

# SMACNA SAFETY PROFILE 2013

## Performance and Characteristics

July 2013

## INTRODUCTION

Each year SMACNA conducts a Safety Awards Program to recognize SMACNA members with the lowest injury/illness rates during 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 11 years at 2.52.

The average number of lost workdays was the lowest since at least 2002 at 61 days.

Nearly 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.

Only one sector had an incident rate above 4.0, Residential HVAC, and only one other sector was above 3.0, Siding and Decking

The average EMR was 0.82, the lowest score since at least 2003.

### **Other notable findings include:**

There were 217 participants.

The number of reported hours of work was over 71 million, an increase of 20 percent from last year.

The prevalence of formal drug and alcohol abuse programs declined by 16 percent from two years ago to 78 percent in 2012.

Use of SMOHIT safety products increased by six percent to 60 percent.

The OSHA incident rate generally declined as contractor hours worked increased.

**SMACNA Safety Summary**

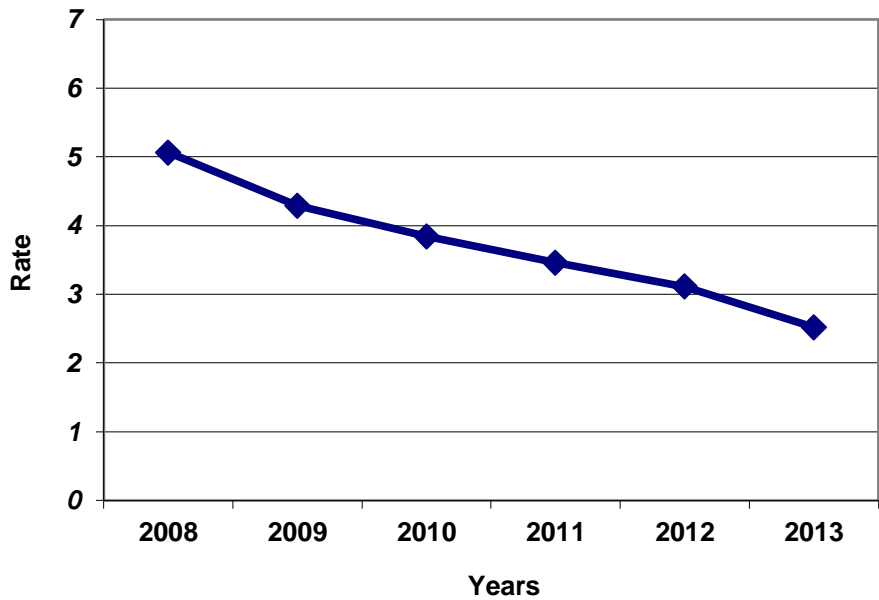
<b>Class Size</b>	<b>Reports</b>	<b>Hours</b>	<b>Number of Incidents</b>	<b>Incidence Rate</b>
1	38	551,199	15	5.44
2	29	1,084,920	26	4.79
3	31	2,126,660	42	6.95
4	35	4,963,516	105	4.23
5	22	5,487,587	71	2.59
6	14	4,673,946	52	2.23
7	15	6,969,138	107	3.07
8	33	45,765,728	484	2.12
<b>Grand Total</b>	<b>217</b>	<b>71,622,694</b>	<b>902</b>	<b>2.52</b>

- 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.

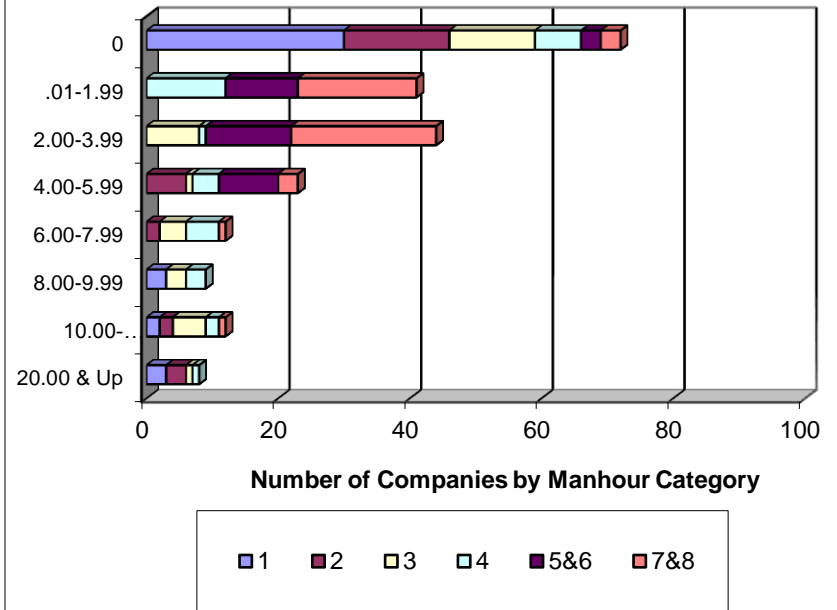
Once again, the incidence rate fell. In 2012 it was 2.52, a significant drop from the previous year’s rate of 3.11.

There were 217 participants in the *2013 SMACNA Safety Excellence Awards Program Survey*. These companies worked over 71 million hours in 2012, a large jump from the 59 million hours reported last year in this report. The largest number of respondents, 38 (18 percent), was from small contractors who work 25,000 hours or less (class size 1). However, over half of the hours (64 percent) were worked by companies with over 500,000 hours (class size 8). One third of the respondents had a zero incidence rate.

**Incidence Rate Trend**



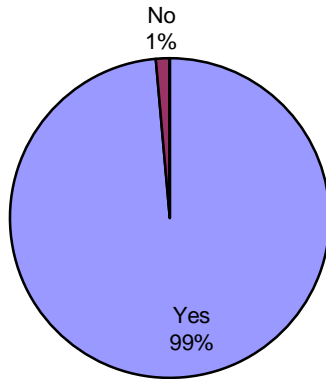
**Incidence Rate By Size**



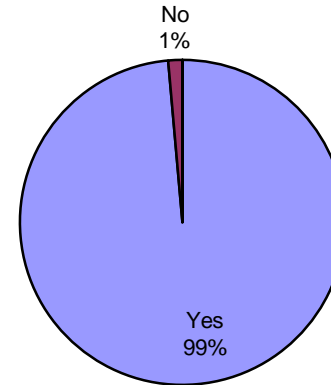
The average OSHA incidence rate fell to 2.52 in 2012, its lowest level in over a decade. Since 2000, the incidence rate increased over the previous year four times and decreased nine times. As a reminder, OSHA incidence rate is a measure of frequency and does not necessarily reflect the severity of the cases (i.e., days away from work or restricted duty). There were 533 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.

