

SMACNA SAFETY PROFILE 2014

Performance and Characteristics

July 2014

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

The average EMR was 0.81, tied for the lowest rate in a decade.

The number of participants increased by 19 percent to 254.

The OSHA incident rate increased to 2.69 in 2014 after achieving the lowest rate in at least the past 11 years last year at 2.52.

The average number of lost workdays was the second lowest in at least 10 years at 58 days.

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

Books continue to be the primary training material used.

No sector had an incident rate above 4.0 and only two sectors were above 3.0, Residential HVAC and Industrial Sheet Metal.

The number of reported hours of work was over 72 million, a slight increase from last year at 71.6 million.

The prevalence of formal drug and alcohol abuse programs increased slightly to 80 percent.

The OSHA incident rate generally declined as contractor hours worked increased. In other words, the larger the company, the lower the incidence rate.

SMACNA Safety Summary

Class Size	Reports	Hours	Number of Incidents	Incidence Rate
1	52	628,333	14	4.46
2	43	1,579,918	38	4.81
3	33	2,268,954	41	3.61
4	43	6,508,729	168	5.16
5	18	4,459,641	52	2.33
6	22	7,663,835	96	2.51
7	8	3,679,281	44	2.39
8	35	45,635,772	520	2.28
Grand Total	254	72,424,463	973	2.69

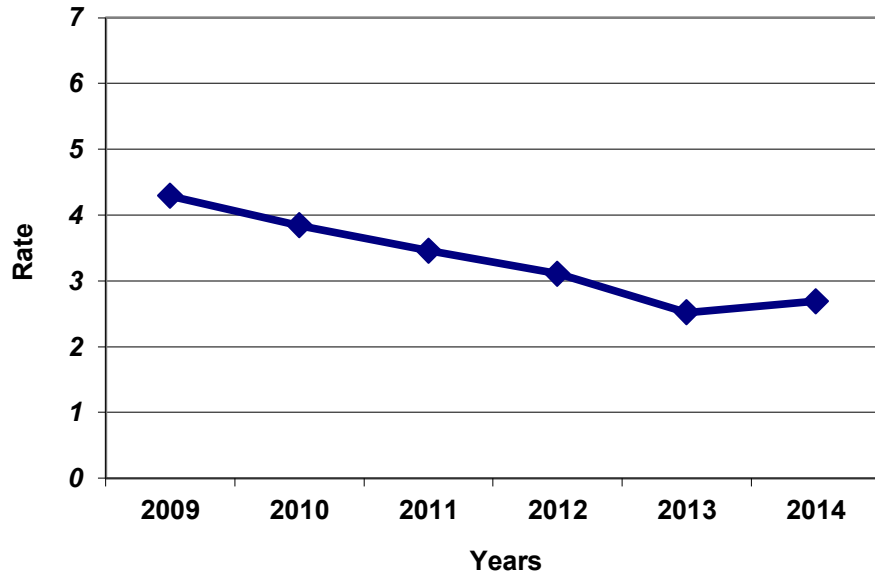
Class Size

- 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.

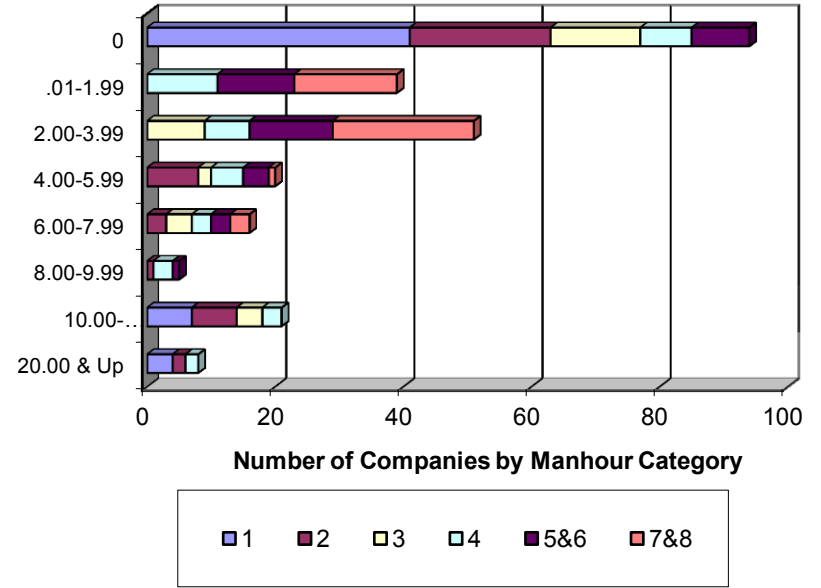
For the first time in over a decade, the incidence rate increased. In the 2013 report (based on 2012 data) it was 2.52 and this year (based on 2013) it was 2.69.

There were 254 participants in the *2014 SMACNA Safety Excellence Awards Program Survey*. These companies worked over 72 million hours in 2013, a small increase over last year and a large jump from the 59 million hours reported two years ago. The plurality of respondents, 52 (20 percent), was from small contractors who work 25,000 hours or less (class size 1). Fourteen percent of the respondents represented the largest class size (over 500,000 hours) and they had 63 percent of the total hours. Just over a third of the respondents had a zero incidence rate.

Incidence Rate Trends



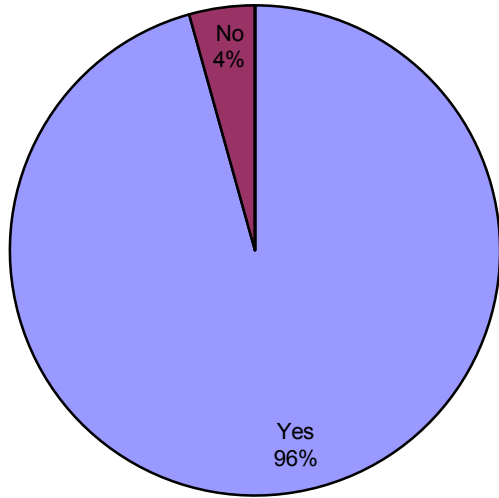
Incidence Rate By Size



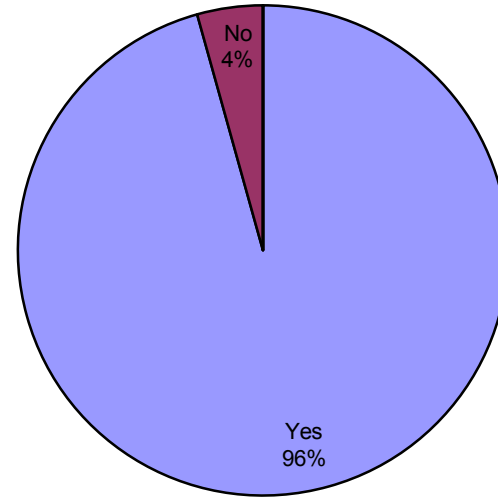
The average OSHA incidence increased by 0.17 to 2.69 in 2014 (2013 data). The OSHA incidence rate is a measure of frequency and does not necessarily reflect the severity of the cases (i.e., days away from work or restricted duty). There were 543 lost workday cases. Lost workday cases are a better measure 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.

