,165	3	3.36
Manufacturing	32	636,609	12	3.67
Testing and Balancing	40	514,177	6	2.17
Siding and Decking	13	289,554	3	2.13

This table shows the number of contractors in each industry segment, along with the hours, number of incidents and incident rate. Commercial HVAC was easily the largest category for hours worked and kitchen equipment/food services was the smallest. The highest incident rate was for manufacturing work; last year the highest rate was for architectural sheet metal work. Residential HVAC had the lowest incident rate in 2011, just like it did in 2010.

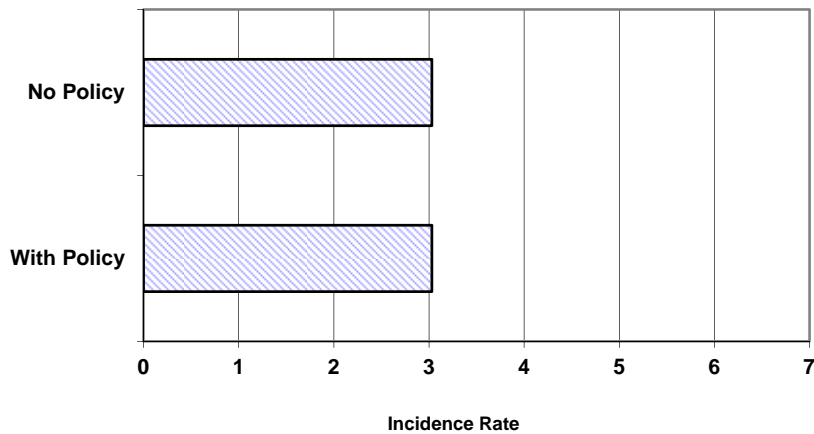
Formal Program for Drug and Alcohol Abuse



Formal Program for Drug and Alcohol Abuse



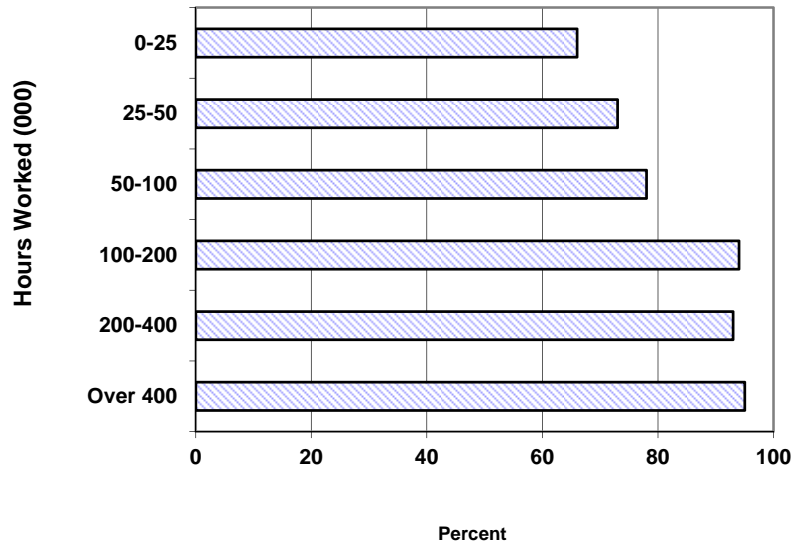
Incidence Rate by Drug Policy



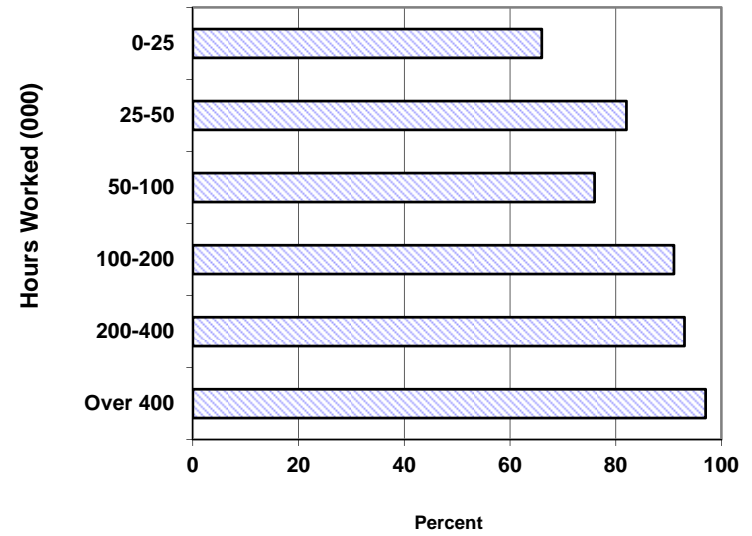
Although a large percent of survey participants in 2011 had a formal program for drug and alcohol abuse (82 percent), this is 12 percent lower than in 2010 (94 percent). Changes in the survey sample may account for some of the changes in findings from year to year.