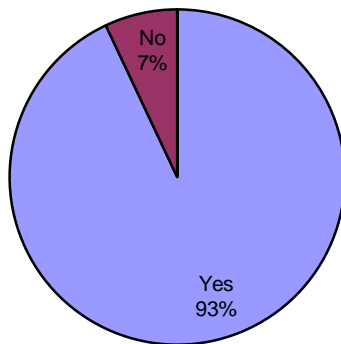
### Safety and Health Program



### Conduct Safety Inspections

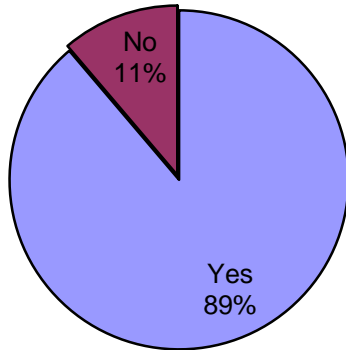


### Designated Safety Coordinator

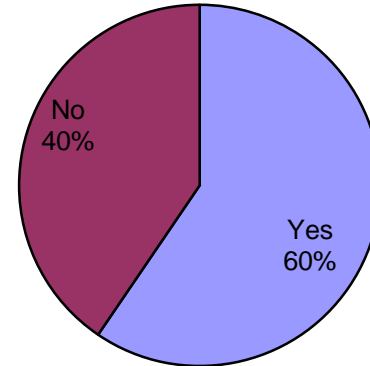


Nearly all companies have a written safety and health program, conduct safety inspections and have a designated safety coordinator. Those who do not have these safety program features typically are smaller companies. The safety coordinator is a full-time employee in 69 percent of the companies participating in the survey, up from 64 percent last year. Overall, these results are very consistent with last year's results.

### Use Safety Products & Services from SMACNA

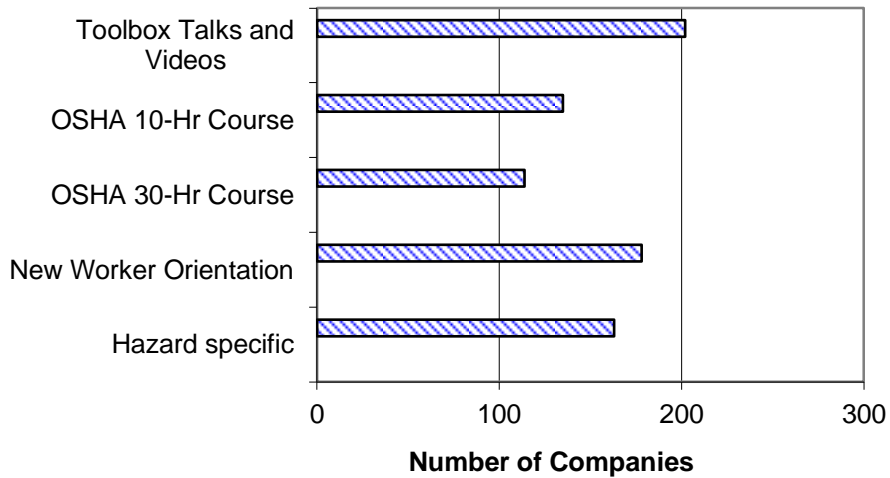


### Use SMOHIT Safety Products

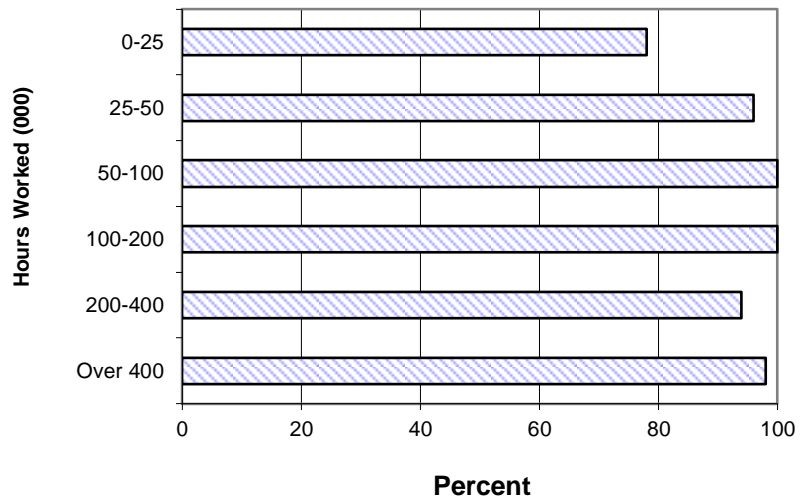


Most contractors use SMACNA’s safety products and services, 89 percent to be exact. After a decline in 2011, the percent that use SMOHIT safety products increased from 54 percent to 60 percent in 2012. Like most results published in this report, this change may be due to an actual change in the percent of contractors using SMOHIT safety products or due to changes in the composition of the survey sample.

