

# **SMACNA SAFETY PROFILE 2009**

## **Performance and Characteristics**

**July 2009**

## Introduction

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

Information submitted for the contest provides a rich data base 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 data provided by 304 SMACNA contractors indicated that:**

- o The OSHA incidence rate was 4.29.
- o Almost one-third of all contractors reported an OSHA incidence rate of zero.
- o The OSHA incident rate generally declined as hours worked increased.
- o The average EMR was .84.
- o Almost half of contractors reported no lost workdays.

### **Characteristics of safety policies and programs of most SMACNA contractors include:**

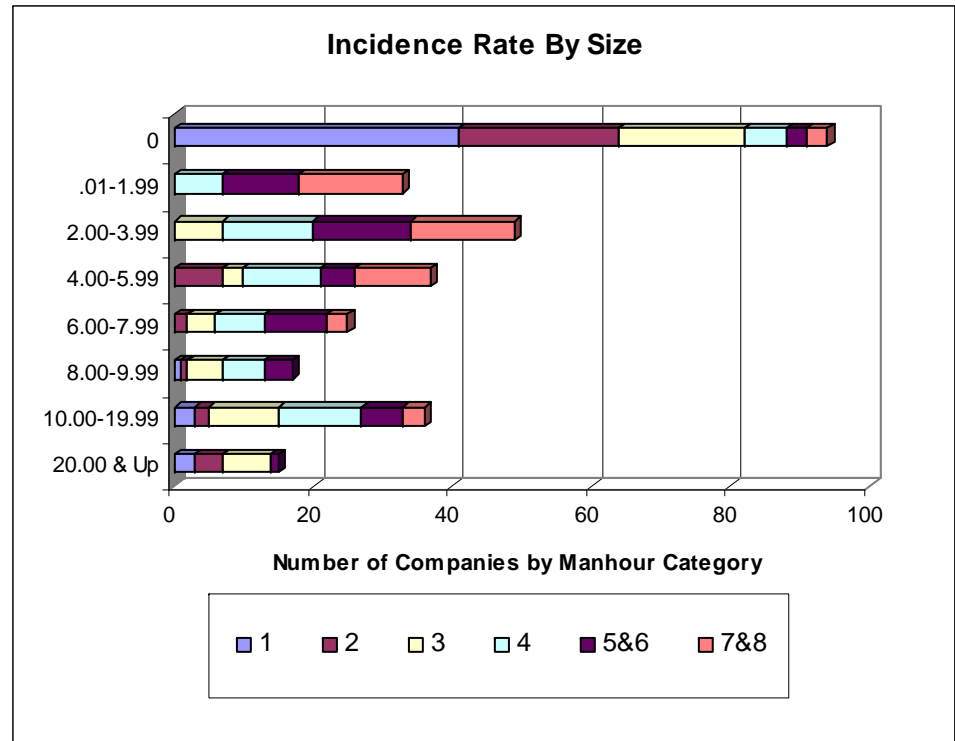
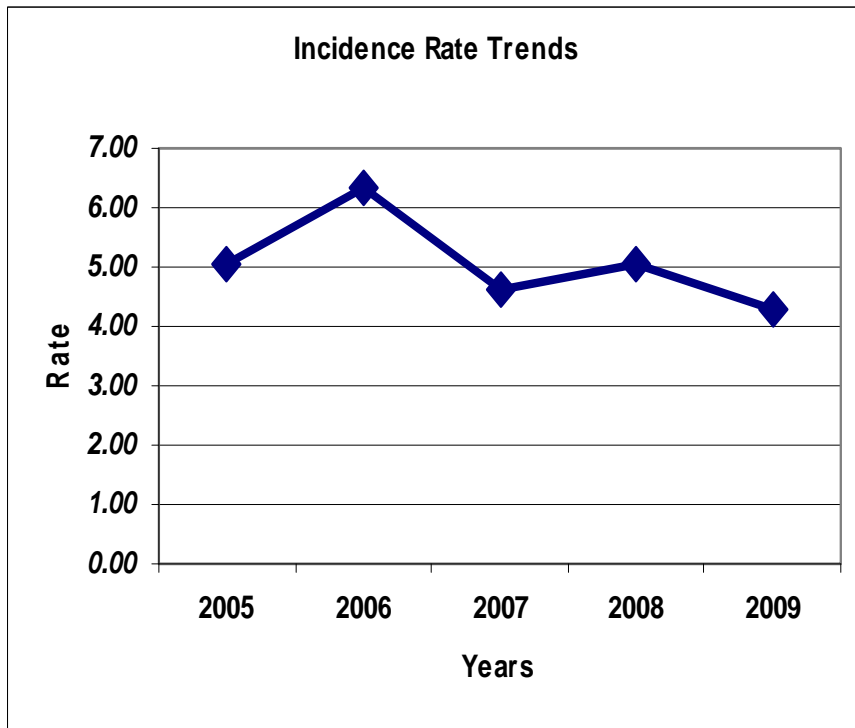
- o A company safety policy.
- o A designated competent safety coordinator.
- o Regularly scheduled training programs.
- o A variety of safety training materials from SMACNA and other sources.
- o A formal program for drug and alcohol abuse, now up to 87 percent.
- o Continued increased utilization of SMOHIT safety products

## SMACNA Safety Summary

Class Size	Reports	Hours	Number of Incidents	Incidence Rate
1	48	692,219	15	4.33
2	40	1,417,842	41	5.78
3	54	3,891,912	141	7.25
4	63	9,375,799	291	6.21
5	33	8,157,933	232	5.69
6	19	6,582,277	178	5.41
7	9	4,102,918	71	3.46
8	38	46,070,589	755	3.28
<b>Grand Total</b>	<b>304</b>	<b>80,291,489</b>	<b>1,724</b>	<b>4.29</b>

### Class Size

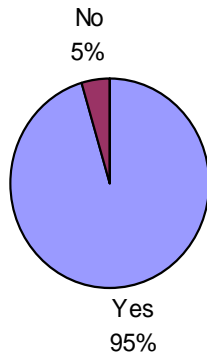
1	1-25,000 hours	<p>This year there were 304 participating contractors in the SMACNA Safety Awards Program. These companies worked about 80 million hours. Over half the total hours were reported by companies working over 500,000 hours in the year. Almost one-third of respondents reported no occupational injuries or illness with lost workdays. The average OSHA incidence rate was 4.29, down from 5.06 a year earlier.</p>
2	25,001-50,000 hrs.	
3	50,001-100,000 hrs.	
4	100,001-200,000 hrs.	
5	200,001 - 300,000 hrs.	<p>Responding contractors reported over 30,000 lost workdays. There were 131 contractors or 43 percent with no lost workdays. For those contractors who reported lost workdays because of occupational injury or illness, the average number of days was 101, continuing an upward trend.</p>
6	300,001-400,000 hrs.	
7	400,001-500,000 hrs.	
8	Over 500,000 hrs.	



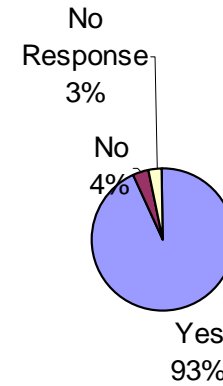
The average incidence rate declined in the past year to 4.29, continuing the generally downward trend of recent years. Some annual variation may be attributed to the changing mix of respondents by number of man-hours. As a reminder, the OSHA incidence rate is different from a lost work day rate (it includes “other” recordable injuries and illnesses vs only days away from work or restricted duty) and may not necessarily reflect the total severity of the cases.