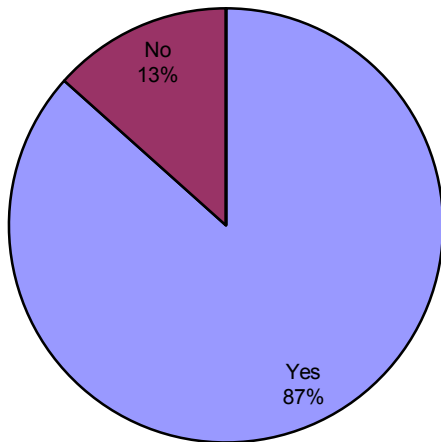
Safety and Health Program



Conduct Safety Inspections



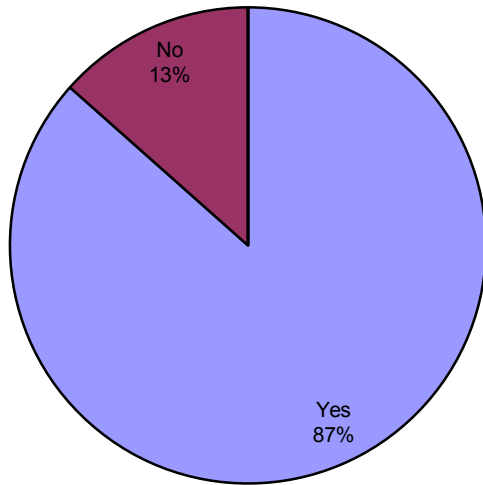
Designated Safety Coordinator



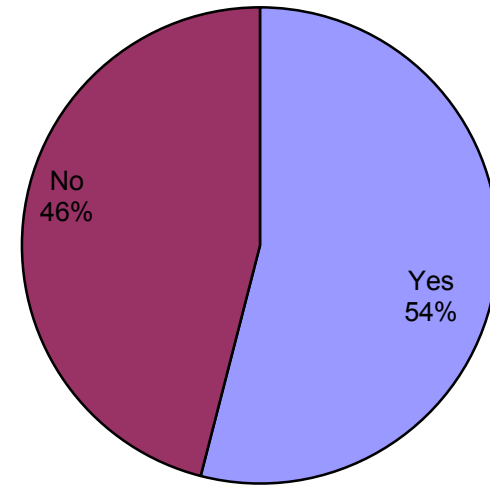
Nearly all companies have a written safety and health program, conduct safety inspections and have a designated safety coordinator. Those who do not have these safety program features typically are smaller companies. For those contractors with a designated safety coordinator, the position is full time for 71 percent of the companies participating in the survey, up from 69 percent last year and 64 percent two years ago.

Interestingly, the percent of companies who do not have a designated safety coordinator increased from 7 percent last year to 13 percent this year..

Use Safety Products & Services from SMACNA

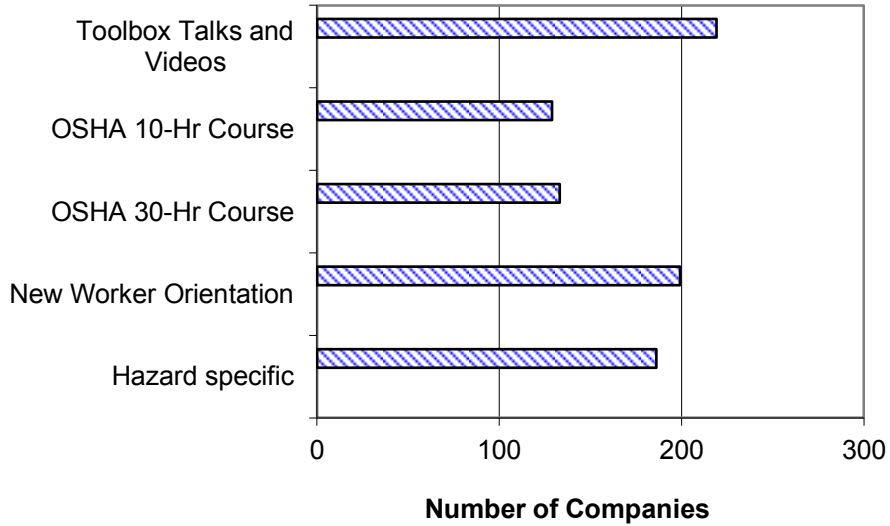


Use SMOHIT Safety Products

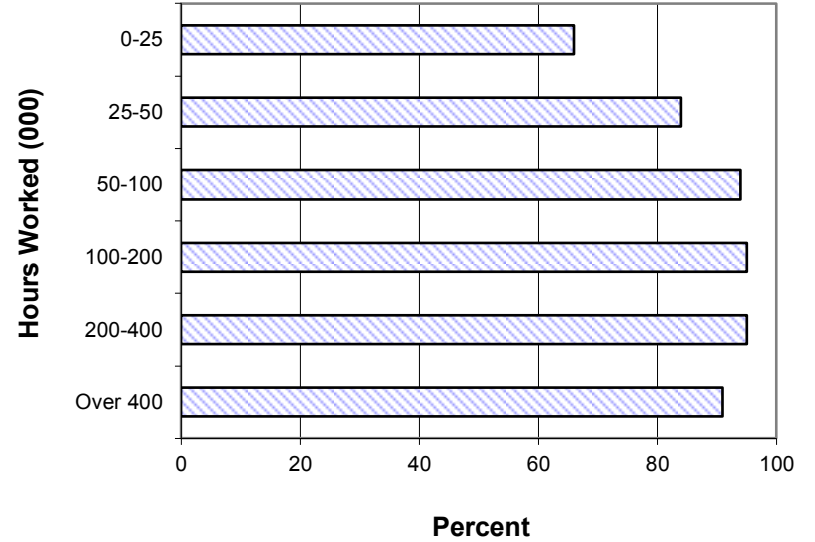


Most contractors use SMACNA's safety products and services, 87 percent to be exact. The percent of contractors who use SMOHIT safety products was 54 percent, a modest decline from 60 percent last year. Like many results published in this report, this change may be due to an actual change in the percent of contractors using SMOHIT safety products or due to changes in the composition of the survey sample.