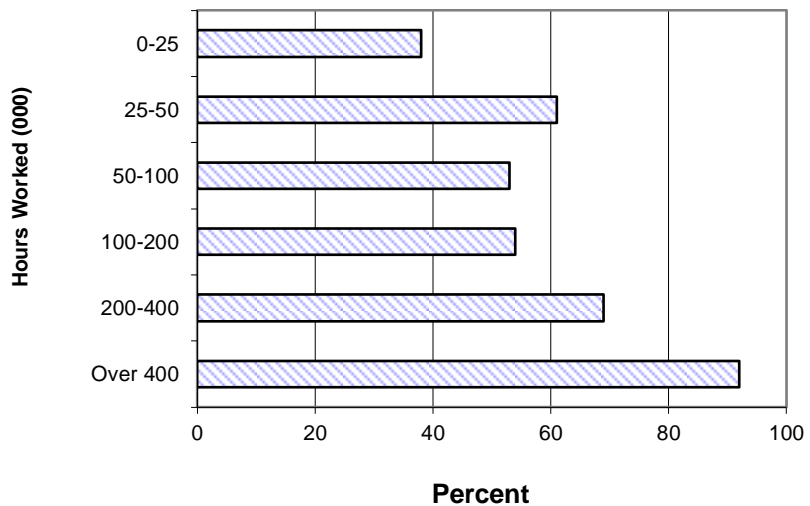
### Type of Safety Training



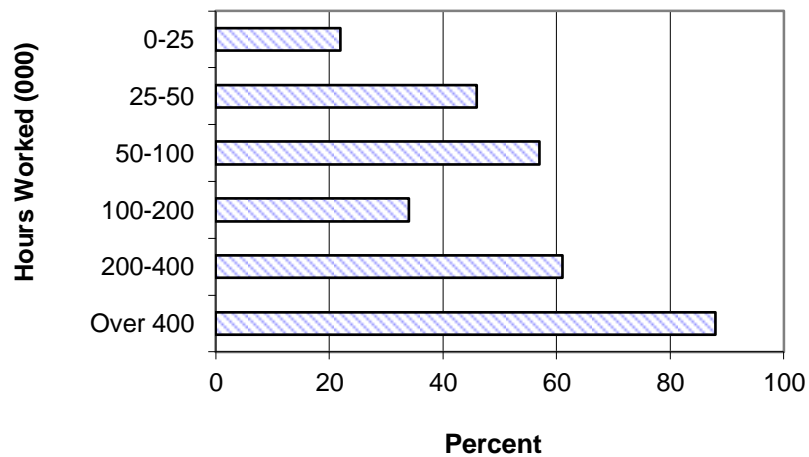
### Toolbox Talks and Videos



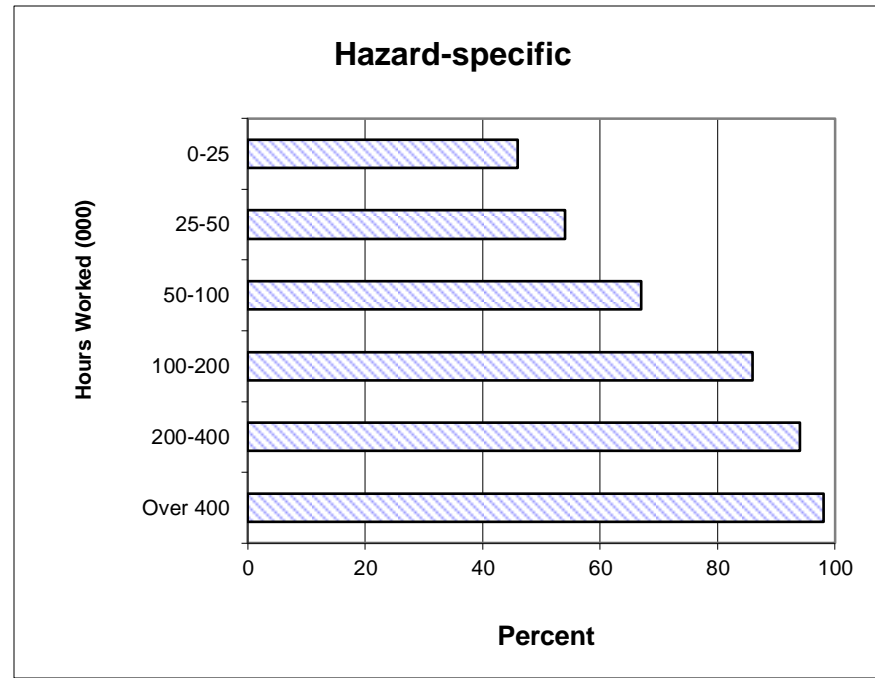
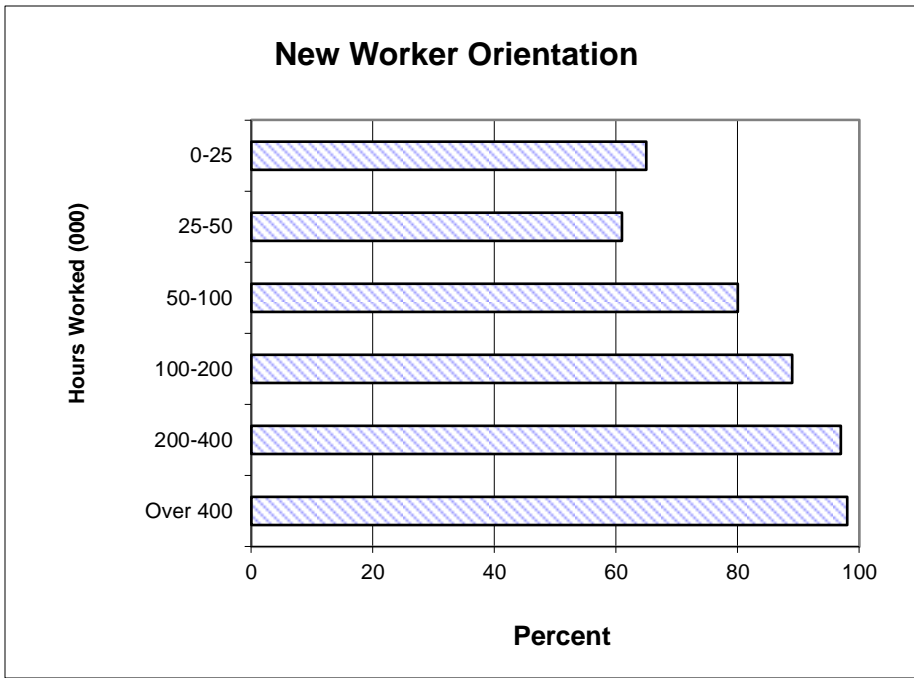
### OSHA 10-Hour Course