There were companies reporting no injury/illness cases in all size categories. Zero was, by far, the most common incidence rate reported, consistent with past years. Remaining companies incidence rates were spread throughout the range of reported figures.

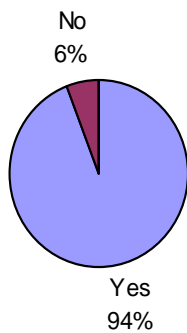
### Safety and Health Program



### Conduct Safety Inspections

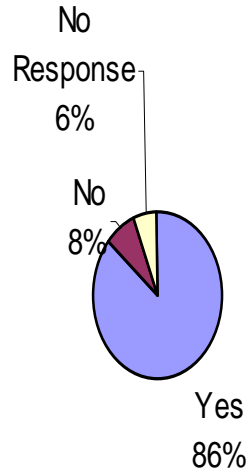


### Designated Safety Coordinator

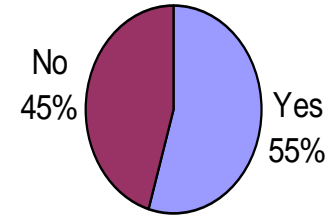


Written safety and health programs including a designated competent safety coordinator and regular safety inspections have become almost universal. The safety coordinator is usually a full time employee, especially in larger companies. Very few respondents utilize a third party to be responsible for company safety.

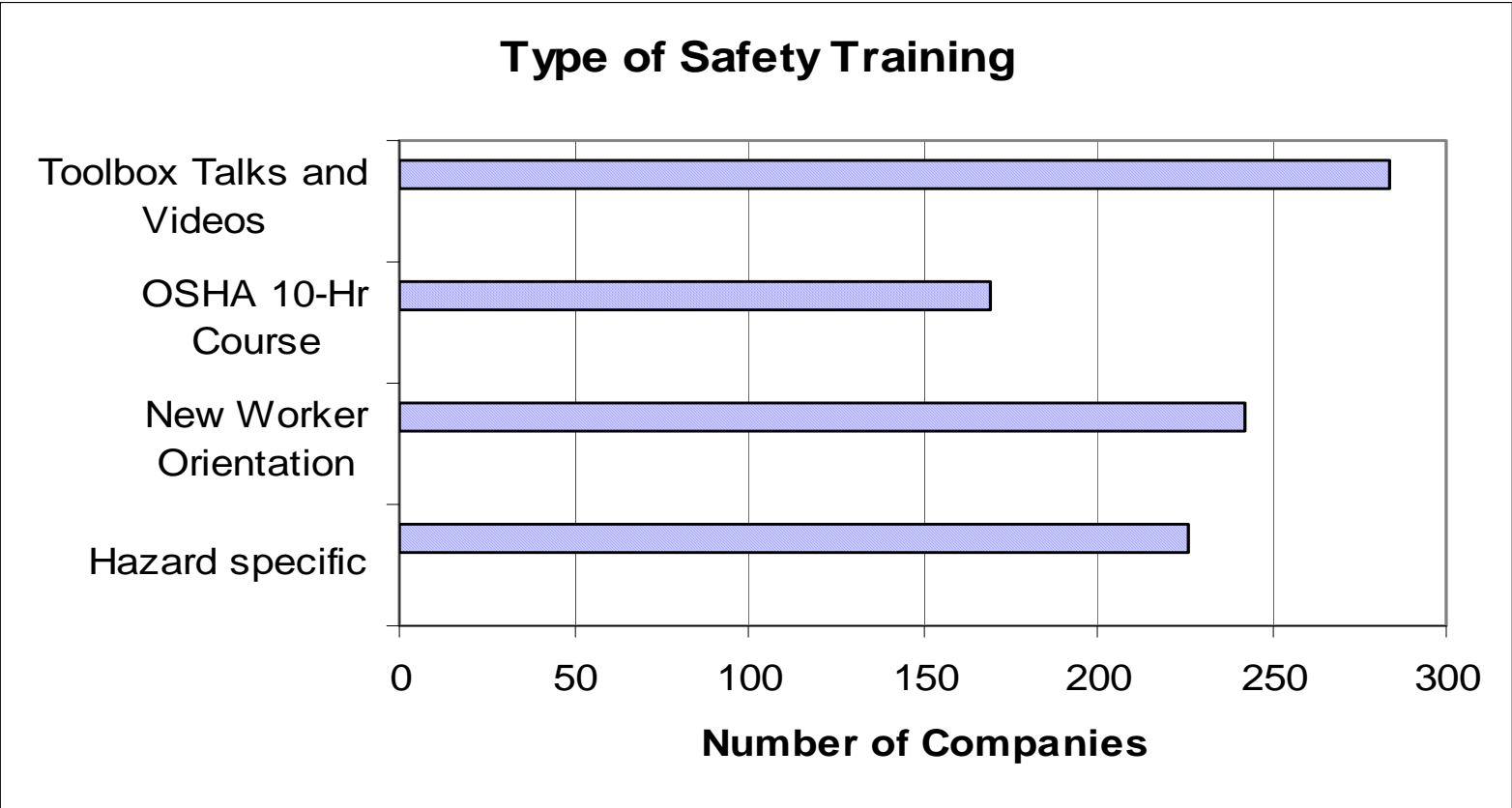
### Use Safety Products & Services from SMACNA



### Use SMOHIT Safety Products



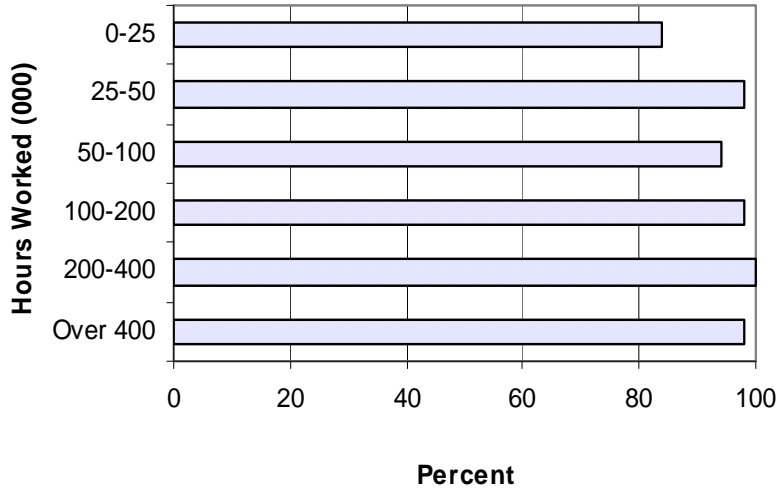
Most contractors use SMACNA safety products and services. As reported each year, a much lower portion utilize SMOHIT safety products, but this percentage continues to trend upward. While larger companies were more likely to use SMACNA as a source of safety materials, moderate SMOHIT usage was apparent for all size contractors.