As with other safety and drug questions, contractor size was correlated with program prevalence. In the chart above, the larger the contractor, the more likely they were to have a formal drug and alcohol abuse program.

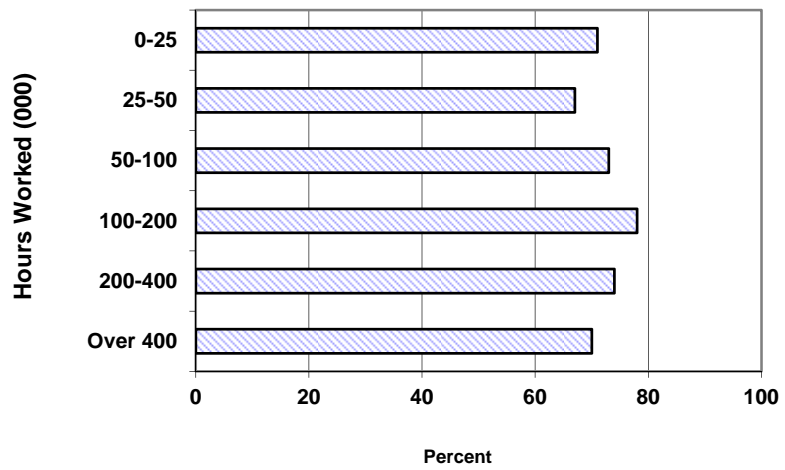
Pre-Hire Testing Conducted



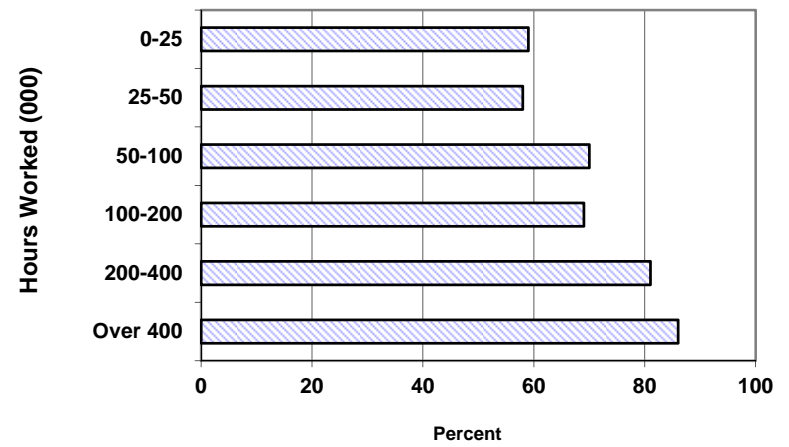
Post Accident Testing Conducted

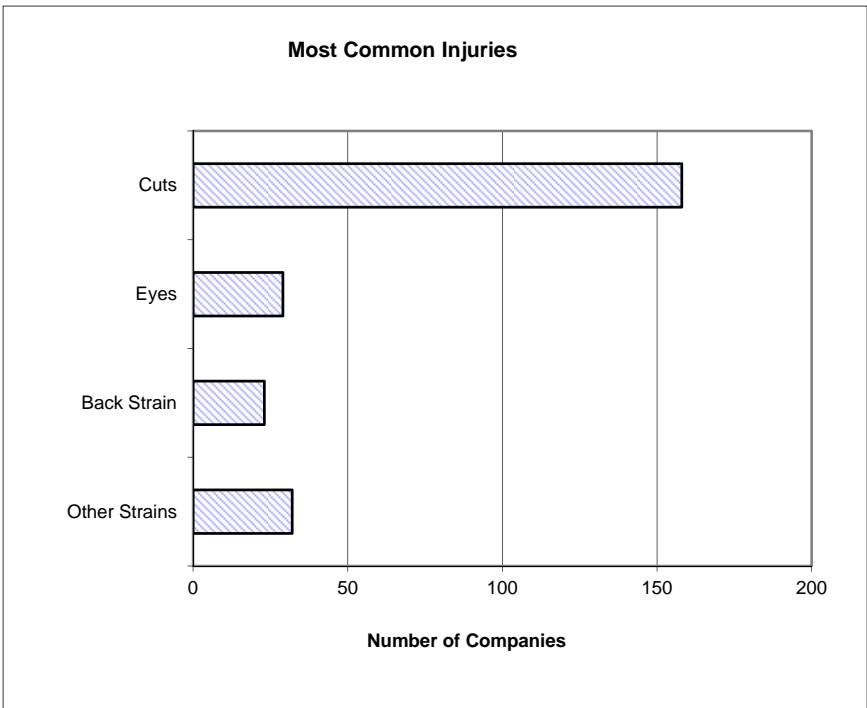
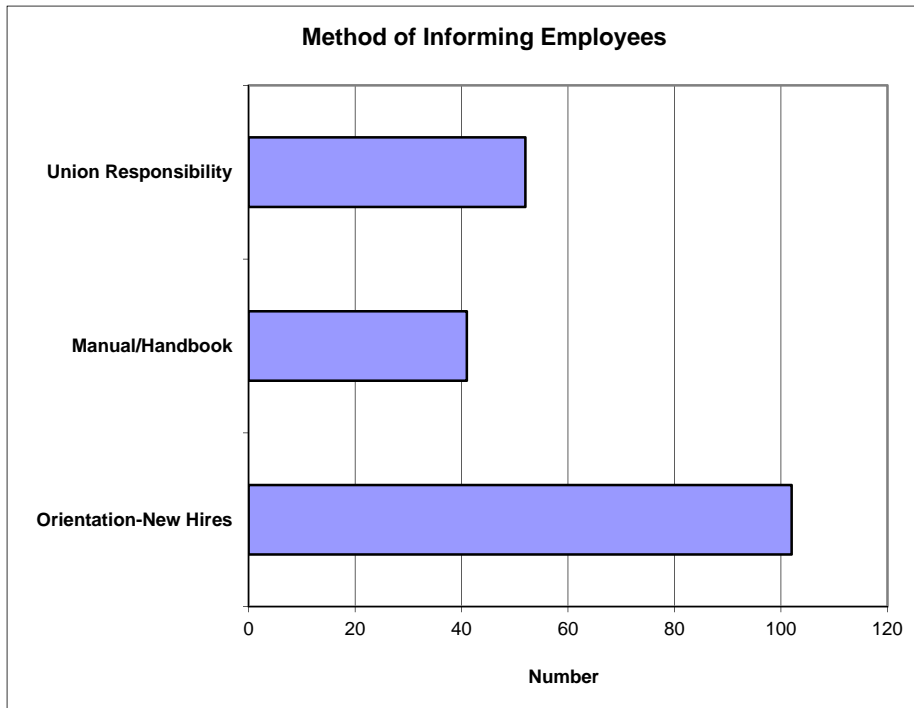