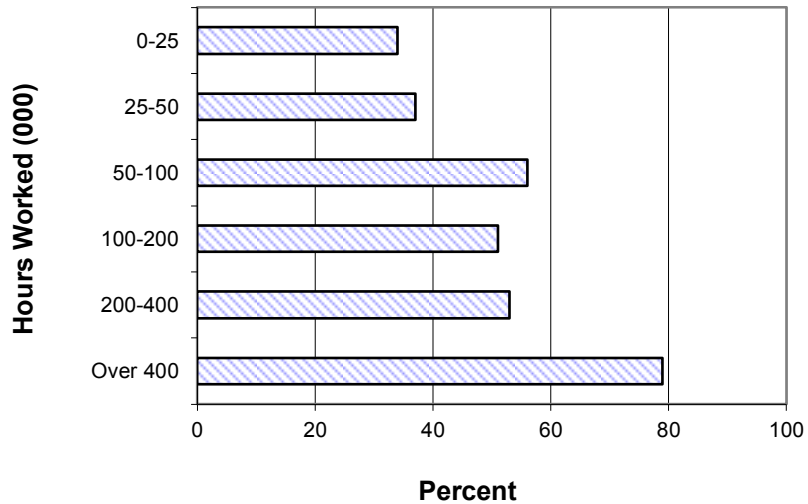
Type of Safety Training



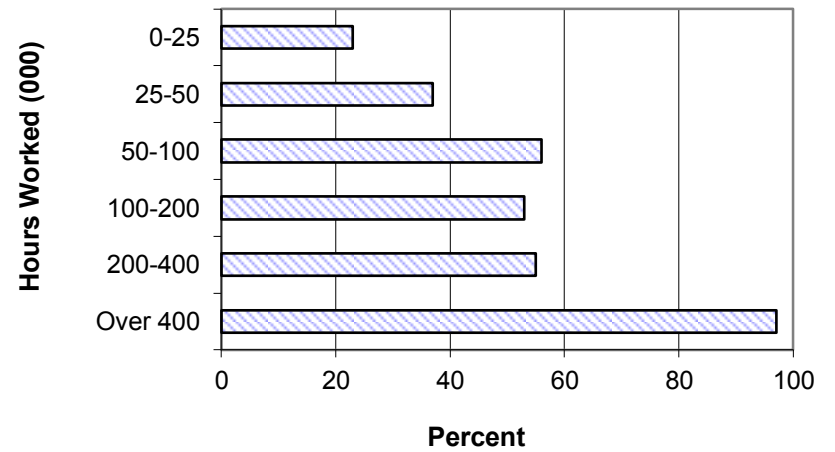
Toolbox Talks and Videos

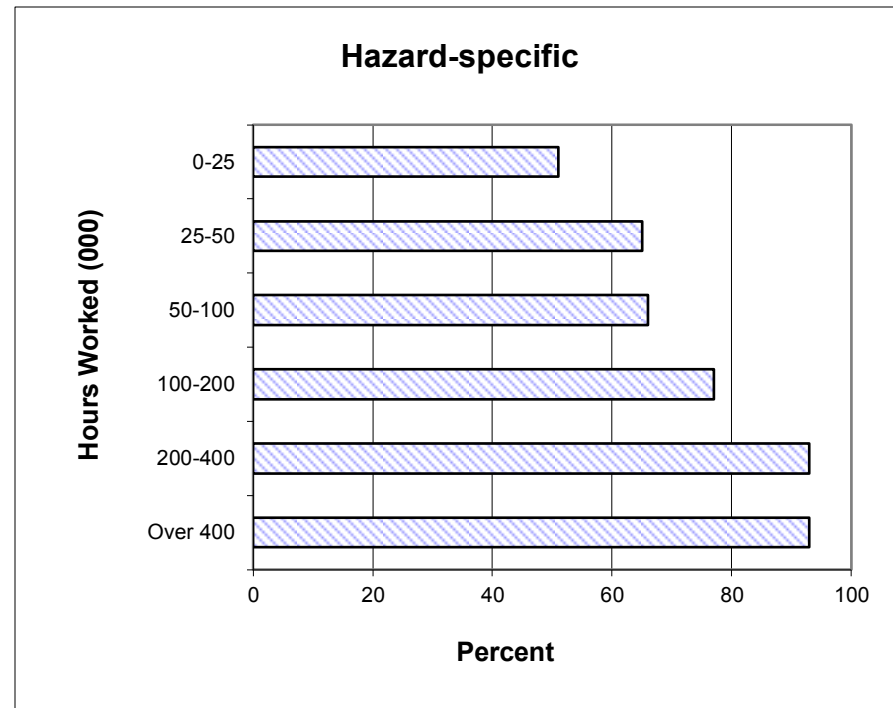
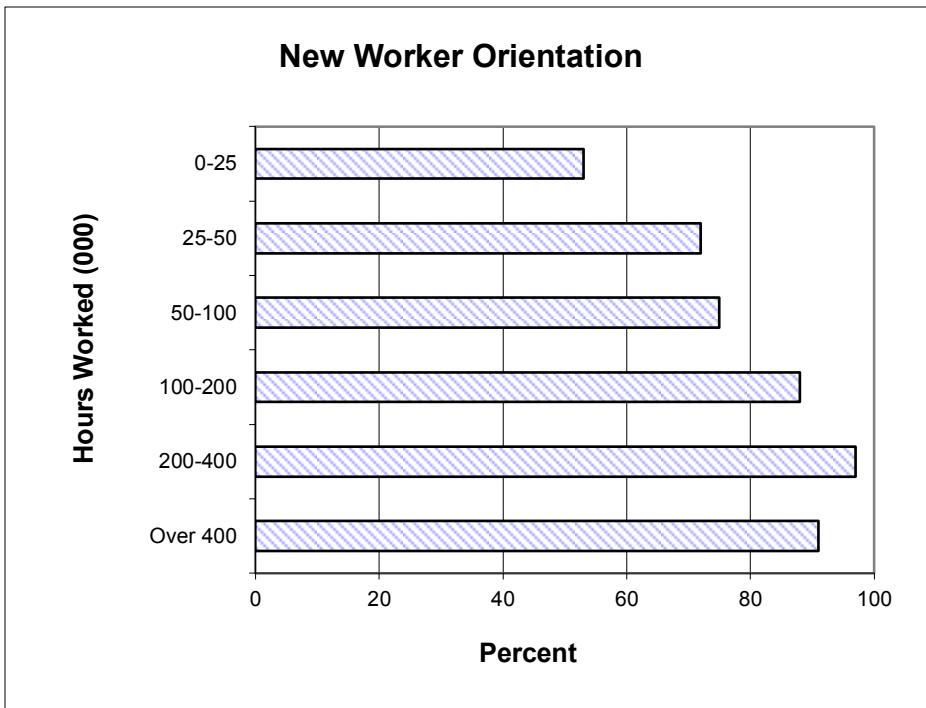