### OSHA 30-Hour Course

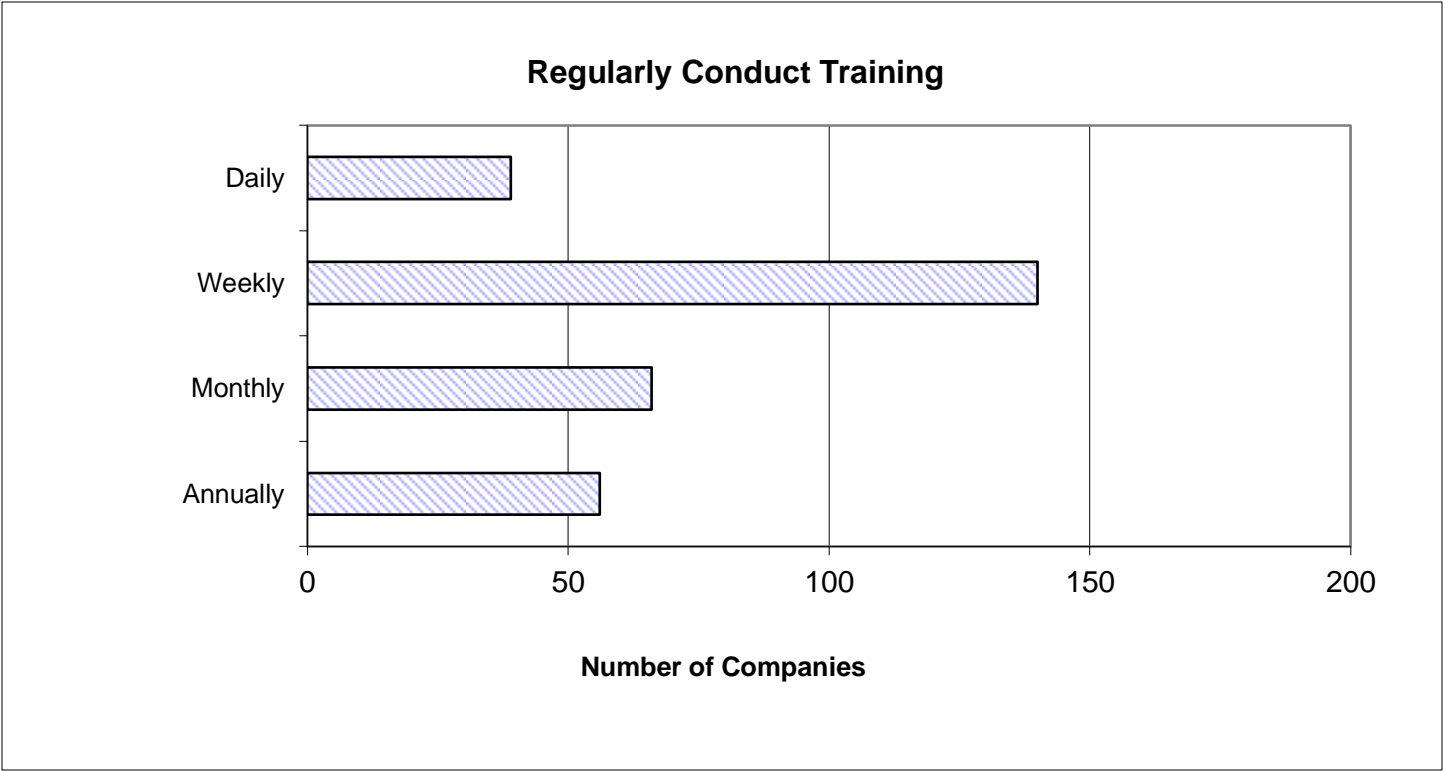






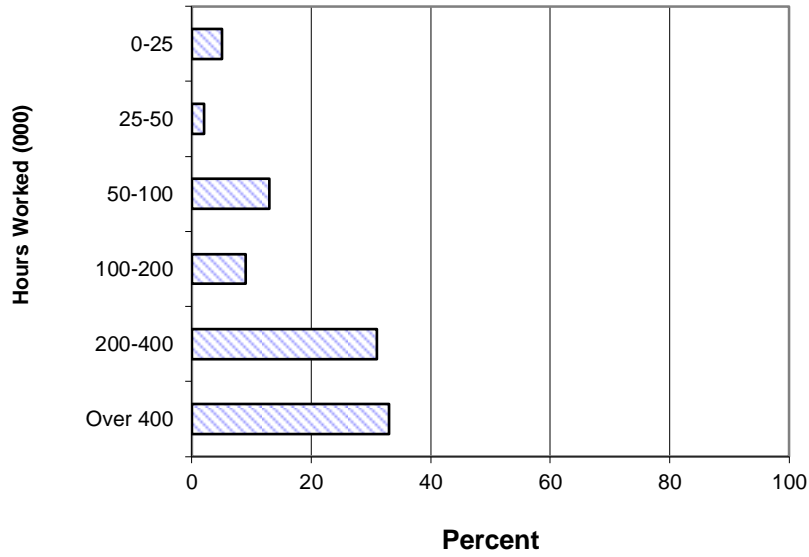
Contractors used a variety of training methods. The OSHA 30-Hour Course, a fairly new addition to the survey, continued to grow in popularity. In fact, its usage increased in five of the six company size categories shown in the chart on page 7.

The pattern of usage was similar to last year. Toolbox talks and videos 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, 46 percent of the smallest companies (25,000 hours or less) utilized Hazard Specific Training while 98 percent of the largest contractors (over 400,000 hours) used this type of training.

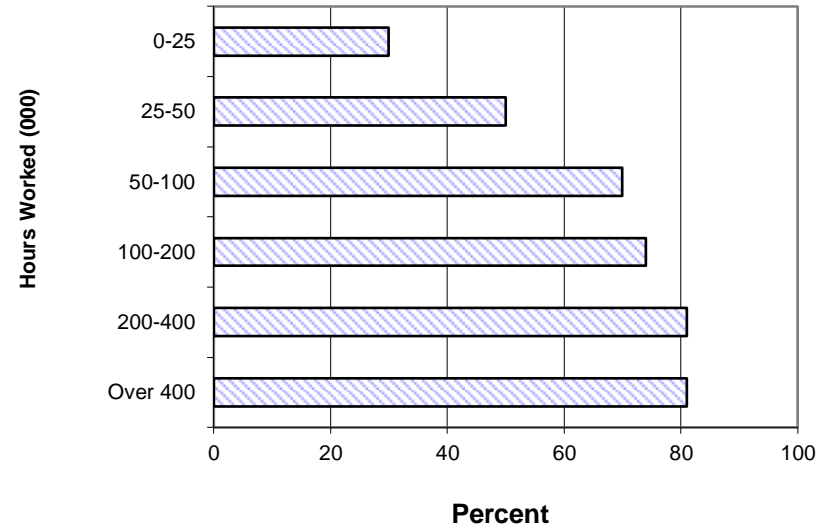


The most common training frequency, by far, was weekly with 47 percent of the respondents indicating that they conduct training weekly. Forty one percent of those returning the survey conduct training monthly or less.