Random Testing Conducted



Penalties





Contractors primarily use three methods of informing their employees about their drug and alcohol abuse policies: the union, manuals/handbooks, and new hire orientation. New hire orientation is the most common method.

The most common injury again for 2011 was cuts. Injuries involving the eyes, back strain and other strains were about equal in prevalence.

SMACNA Safety Trends

	<u>2003</u>	<u>2004</u> ^{1/}	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Incidents	1,197	1,429	1,494	1,446	1,339	1,210	1,724	1,687	1,192	912
Incidence Rate	4.61	5.52	5.06	5.21	4.62	5.06	4.29	3.84	3.46	3.11
Lost Workdays	25,591	26,086	27,605	24,371	20,547	19,467	30,712	25,785	22,311	15,316
Average Lost Workdays	145	168	160	82	84	92	101	70	63	61
Reported Hours (millions)	52.0	51.8	59.0	56.0	57.9	47.8	80.3	87.8	68.9	58.7
Safety & Health Program	92%	93%	93%	96%	98%	95%	95%	96%	98%	98%
Designated Safety Coord.	91%	87%	93%	97%	96%	95%	94%	97%	93%	93%
SMACNA Products	88%	83%	82%	84%	87%	87%	86%	88%	87%	88%
SMOHIT Safety Products			28%	37%	45%	51%	55%	67%	68%	54%
EMR	0.86	0.85	0.85	0.85	0.83	0.79	0.84	0.83	0.82	0.82
Drug Program	67%	76%	74%	78%	84%	82%	87%	88%	94%	82%
Number of Companies	296	252	283	298	243	212	304	377	350	247

^{1/} Data beginning in 2004 are not totally comparable to previous years due to significant changes in OSHA record keeping

SMACNA Safety Performance

Selected Issues

	<u>2012</u>		<u>2011</u>	
	All <u>Respondents</u>	Superior <u>Performers</u>	All <u>Respondents</u>	Superior <u>Performers</u>
Use SMACNA Safety Products	88%	86%	87%	81%
Have a Formal Drug Policy	82%	92%	94%	81%
Provide New Worker Orientation	81%	92%	80%	88%
Utilize OSHA 10 Hr. Training	55%	75%	73%	62%
Utilize OSHA 30 Hr. Training	42%	56%	31%	46%
Utilize Computer Based Training	39%	50%	40%	42%
Average EMR	0.82	0.73	0.82	0.67
Average Incidence Rate	3.11	0.93	3.46	0.86

This table compares superior performers to the total sample for calendar year 2011 and 2010. For the purposes of this table, a superior performing contractor is one who worked over 100,000 hours and achieved a OSHA incidence rate of below 2.00.

Those contractors who met the criteria for superior performers exhibited better performance in most of the categories listed such as new worker orientation, OSHA 30-hour training, and computer based training. In other words, it appears that those companies that put the greatest effort into safety promotion see the best results with lower incidence rates and EMR results.