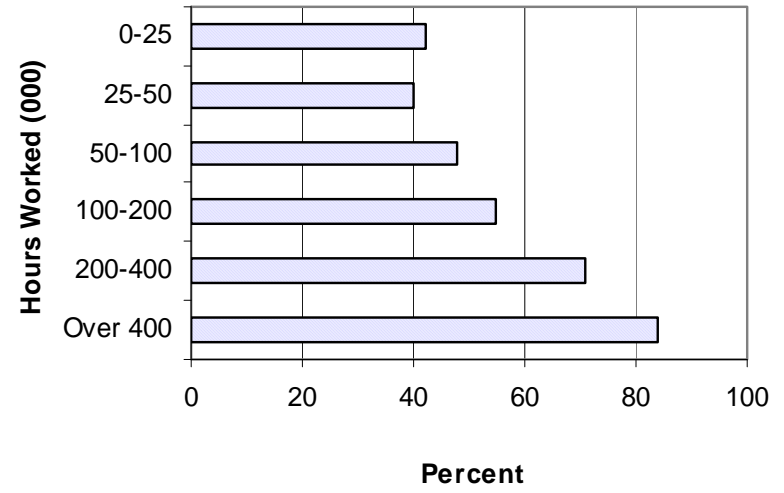
A number of types of training are utilized by contractors. Compared to a year earlier, there was little change in type of training or its prevalence, By contractor size, utilization of toolbox talks and videos is universal while usage of other categories of training increased with the number of hours worked by the contractor.