OSHA 10-Hour Course



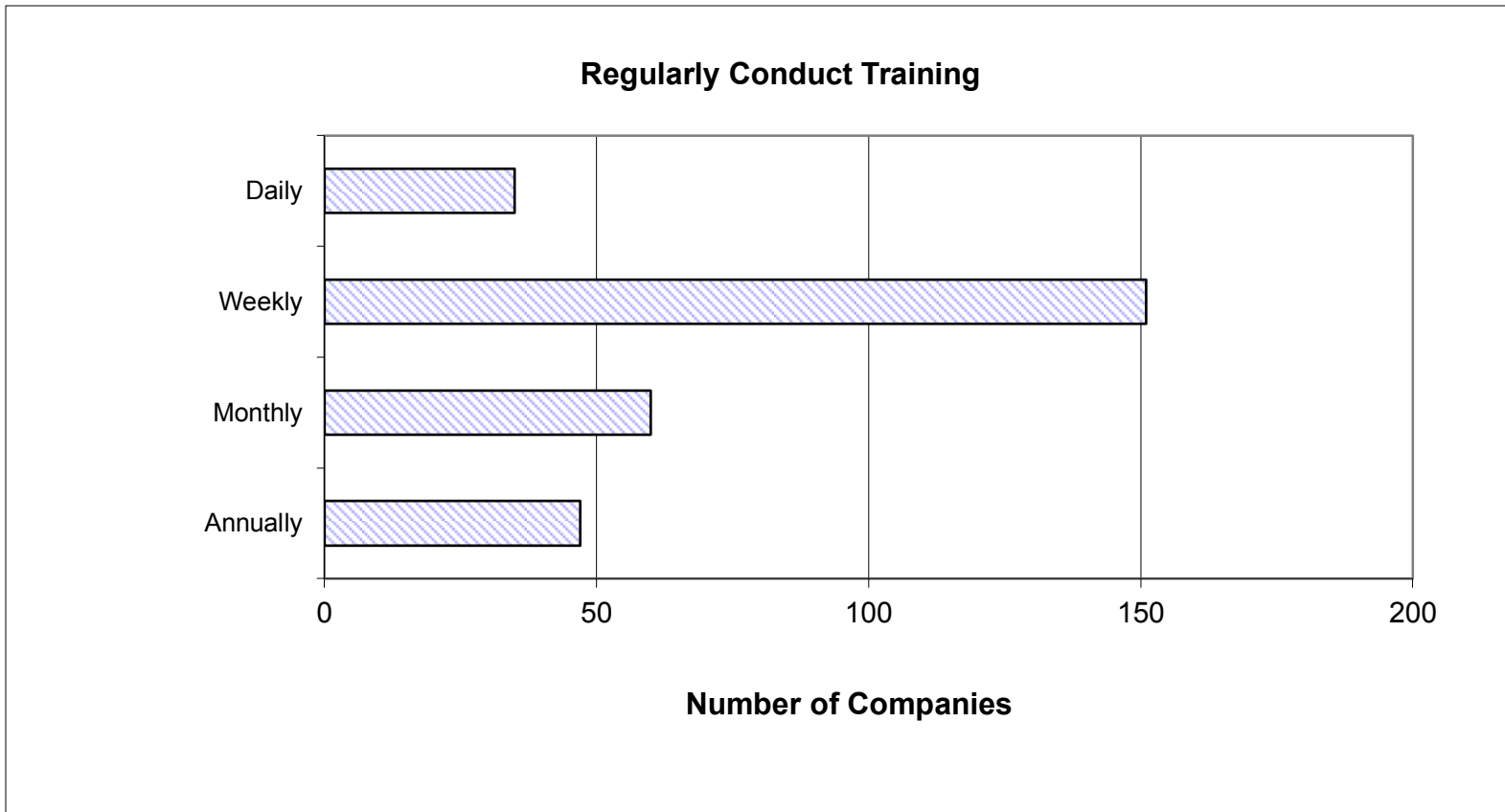
OSHA 30-Hour Course





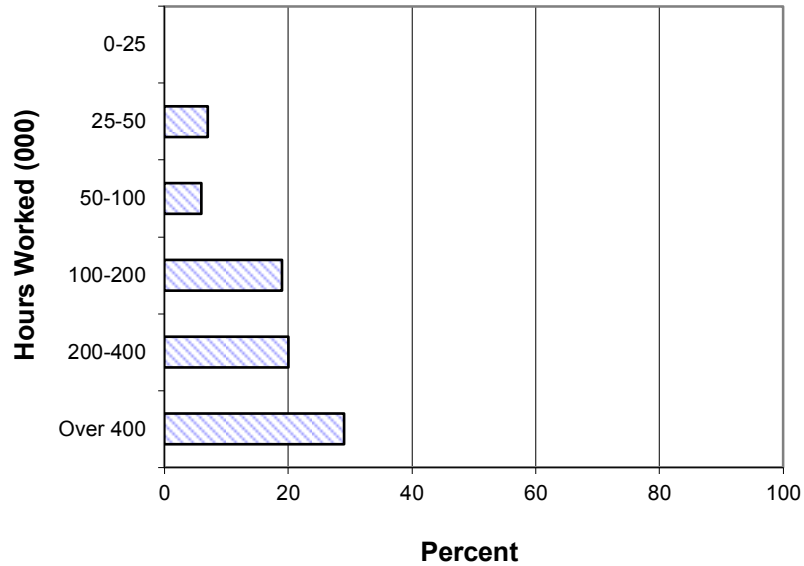
As expected, contractors used a variety of training methods. The OSHA 30-Hour Course continued to grow in popularity, especially among the largest contractors where nearly all used the course. Toolbox talks and videos were the most common training methods overall.

The pattern of usage was similar to last year. Generally, as contractors get larger the percent using the various training methods increases. For example, 51 percent of the smallest companies (25,000 hours or less) utilized Hazard Specific Training while 93 percent of the largest contractors (over 400,000 hours) used this type of training.

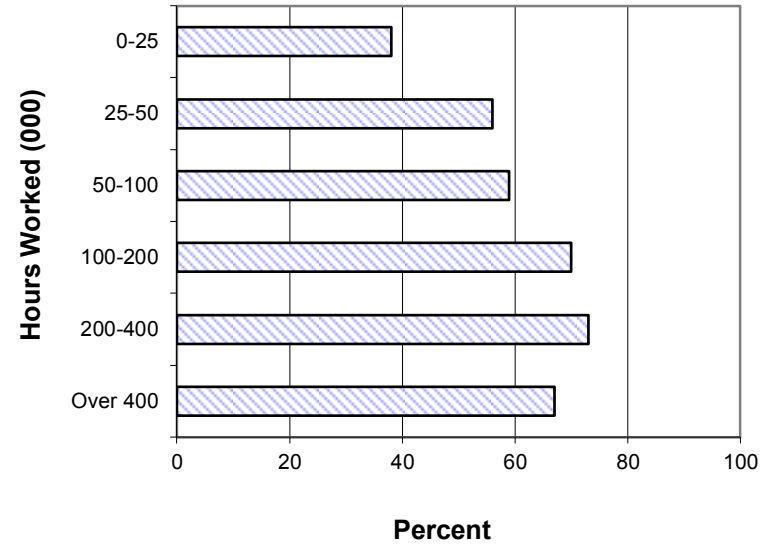


A majority of the companies, 52 percent, said they conduct training weekly. Twelve percent conduct training daily, 20 percent monthly and 16 percent annually.