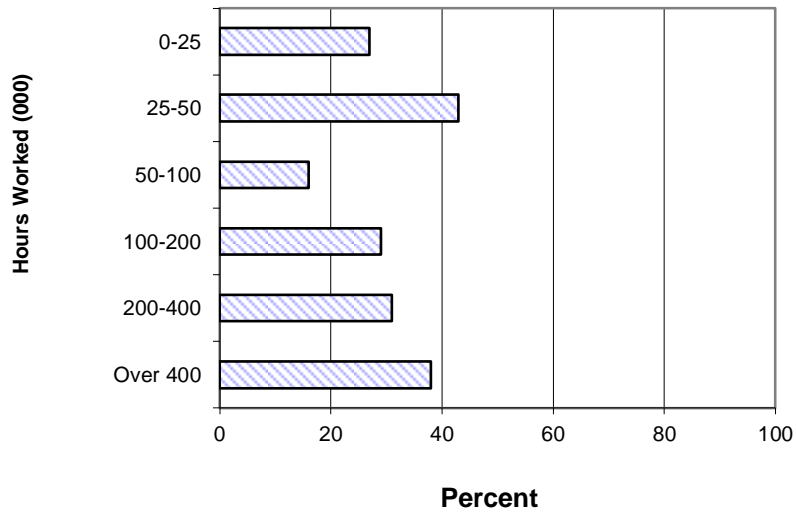
### Conduct Training-Daily



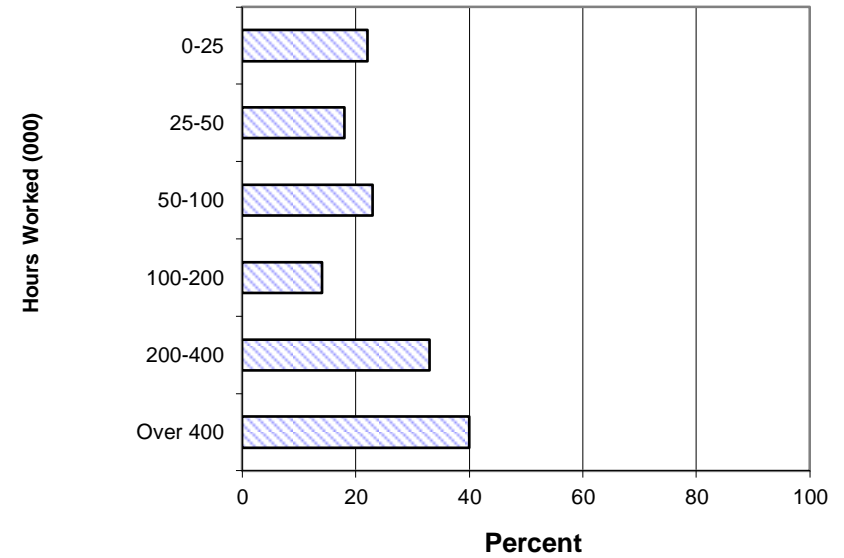
### Conduct Training-Weekly



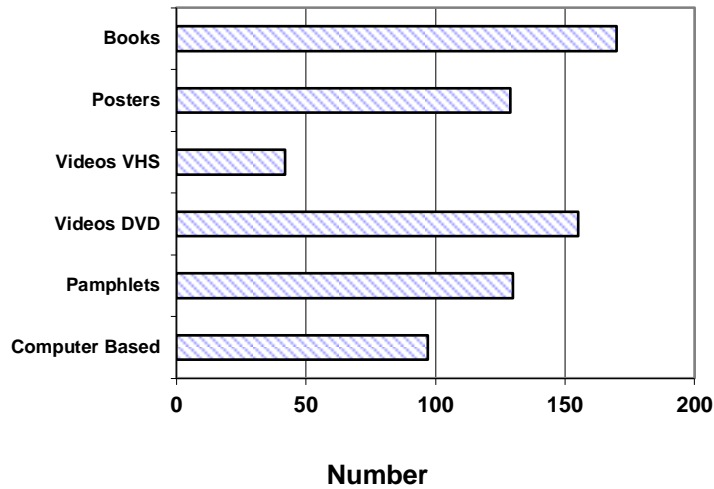
### Conduct Training-Monthly



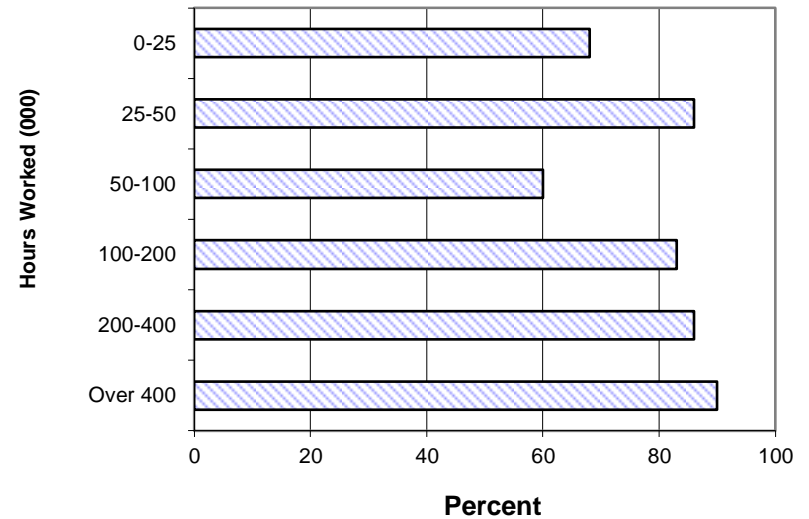
### Conduct Training-Annually



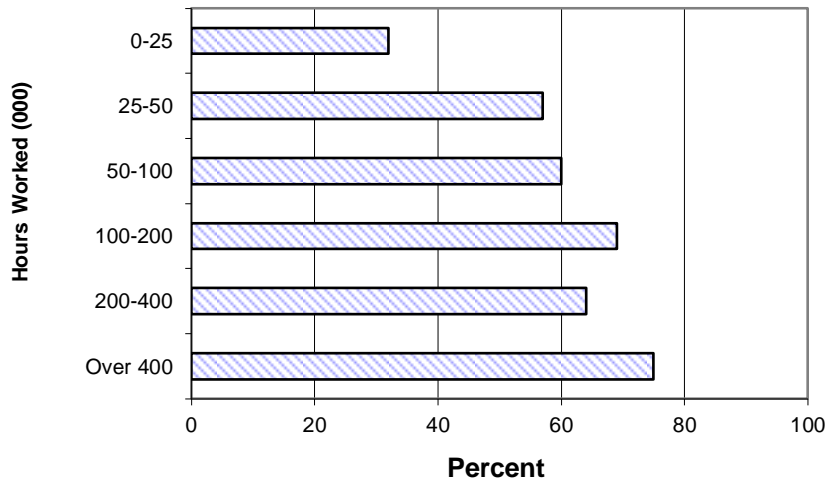
### Types of Training Materials Used



### Safety Training Materials-Books/Manuals



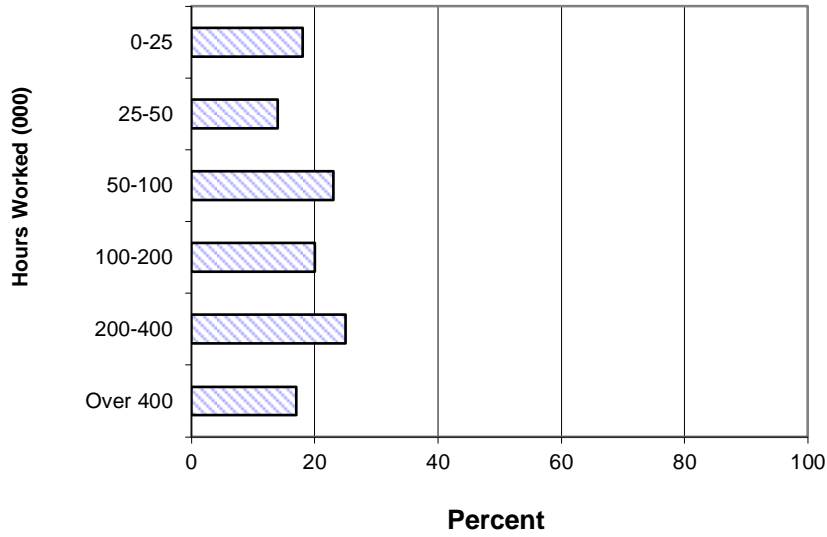
### Safety Training Materials-Posters



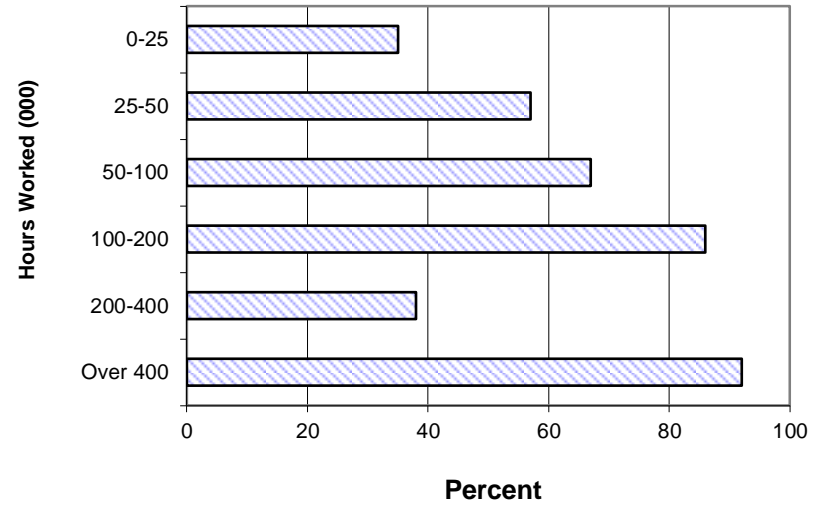
Books continue to be the most common type of training material, followed closely by DVD's. As would be expected, VHS videos are the least common type of training material used.

There was 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.