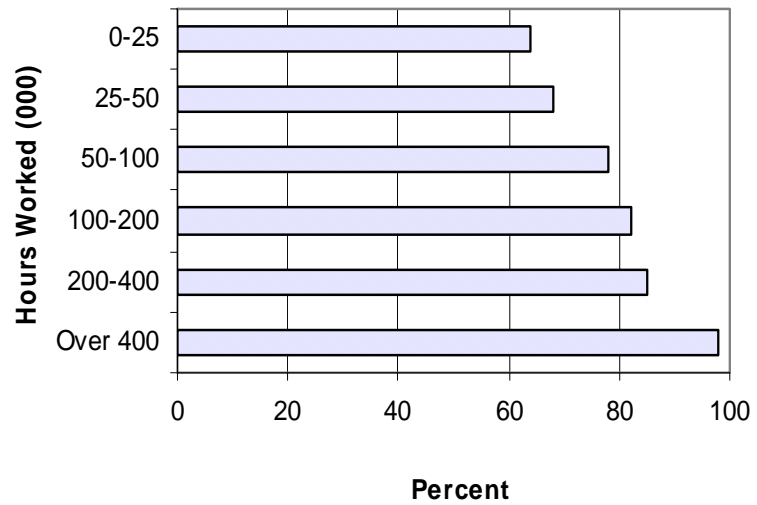
**Toolbox Talks and Videos**



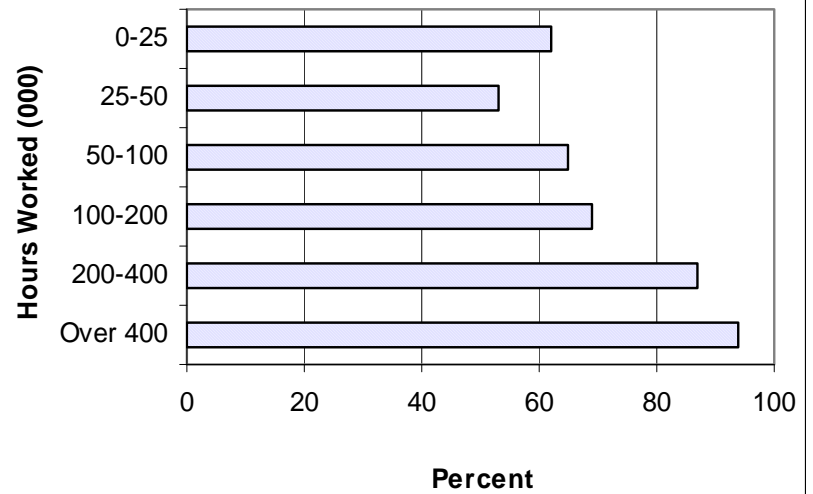
**OSHA 10-Hour Course**

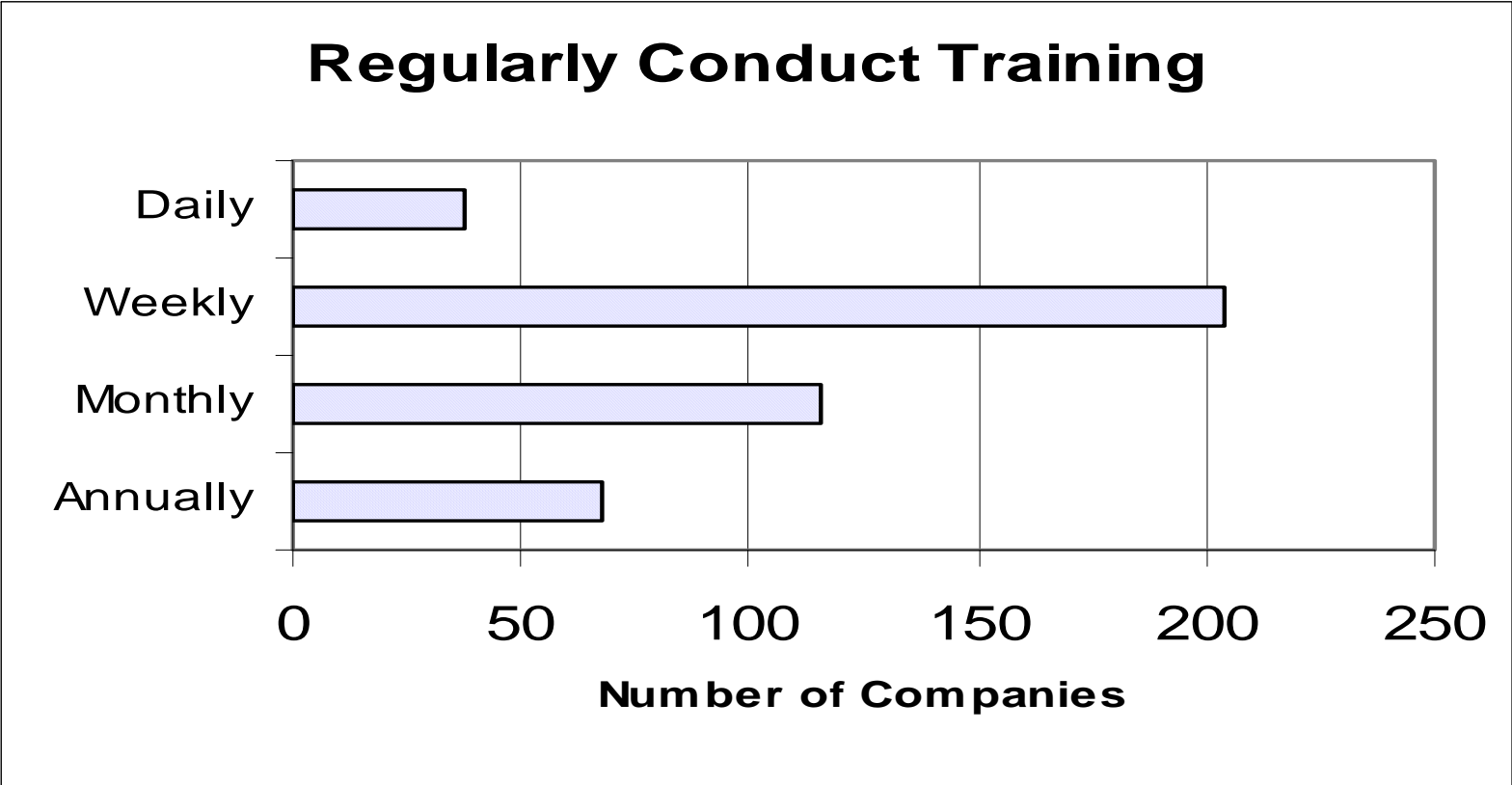


**New Worker Orientation**



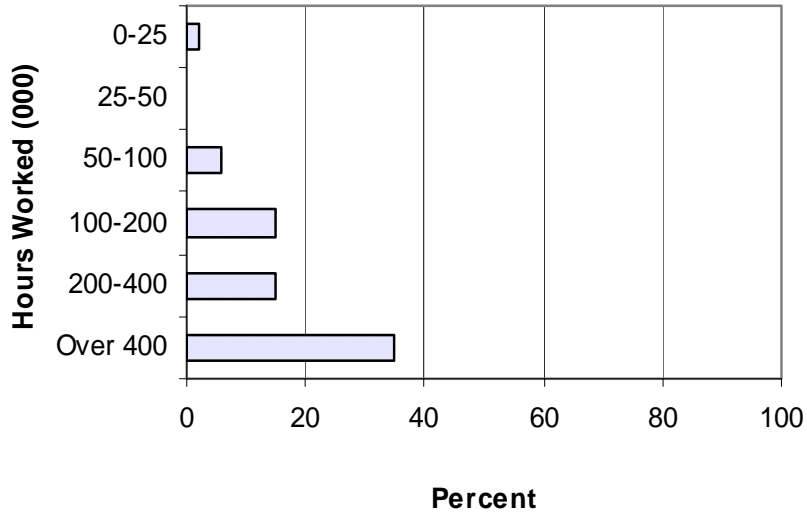
**Hazard-specific**



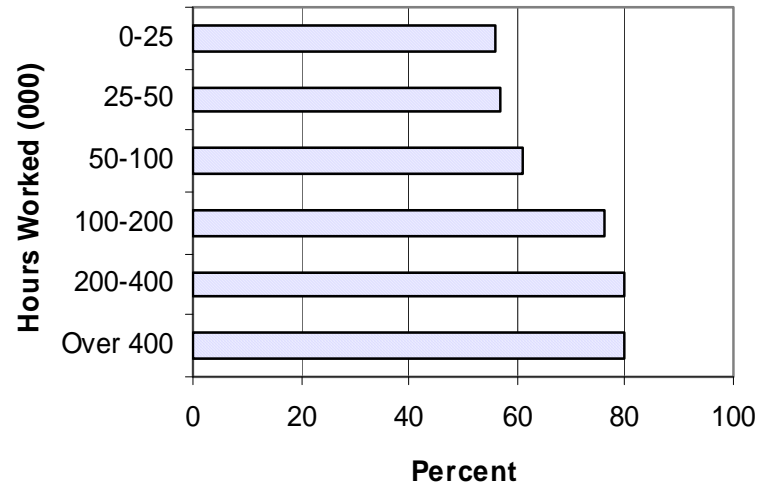


Most often contractors include training as a part of their weekly schedule. All sizes of contractors, by hours worked, favored a weekly training schedule.