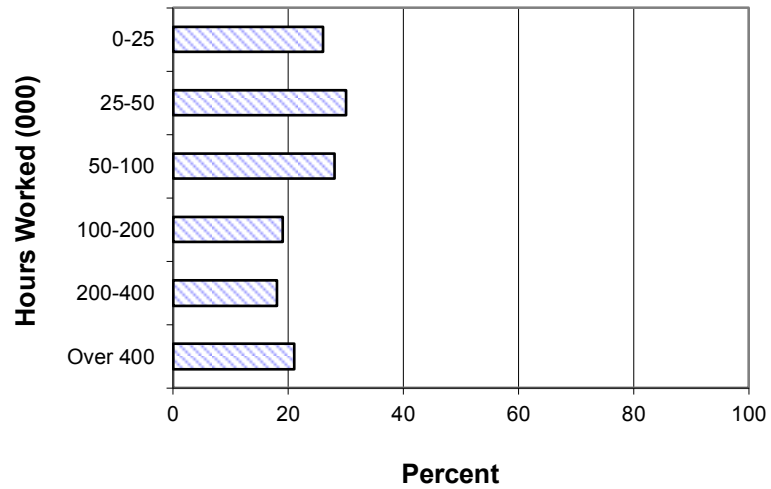
Conduct Training-Daily



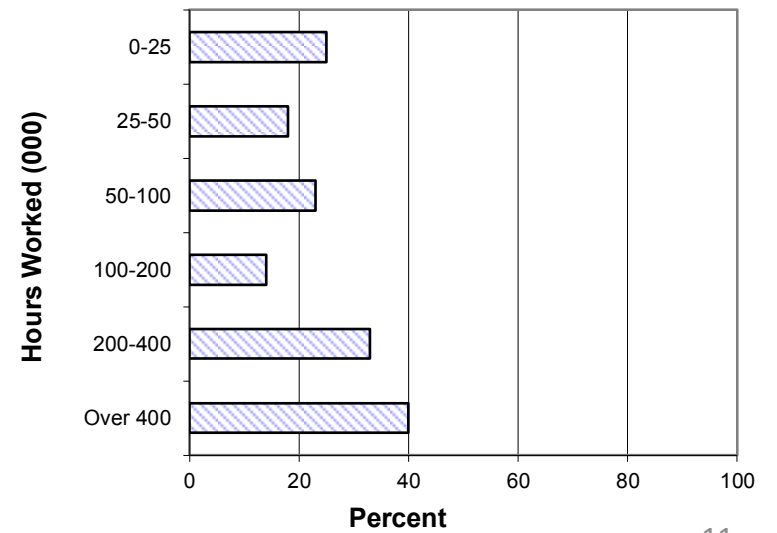
Conduct Training-Weekly



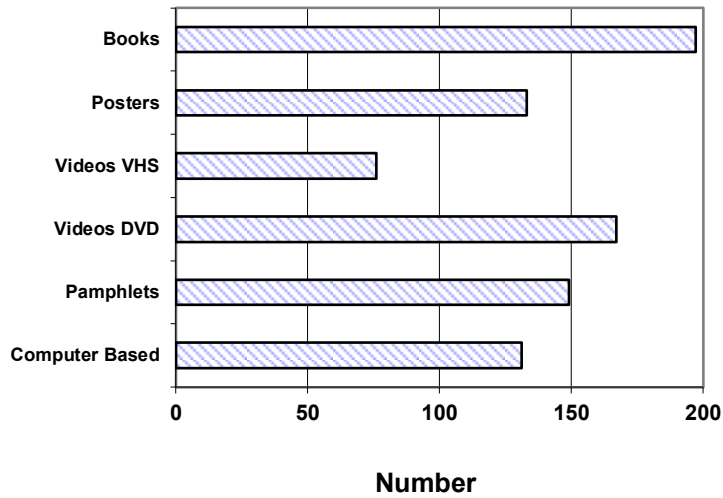
Conduct Training-Monthly



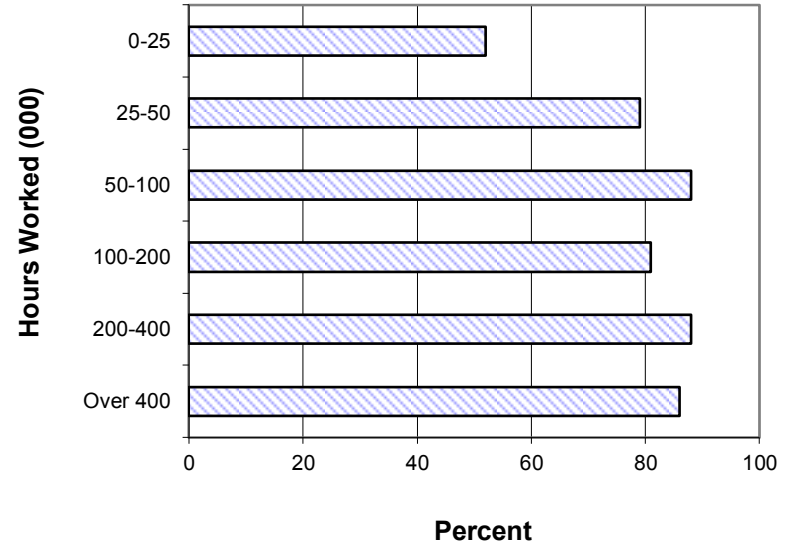
Conduct Training-Annually



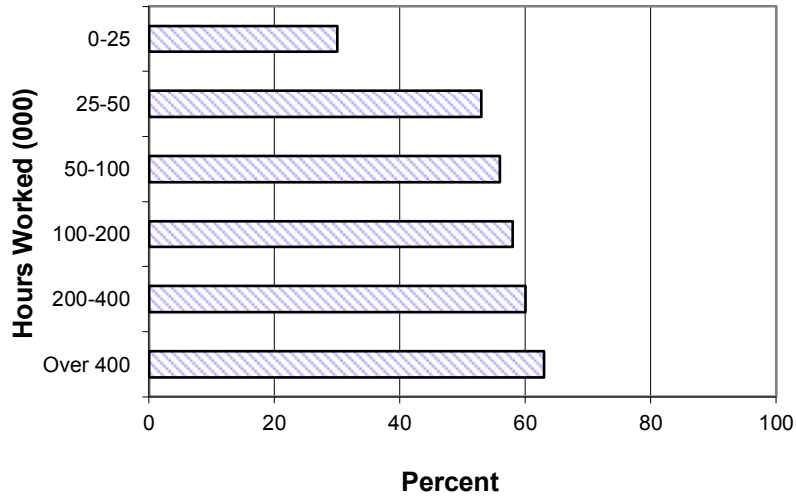
Types of Training Materials Used



Safety Training Materials-Books/Manuals



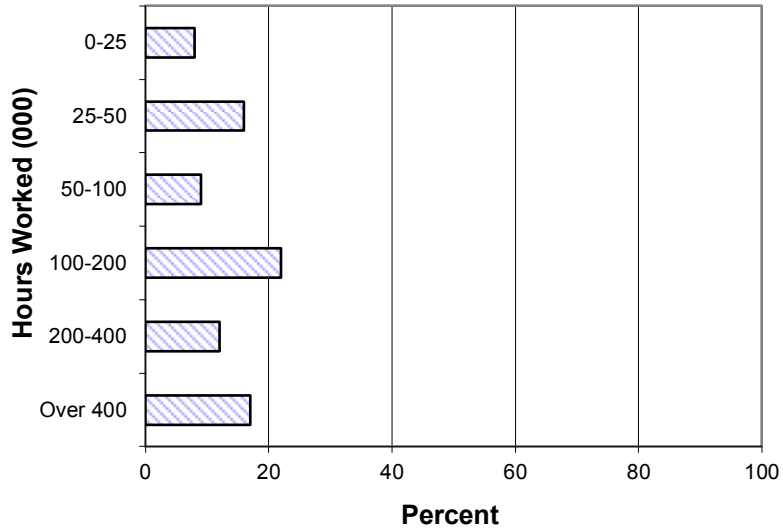
Safety Training Materials-Posters



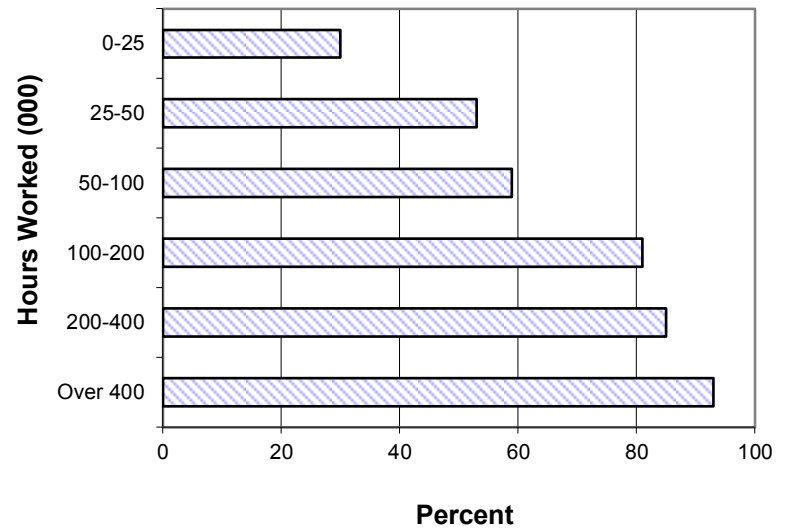
Books continue to be the most common type of training material, followed by DVD's. As would be expected, VHS videos are the least common type of training material used.