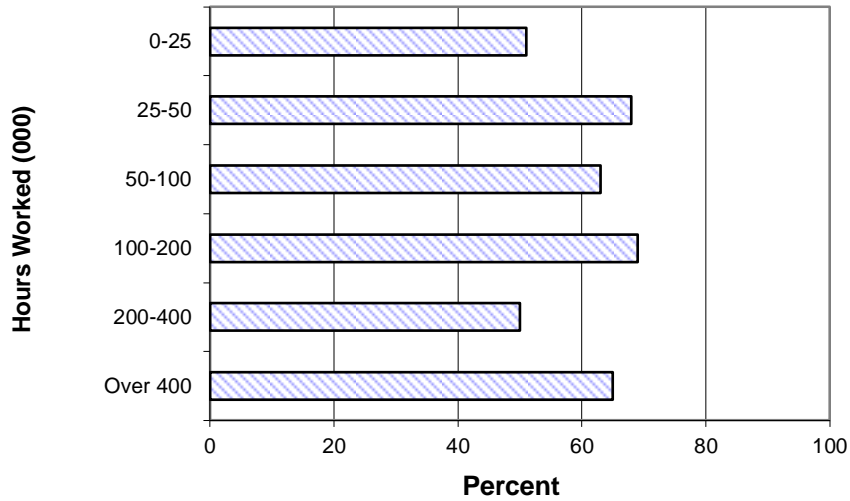
### Safety Training Materials-VHS



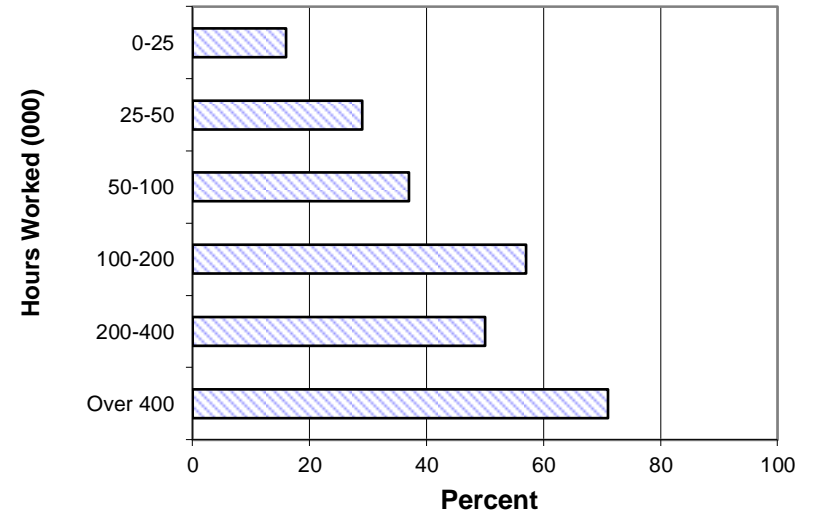
### Safety Training Materials-Videos DVD



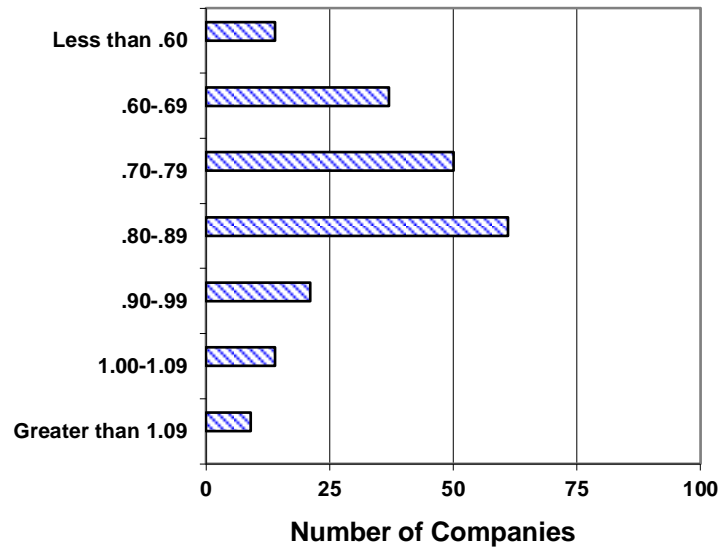
### Safety Training Materials-Pamphlets



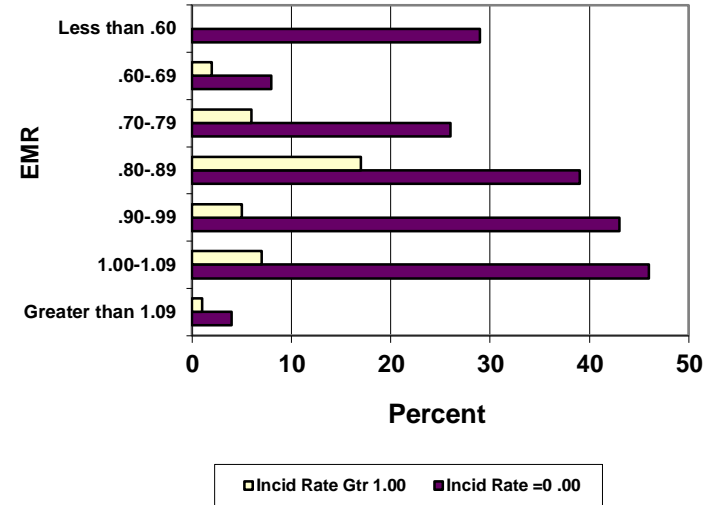
### Safety Training Materials-Computer Based Training



**Number of Responses by EMR**



**Relationship of EMR to Incidence Rate**



The percent of contractors who had an experience modification rate (EMR) less than 1.0 increased in 2013 going from 85 percent last year to 89 percent this year. An EMR in the 0.80 – 0.89 range was most common, followed by the 0.70 – 0.79 range.

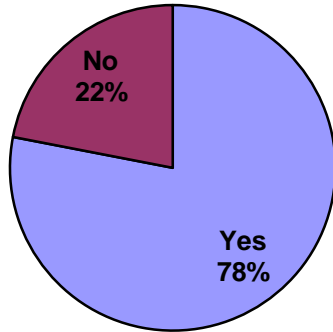
As shown in the Relationship of EMR to Incidence Rate chart, the percent of contractors with a 0.00 incidence rate was higher for all EMR scores than the percent of contractors with an incidence rate greater than 1.0. In other words, a zero incidence rate is much more common than a large incident rate, regardless of the EMR score. There was little, if any, relationship between EMR and OSHA incidence rates.