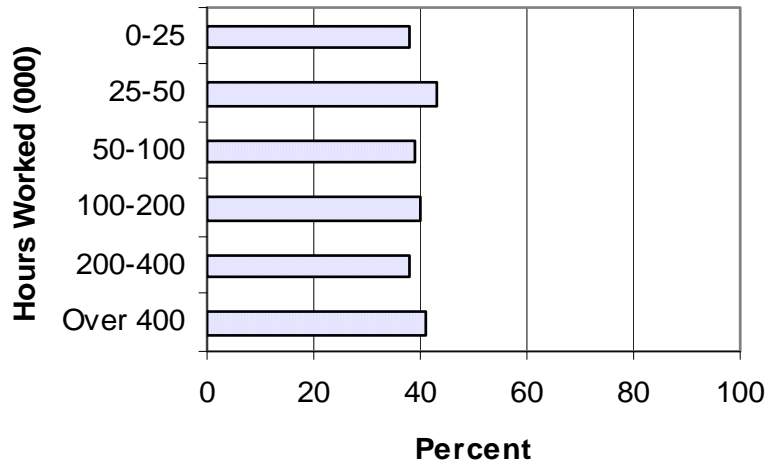
**Conduct Training-Daily**



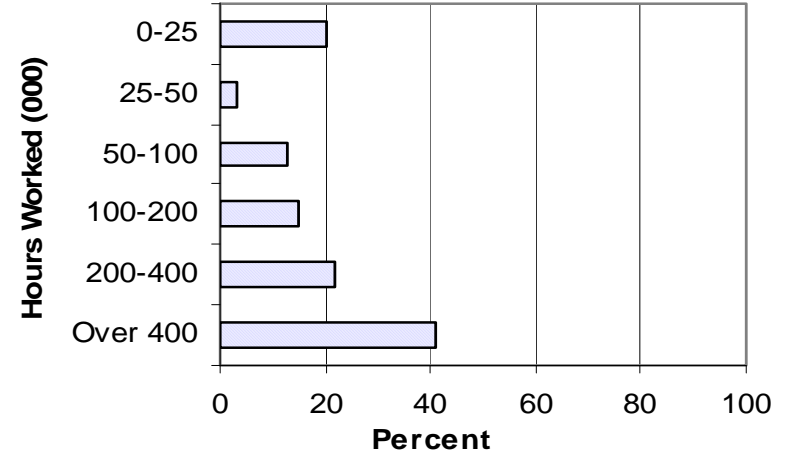
**Conduct Training-Weekly**



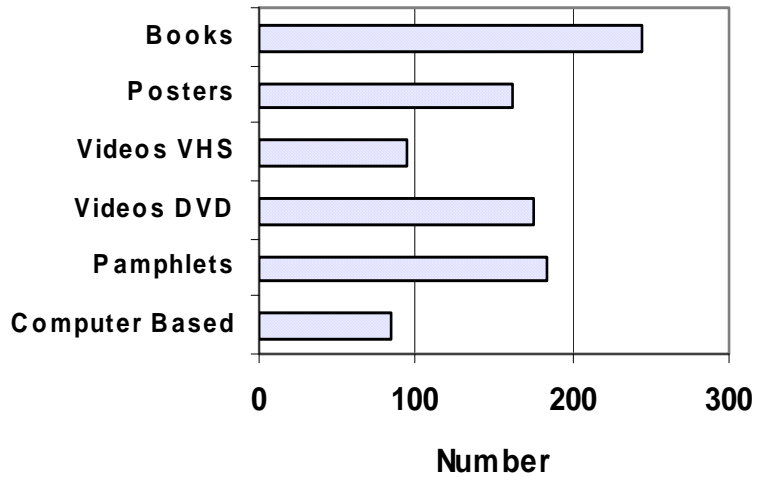
**Conduct Training-Monthly**



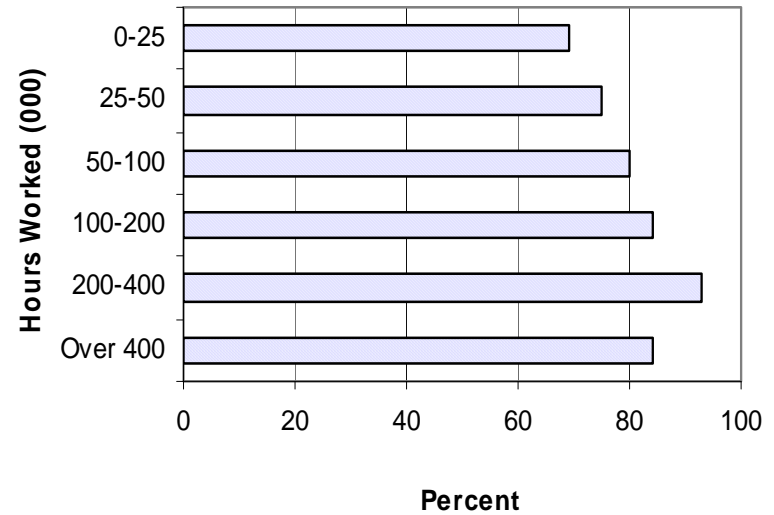
**Conduct Training-Annually**



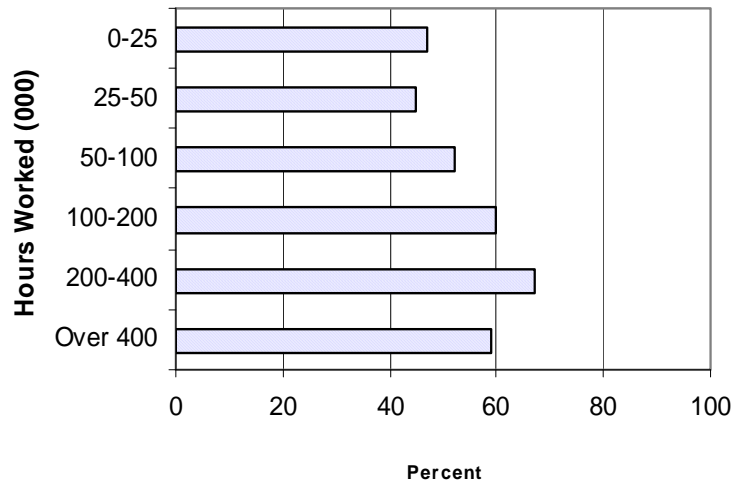
**Types of Training Materials Used**



**Safety Training Materials-Books/Manuals**

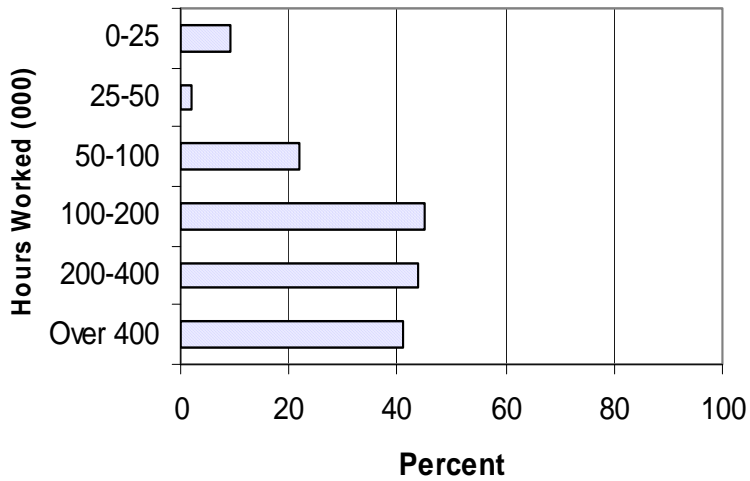


**Safety Training Materials-Posters**

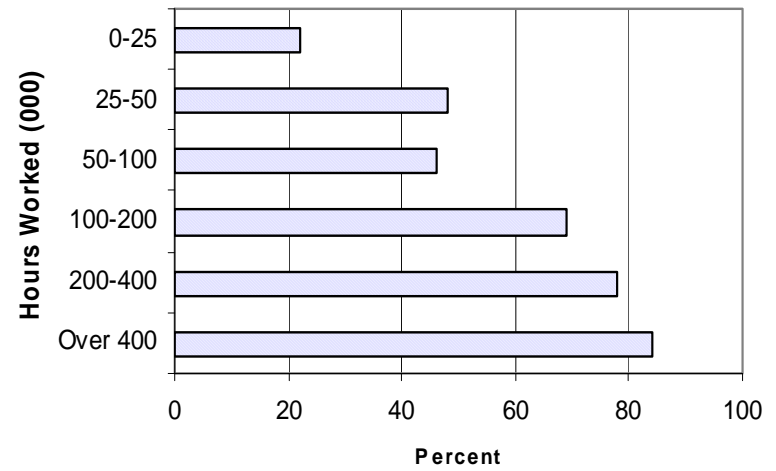


A variety of materials are widely used by contractors to transmit safety information. Print materials are most commonly utilized. Books and manuals were most popular for all sizes of contractors, but pamphlets are most widely used by smaller companies. Some shift was experienced from VHS to DVD. Utilization of all training materials generally increased with contractor size.

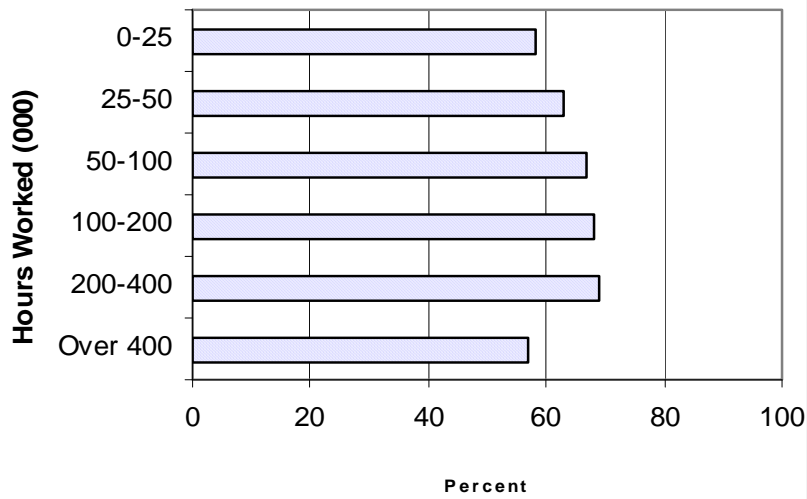
**Safety Training Materials- Videos VHS**