There was a strong positive correlation between the use of posters, DVD's and computer-based training and organization size. In other words, large contractors tend to use these methods more than small contractors.

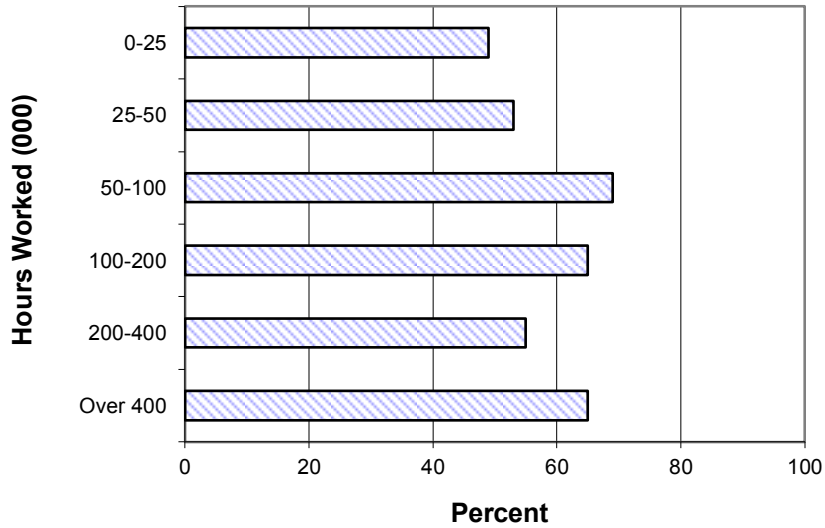
Safety Training Materials-VHS



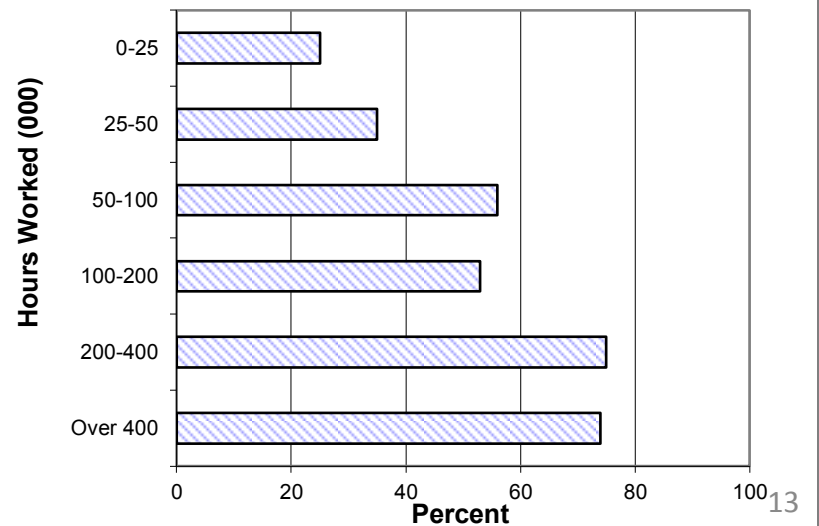
Safety Training Materials-Videos DVD



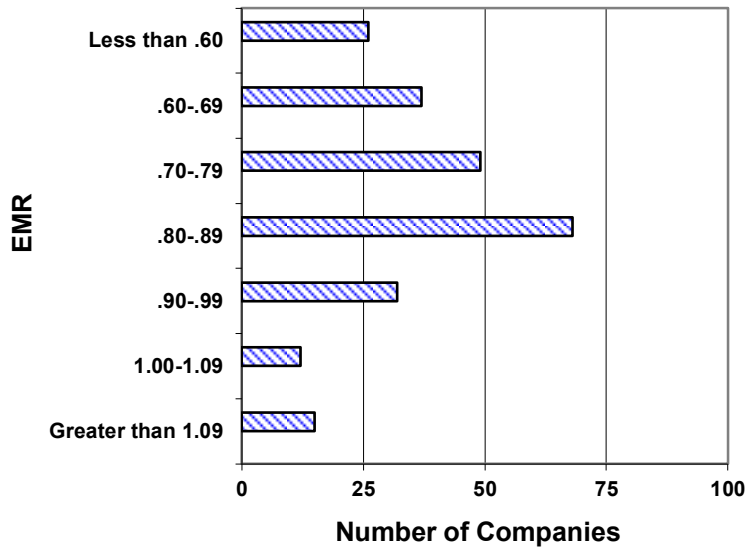
Safety Training Materials-Pamphlets



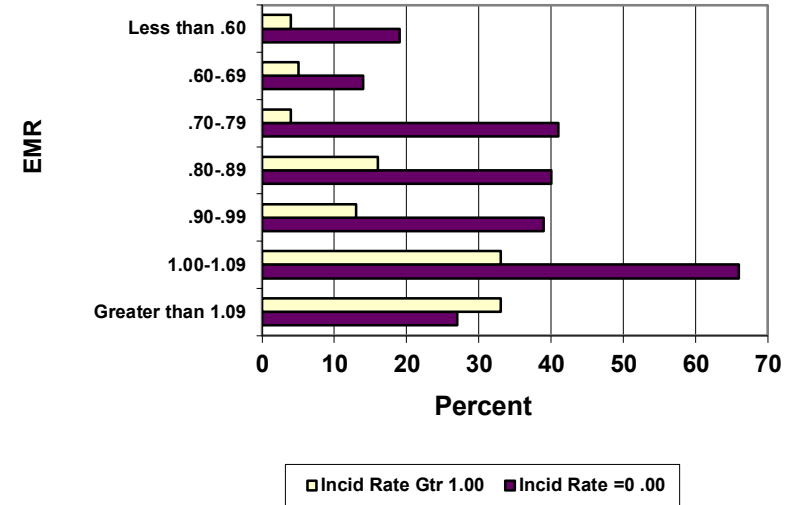
Safety Training Materials-Computer Based Training



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 remained the same as last year at 89 percent. This is an increase over two years ago when the EMR was 85 percent. An EMR in the 0.80 – 0.89 range was most common, followed by the 0.70 – 0.79 range.

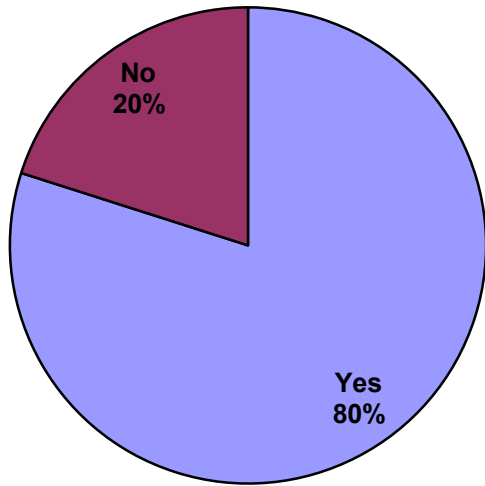
As shown in the Relationship of EMR to Incidence Rate chart, the percent of contractors with a 0.00 incidence rate was higher for nearly all EMR scores than the percent of contractors with an incidence rate greater than 1.0. In other words, a zero incidence rate generally is much more common than a high incident rate, regardless of the EMR score.