### Industry Segment Safety

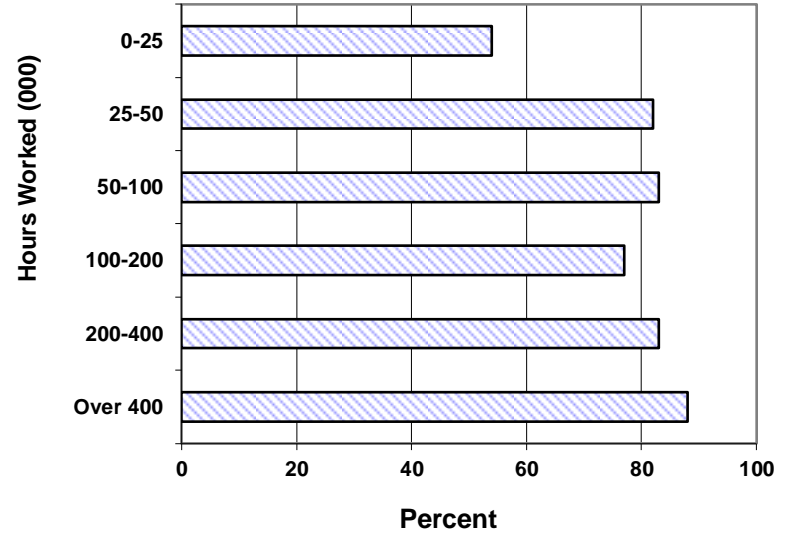
	Number	Hours	Incidents	Incident Rate
<b>Commercial HVAC</b>	90	17,761,282	215	2.42
<b>Residential HVAC</b>	23	577,698	12	4.15
<b>Architectural Sheet Metal</b>	39	985,404	12	2.53
<b>Industrial Sheet Metal</b>	73	6,467,339	75	2.33
<b>Kitchen Equipment/Food Svs.</b>	17	142,844	2	2.21
<b>Manufacturing</b>	22	644,245	8	2.46
<b>Testing and Balancing</b>	28	298,042	3	2.05
<b>Siding and Decking</b>	14	383,834	6	3.37

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. Interestingly, Residential HVAC had the highest incident rate this year and had the lowest incidence rate last year, going from 1.99 last year to 4.15 in 2012. Last year the highest rate was for Manufacturing work.

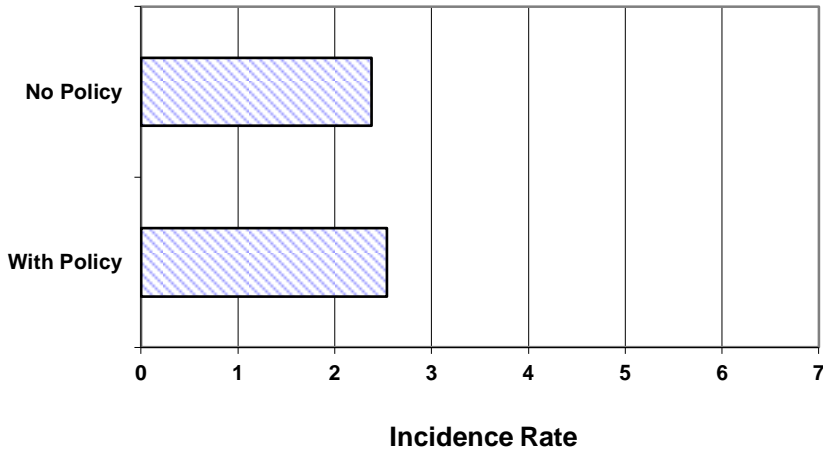
### Formal Program for Drug and Alcohol Abuse



### Formal Program for Drug and Alcohol Abuse



### Incidence Rate by Drug Policy

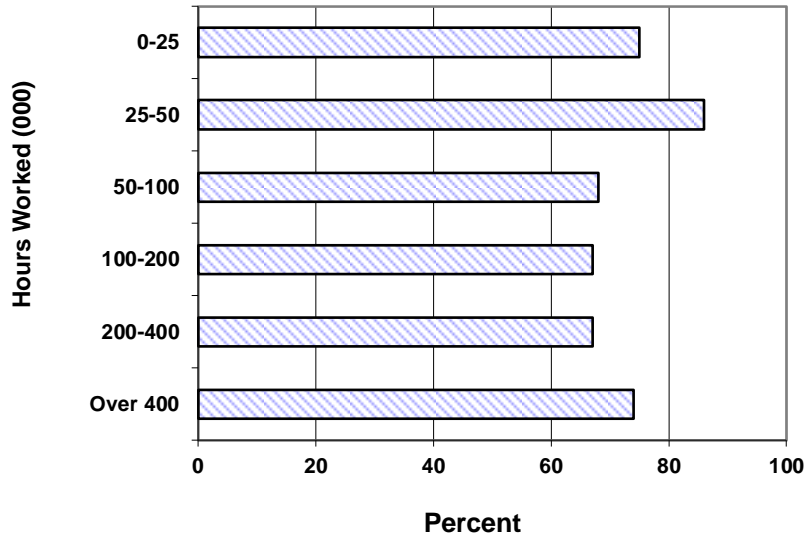


The percent of contractors with a formal drug and alcohol policy has been declining. To illustrate, the 2012 results shown here convey that 78 percent of the respondents had a formal program for drug and alcohol abuse. This is 4 percent lower than in 2011 (82 percent) and 16 percent lower than two years ago (94 percent).

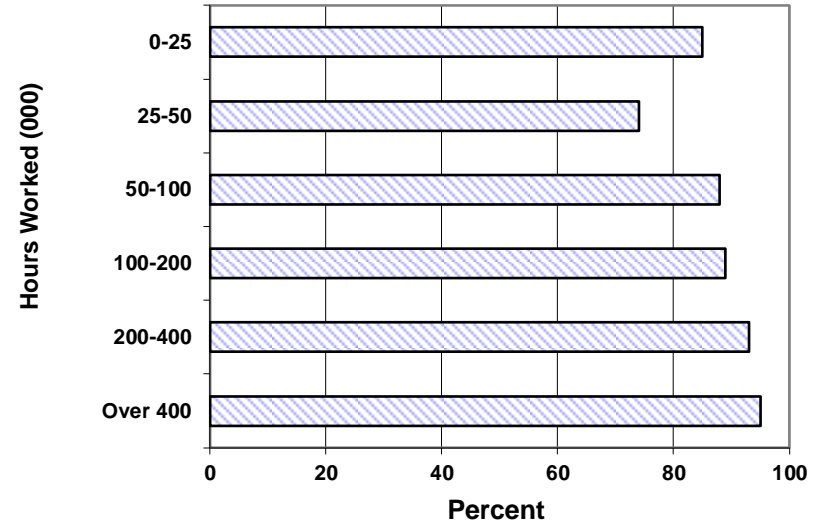
Although the correlation was somewhat modest, the size of the contractor was correlated with program prevalence. In the chart above, the larger the contractor, the more likely they were to have a formal drug and alcohol abuse program.