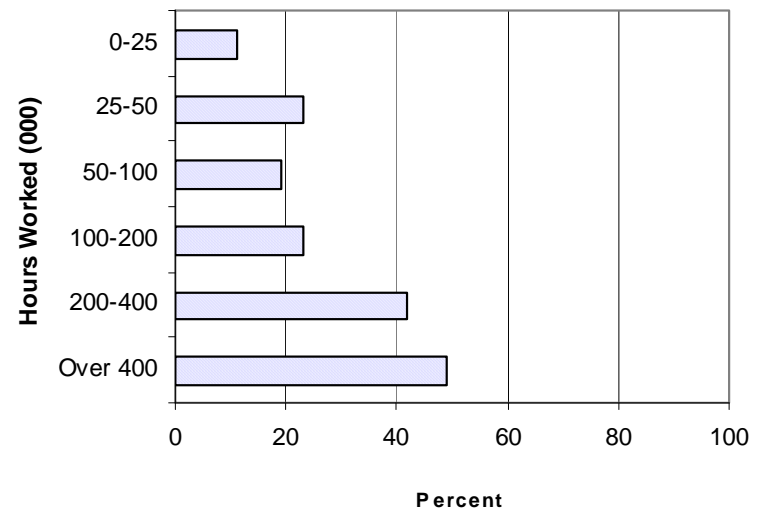
**Safety Training Materials-Videos DVD**

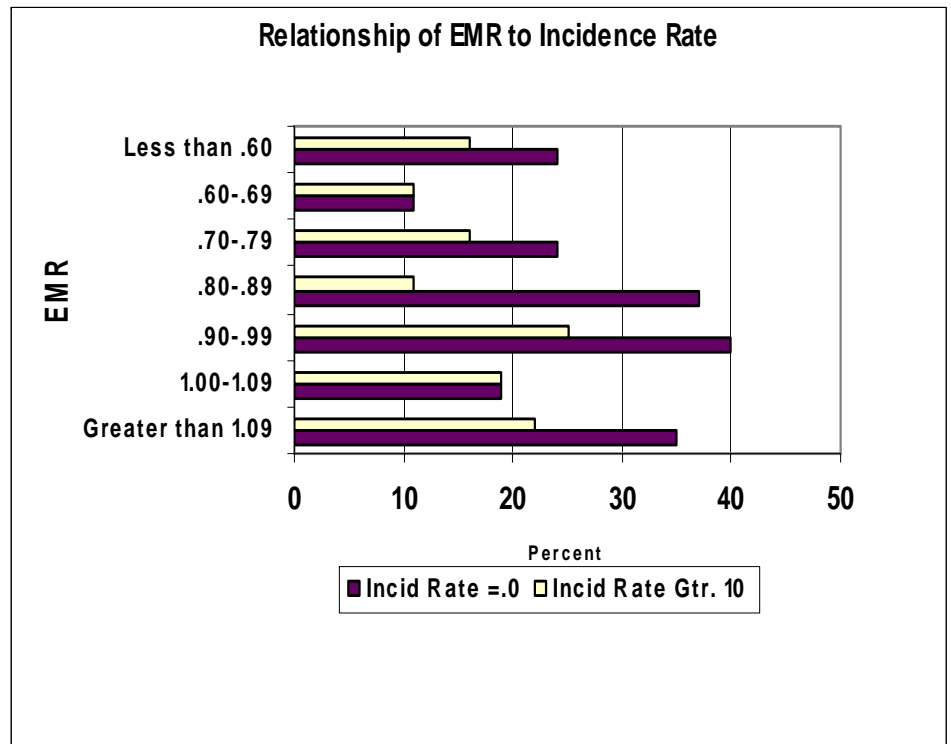
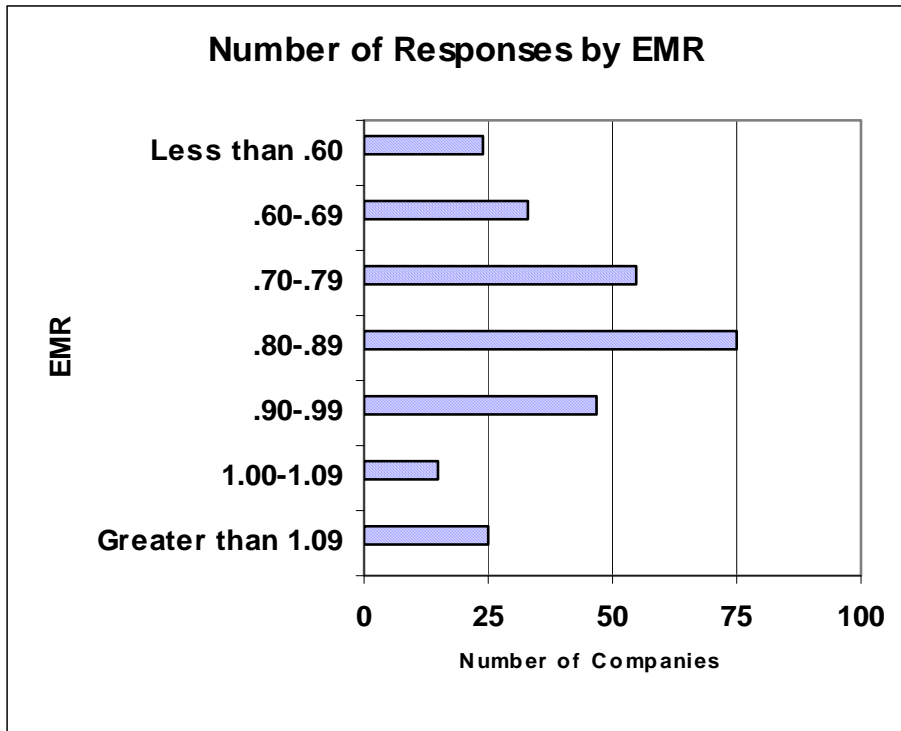


**Safety Training Materials-Pamphlets**



**Safety Training Materials-Computer Based Training**





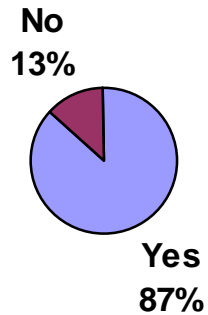
About 85 percent of companies reported an experience modification rate (EMR) of less than 1.0. It was most common to have an EMR between .80 and .89. The average EMR was .84, within the range of recent years. There was only moderate correlation between a company's EMR and its OSHA incidence rate.

## Industry Segment Safety

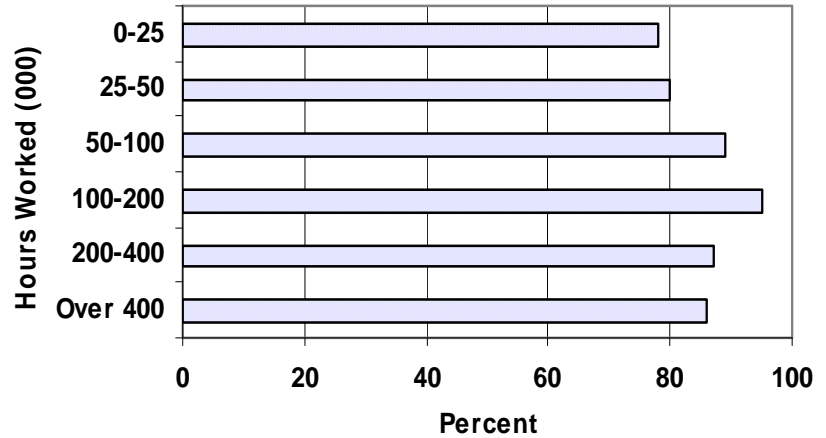
	Number	Hours	Incidents	Incident Rate
Commercial HVAC	146	30,373,192	560	3.69
Residential HVAC	38	812,009	19	4.68
Architectural Sheet Metal	61	2,533,043	41	3.26
Industrial Sheet Metal	121	9,836,950	185	3.77
Kitchen Equipment/Food Svs.	28	267,855	5	4.08
Manufacturing	49	1,442,138	41	5.70
Testing and Balancing	50	822,595	14	3.42
Siding and Decking	15	769,451	10	2.47

For a majority of respondents, it was possible to relate safety experience to type of work performed. Most reported work was HVAC. For most categories of work, incidence rate was between three and five. The exceptions were Manufacturing, which was highest and Siding and Decking which was lowest. Reported hours increased the most for Architectural.