Industry Segment Safety

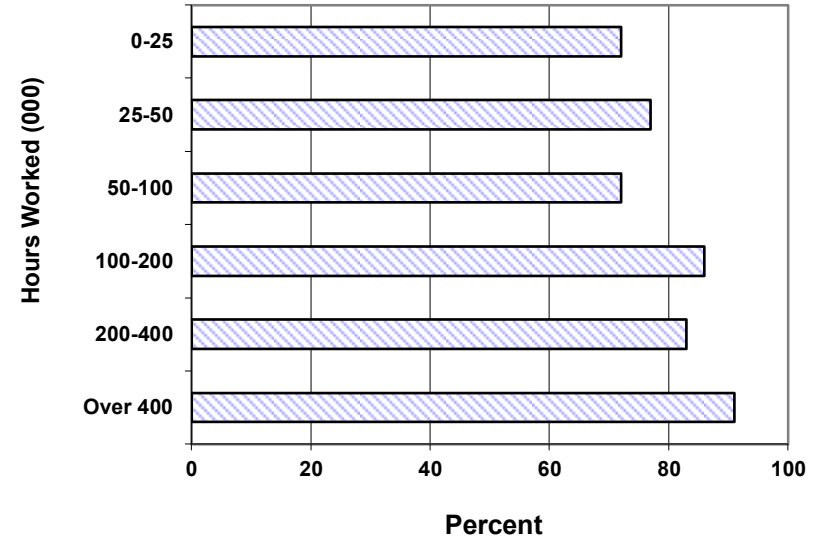
	Number	Hours	Incidents	Incident Rate
Commercial HVAC	97	18,821,269	259	2.75
Residential HVAC	20	582,507	9	3.09
Architectural Sheet Metal	32	688,842	8	2.23
Industrial Sheet Metal	74	5,838,802	89	3.04
Kitchen Equipment/Food Svcs.	13	147,095	2	2.43
Manufacturing	27	707,470	10	2.89
Testing and Balancing	29	415,829	5	2.53
Siding and Decking	8	325,618	3	1.55

This table shows the number of contractors in each industry segment, along with the hours, number of incidents and incident rate. Commercial HVAC easily was the largest category for hours worked and Kitchen Equipment/Food Services was the smallest. Like last year, Residential HVAC had the highest incident rate. Two years ago it had the lowest incidence rate. The lowest incident rate this year was for the Siding and Decking segment. Most incident rates were between 2.20 and 3.10.

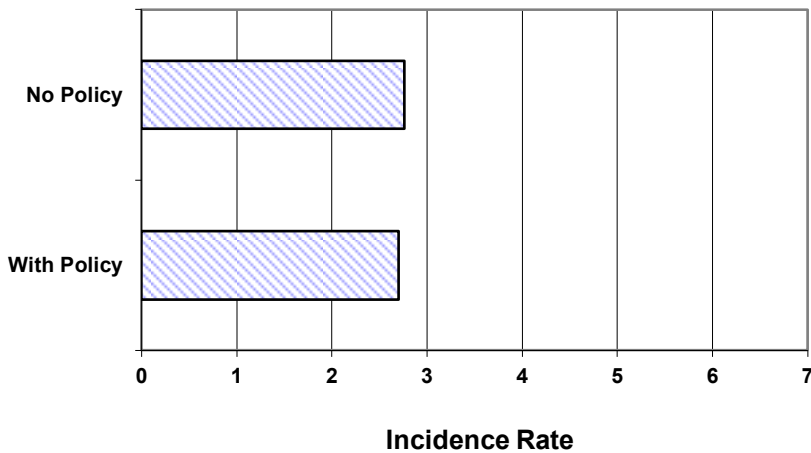
Formal Program for Drug and Alcohol Abuse



Formal Program for Drug and Alcohol Abuse



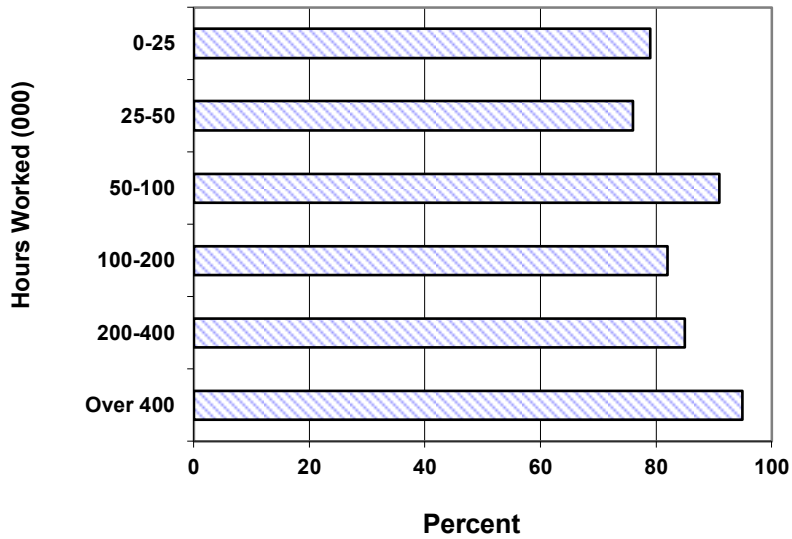
Incidence Rate by Drug Policy



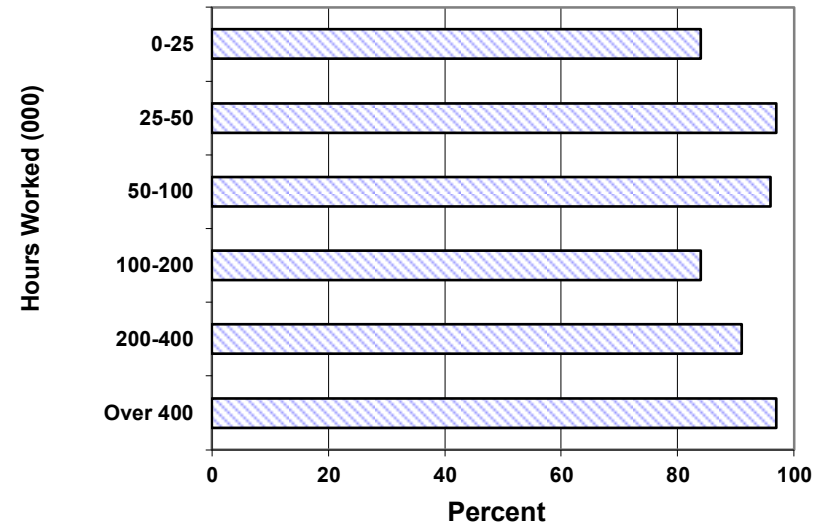
The percent of contractors with a formal drug and alcohol program was 80 percent, about the same as last year's 78 percent.