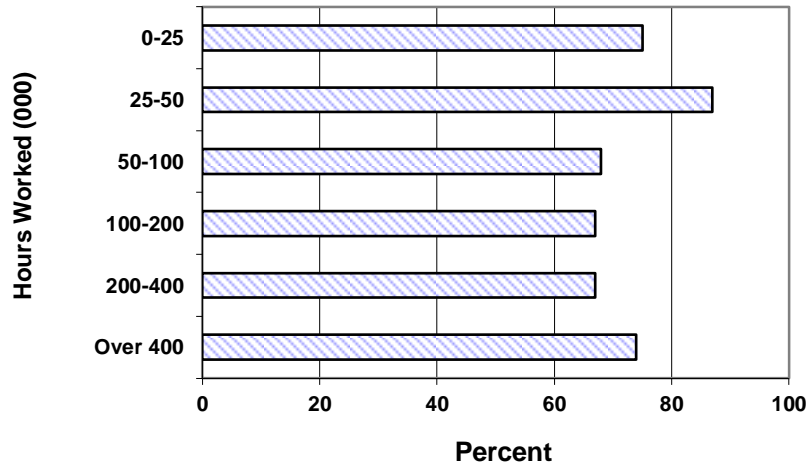
### Pre-Hire Testing Conducted



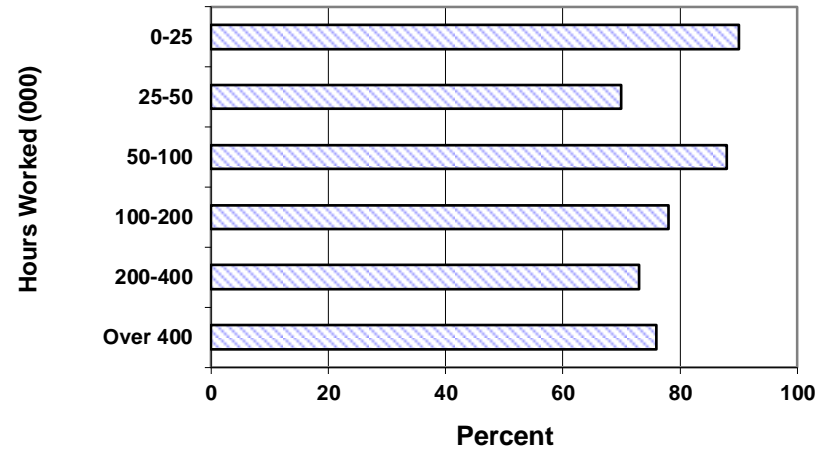
### Post Accident Testing Conducted



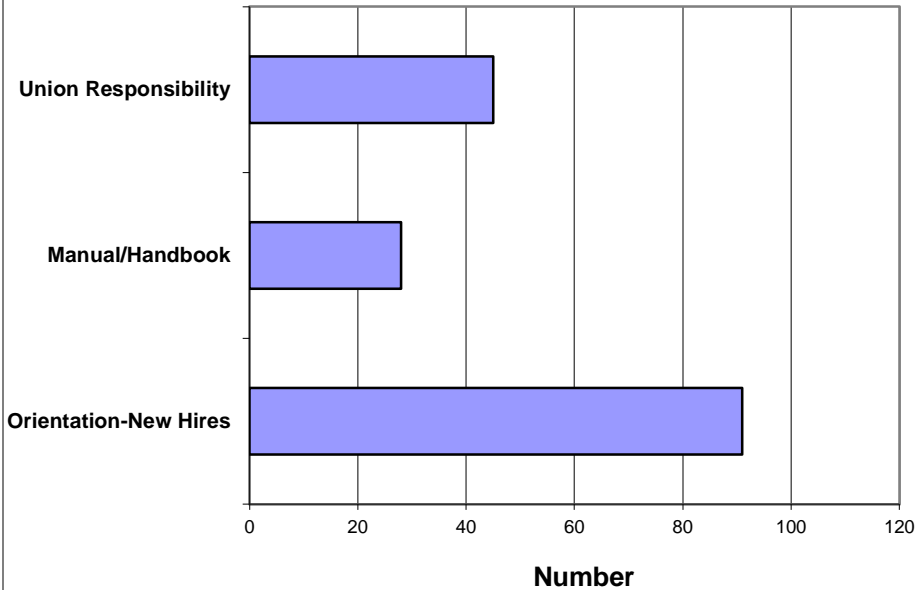
### Random Testing Conducted



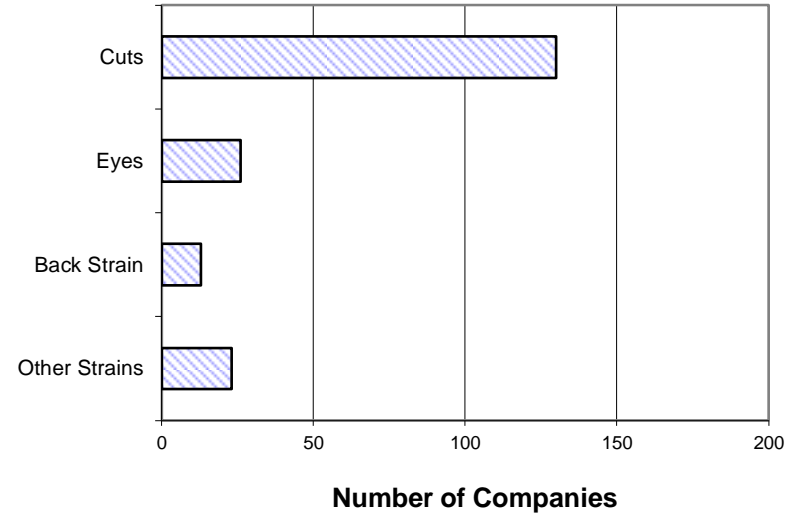
### Penalties



### Method of Informing Employees



### Most Common Injuries



Similar to last year, 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 was the most common method, by far.

The most common injury again for 2012 was cuts. Injuries involving the eyes were the second most common, followed by other strains and back strain.

## SMACNA Safety Trends

	<u>2004</u> <sup>1/</sup>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Incidents	1,429	1,494	1,446	1,339	1,210	1,724	1,687	1,192	912	902
Incidence Rate	5.52	5.06	5.21	4.62	5.06	4.29	3.84	3.46	3.11	2.52
Lost Workdays	26,086	27,605	24,371	20,547	19,467	30,712	25,785	22,311	15,316	11,545
Average Lost Workdays	168	160	82	84	92	101	70	63	61	53
Reported Hours (millions)	51.8	59.0	56.0	57.9	47.8	80.3	87.8	68.9	58.7	71.6
Safety & Health Program	93%	93%	96%	98%	95%	95%	96%	98%	98%	99%
Designated Safety Coord.	87%	93%	97%	96%	95%	94%	97%	93%	93%	93%
SMACNA Products	83%	82%	84%	87%	87%	86%	88%	87%	88%	89%
SMOHIT Safety Products		28%	37%	45%	51%	55%	67%	68%	54%	60%
EMR	0.85	0.85	0.85	0.83	0.79	0.84	0.83	0.82	0.82	0.81
Drug Program	76%	74%	78%	84%	82%	87%	88%	94%	82%	78%
Number of Companies	252	283	298	243	212	304	377	350	247	217

<sup>1/</sup> 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>2013</u>		<u>2012</u>	
	All <u>Respondents</u>	Superior <u>Performers</u>	All <u>Respondents</u>	Superior <u>Performers</u>
Use SMACNA Safety Products	89%	75%	88%	86%
Have a Formal Drug Policy	78%	77%	82%	92%
Provide New Worker Orientation	83%	92%	81%	92%
Utilize OSHA 10 Hr. Training	63%	67%	55%	75%
Utilize OSHA 30 Hr. Training	53%	65%	42%	56%
Utilize Computer Based Training	45%	58%	39%	50%
Average EMR	0.81	0.74	0.82	0.73
Average Incidence Rate	2.52	0.91	3.11	0.93

This table compares superior performers to the total sample for this year's survey and last year's survey. 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 10-hour and 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.