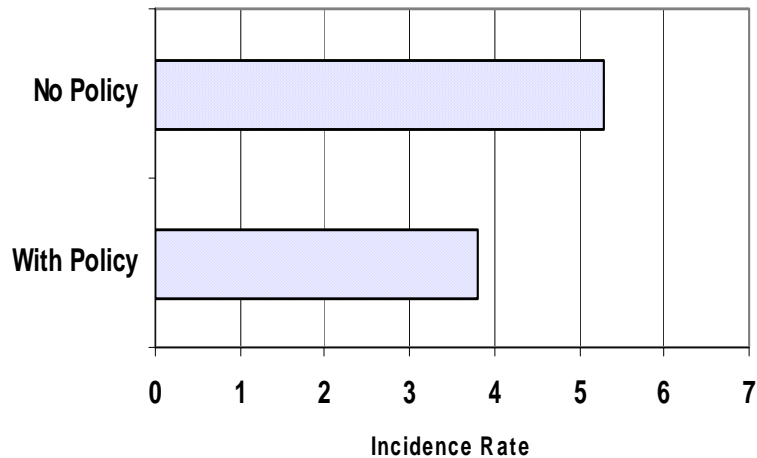
### Formal Program for Drug and Alcohol Abuse



### Formal Program for Drug and Alcohol Abuse



### Incidence Rate by Drug Policy

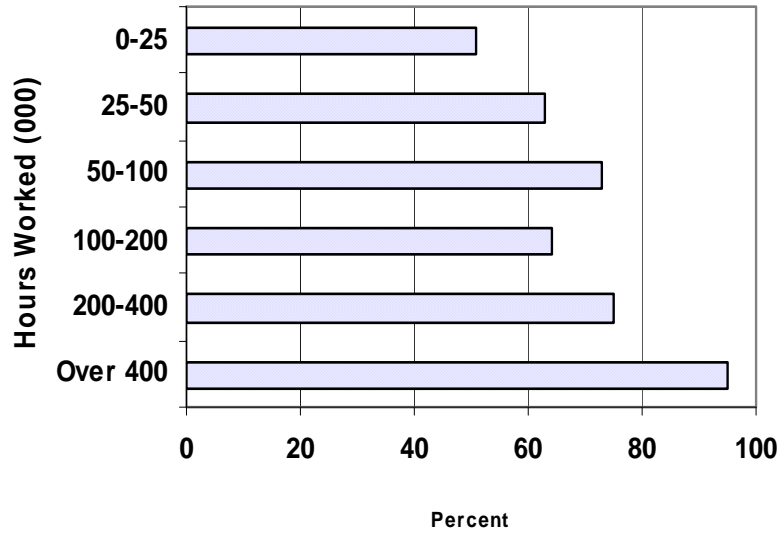


Most companies have a formal program for handling drug and alcohol abuse. They account for close to 90 percent of reported hours. All size contractors are likely to have implemented this type of program.

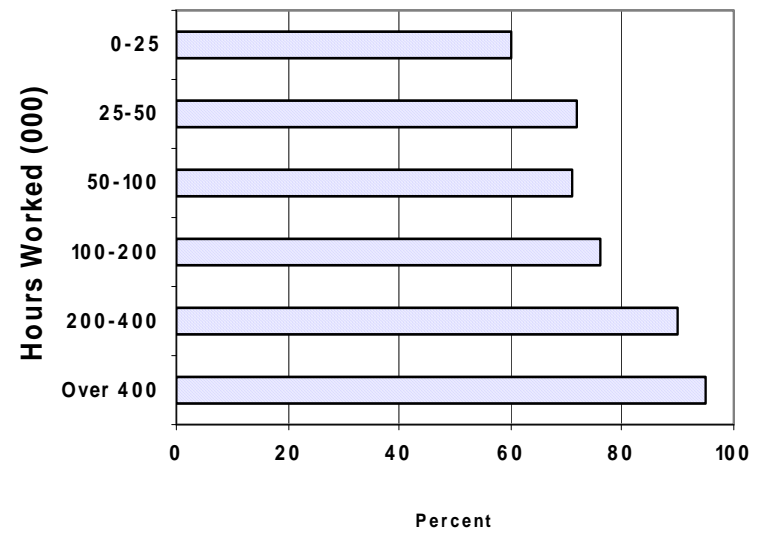
There continues to be a strong relationship between safety performance and a drug and alcohol abuse program. Companies with a program experienced an OSHA incidence rate significantly below those that do not. Testing provisions are on the rise.