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

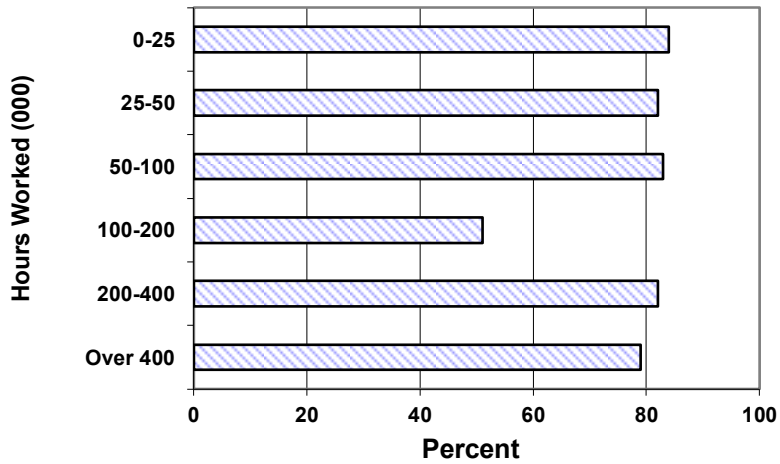
Pre-Hire Testing Conducted



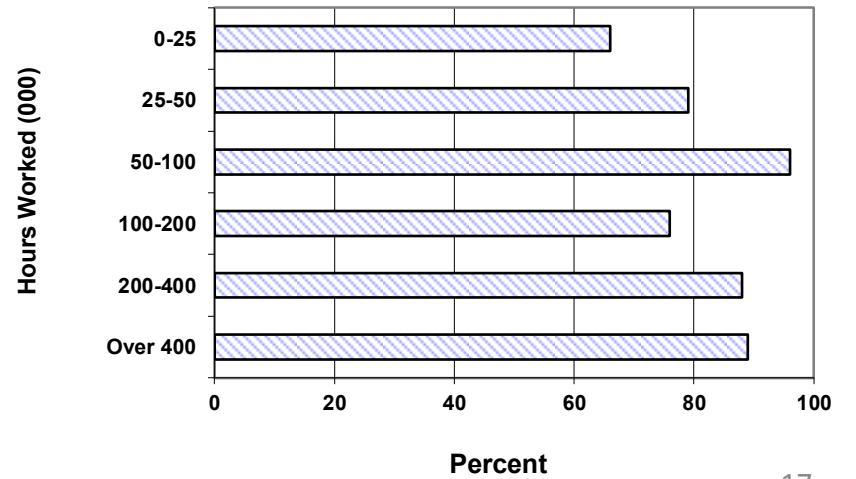
Post Accident Testing Conducted



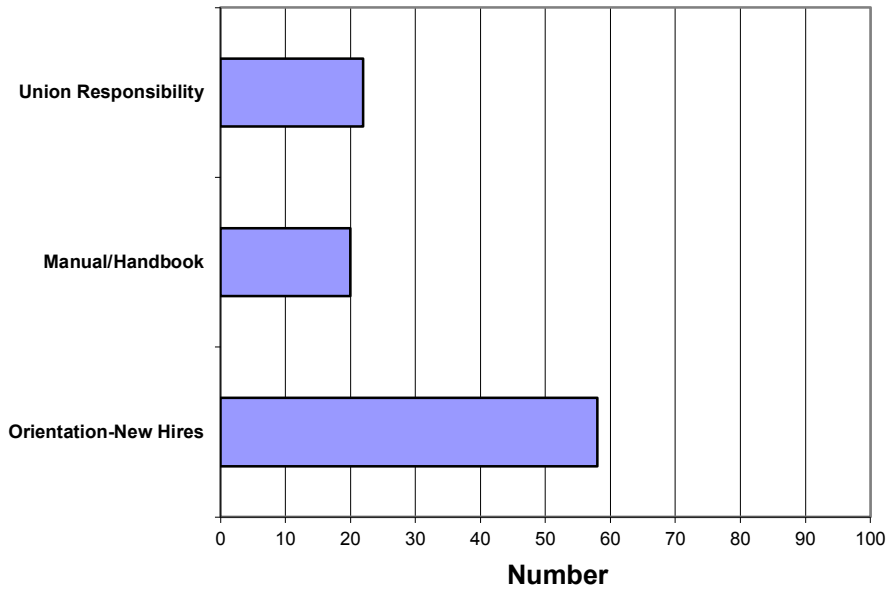
Random Testing Conducted



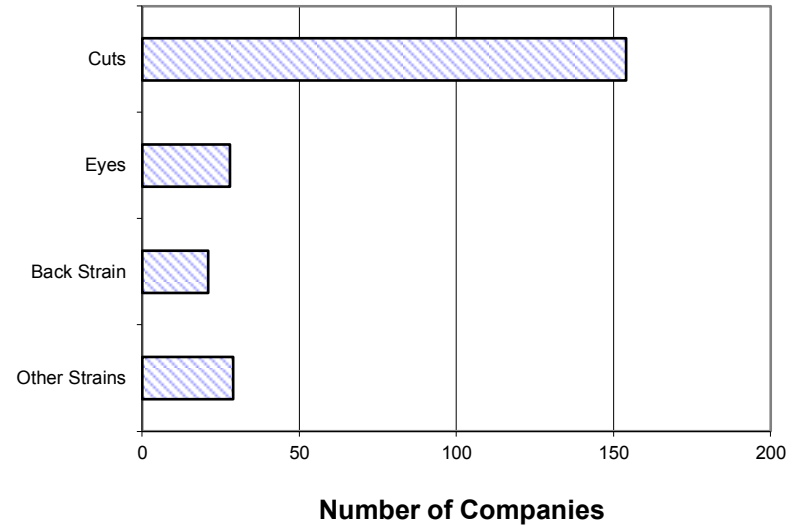
Penalties



Method of Informing Employees



Most Common Injuries



Similar to last year, contractors primarily used 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 2014 was cuts. Other strains was the second most common type of injury, followed closely by injuries to the eyes and finally back strains.

SMACNA Safety Trends

	<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>	<u>2014</u>
Incidents	1,494	1,446	1,339	1,210	1,724	1,687	1,192	912	902	973
Incidence Rate	5.06	5.21	4.62	5.06	4.29	3.84	3.46	3.11	2.52	2.69
Lost Workdays	27,605	24,371	20,547	19,467	30,712	25,785	22,311	15,316	11,545	14,945
Average Lost Workdays	160	82	84	92	101	70	63	61	53	58
Reported Hours (millions)	59.0	56.0	57.9	47.8	80.3	87.8	68.9	58.7	71.6	72.4
Safety & Health Program	93%	96%	98%	95%	95%	96%	98%	98%	99%	96%
Designated Safety Coord.	93%	97%	96%	95%	94%	97%	93%	93%	93%	87%
SMACNA Products	82%	84%	87%	87%	86%	88%	87%	88%	89%	87%
SMOHIT Safety Products	28%	37%	45%	51%	55%	67%	68%	54%	60%	54%
EMR	0.85	0.85	0.83	0.79	0.84	0.83	0.82	0.82	0.81	0.81
Drug Program	74%	78%	84%	82%	87%	88%	94%	82%	78%	80%
Number of Companies	283	298	243	212	304	377	350	247	214	254

SMACNA Safety Performance

Selected Issues

	<u>2014</u>		<u>2013</u>	
	All	Superior	All	Superior
	<u>Respondents</u>	<u>Performers</u>	<u>Respondents</u>	<u>Performers</u>
Use SMACNA Safety Products	87%	87%	89%	75%
Have a Formal Drug Policy	80%	83%	78%	77%
Provide New Worker Orientation	78%	91%	83%	92%
Utilize OSHA 10 Hr. Training	51%	62%	63%	67%
Utilize OSHA 30 Hr. Training	52%	64%	53%	65%
Utilize Computer Based Training	51%	64%	45%	58%
Average EMR	0.81	0.75	0.81	0.74
Average Incidence Rate	2.69	0.97	2.52	0.91

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 below 2.00.

Those contractors who met the criteria for superior performers exhibited better performance in most of the categories listed such as having a formal drug policy, providing new worker orientation, using OSHA 10-hour and 30-hour training, and employing computer based training. In other words, those companies that put the greatest effort into safety promotion see the best results with lower incidence rates and EMR results.