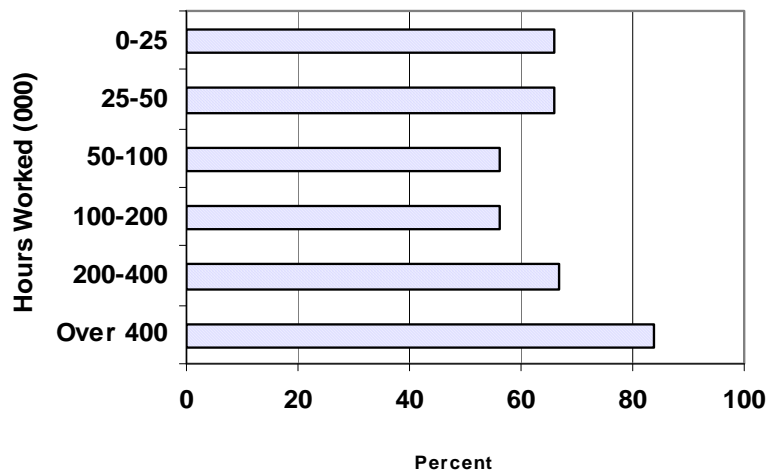
### Pre-Hire Testing Conducted



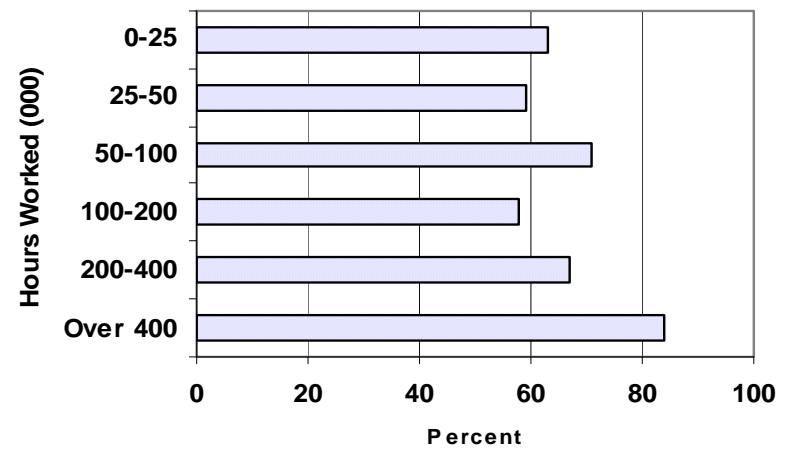
### Post Accident Testing Conducted

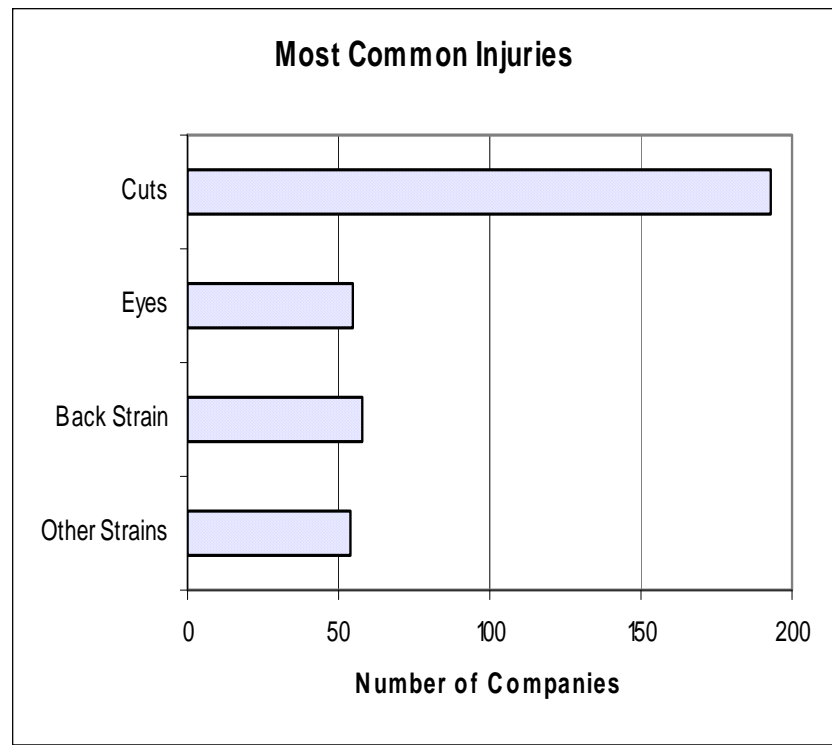
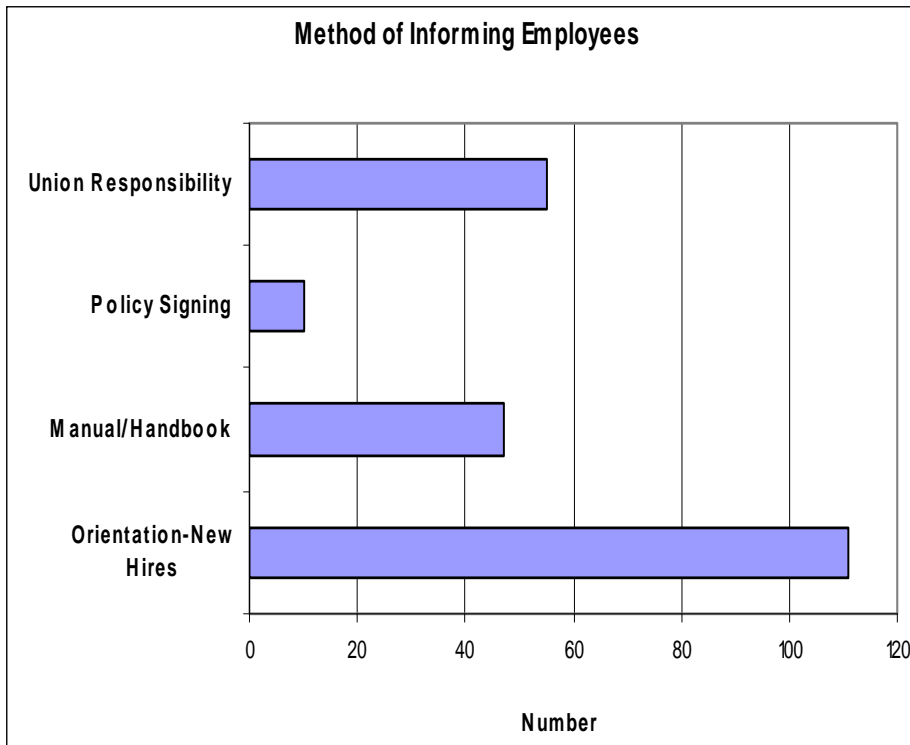


### Random Testing Conducted



### Penalties





Contractors utilize a number of means to inform their employees as to their drug and alcohol abuse policies. Most commonly and increasingly, it is part of an orientation program for new workers, but a significant number view this as a union responsibility.

Cuts, continue, by far, to be the most commonly reported injury. Some eye injuries may be cuts, as well.

### SMACNA Safety Trends

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004 1/</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Incidents	1,267	1,450	1,326	1,197	1,429	1,494	1,446	1,339	1,210	1,724
Incidence Rate	4.47	4.04	3.99	4.61	5.52	5.06	5.21	4.62	5.06	4.29
Lost Workdays	18,665	20,106	15,617	25,591	26,086	27,605	24,371	20,547	19,467	30,712
Average Lost Workdays	97	114	87	145	168	160	82	84	92	101
Reported Hours (millions)	<u>2/</u>	71.8	66.4	52.0	51.8	59.0	56.0	57.9	47.8	80.3
Safety & Health Program	92%	91%	94%	92%	93%	93%	96%	98%	95%	95%
Designated Safety Coord.	95%	92%	94%	91%	87%	93%	97%	96%	95%	94%
SMACNA Products	89%	88%	88%	88%	83%	82%	84%	87%	87%	86%
SMOHIT Safety Products						28%	37%	45%	51%	55%
EMR	0.81	0.83	0.84	0.86	0.85	0.85	0.85	0.83	0.79	0.84
Drug Program	51%	58%	64%	67%	76%	74%	78%	84%	82%	87%
Number of Companies	303	292	322	296	252	283	298	243	212	304

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

2/Data not available.

### Selected Issues

	<u>2009</u>		<u>2008</u>	
	<u>All Respondents</u>	<u>Superior Performers</u>	<u>All Respondents</u>	<u>Superior Performers</u>
Use SMACNA Safety Products	86%	77%	87%	73%
Have a Formal Drug Policy	87%	91%	82%	100%
Provide New Worker Orientation	79%	86%	83%	91%
Utilize OSHA 10 Hr. Training	55%	59%	53%	64%
Utilize Computer Based Training	27%	27%	29%	45%
Average EMR	0.84	0.79	0.79	0.86
Average Incidence Rate	4.29	1.15	5.06	0.58

Contractors with a higher level of safety commitment often experience better safety performance results than those with more basic safety programs. These “superior performers” implement policies and procedures to address key safety and health issues such as consistent training and a formal drug policy. Their safety programs are more often processes that are a part of a larger, corporate “safety culture”. For definition purposes for this exhibit, a superior performing contractor is one who worked over 100,000 hours and achieved an OSHA incidence rate of below 2.00.