

# **SMACNA Safety Profile 2007**

## **Performance and Characteristics**

**August 2007**

## Introduction

Each year SMACNA conducts a Safety Awards Program. This Program recognizes 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 lost workday 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.

In addition to safety performance information, the awards application 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. Particular attention is given to drug and alcohol abuse programs.

## Summary of Findings

Safety performance data provided more than 243 SMACNA contractors indicates that:

- o The lost workday incident rate was 4.62
- o Almost one-third of all contractors reported a lost workday incident rate of zero.
- o Lost workday incident rate generally declined as hours worked increased.
- o The average EMR was .83.

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 (more than three-quarters).

## SMACNA Safety Summary

Class Size	Reports	Hours	Number of Incidents	Incidence Rate
1	44	606,115	37	12.21
2	36	1,318,097	59	8.95
3	37	2,749,874	83	6.04
4	47	6,725,483	224	6.66
5	22	5,395,703	169	6.26
6	13	4,734,483	137	5.79
7	10	4,454,405	135	6.06
8	34	31,945,193	495	3.10
<b>Grand Total</b>	<b>243</b>	<b>57,929,353</b>	<b>1,339</b>	<b>4.62</b>

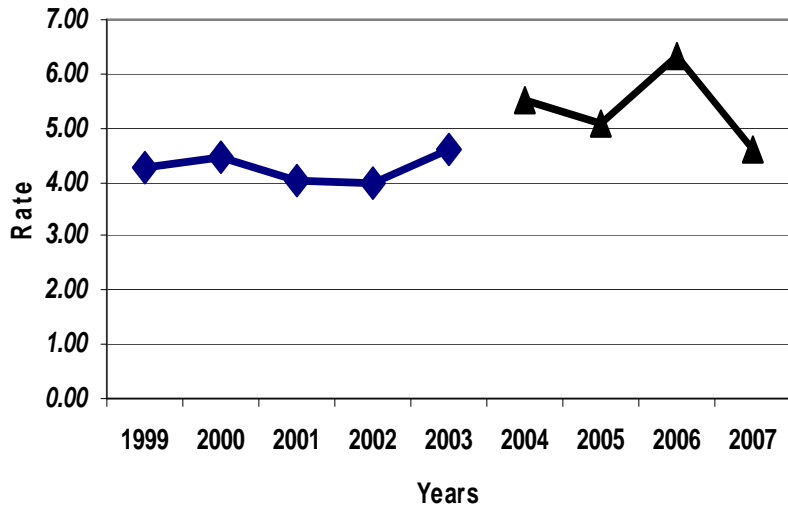
### Class Size

- 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.

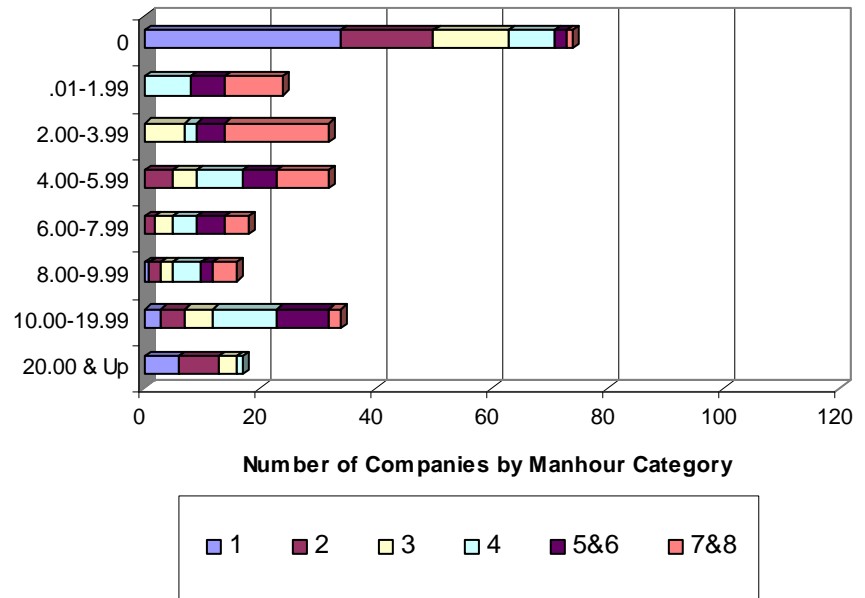
This year there were 243 participating contractors in the SMACNA Safety Awards Program. These companies worked 58 million hours. Over half the total hours were reported by companies working over 500,000 in the year. Almost one-third of respondents reported no occupational injuries or illness with lost workdays. The average lost workday incidence rate was 4.62.

Responding contractors reported over 20,000 lost workdays. There were 74 contractors or 30 percent with no lost workdays. For those contractors who reported lost workdays because of occupational injury or illness, the average number of days was 84, little changed from a year earlier.

Incidence Rate Trends



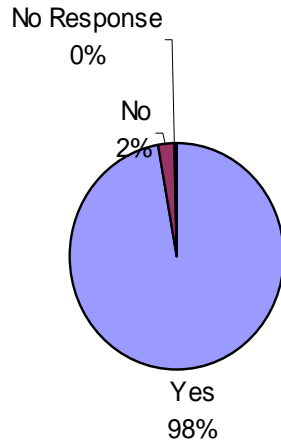
Incidence Rate By Size



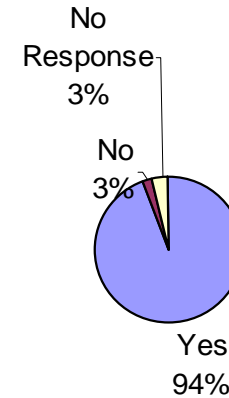
The average incidence rate reported declined to its lowest level since measures were changed in 2004. It should be noted that **data beginning in 2004 are not totally comparable to previous years due to significant changes in the OSHA record keeping requirements.** As the OSHA form used to record injury and illness cases is now more comprehensive, a greater number of incidents are being reported. In addition, the mix of respondents, by number of man-hours varies each year. The impact on the data of these factors cannot be measured. As a reminder, 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 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.

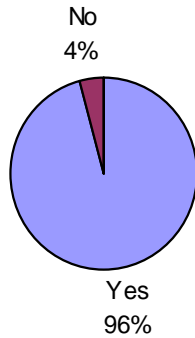
### Safety and Health Program



### Conduct Safety Inspections

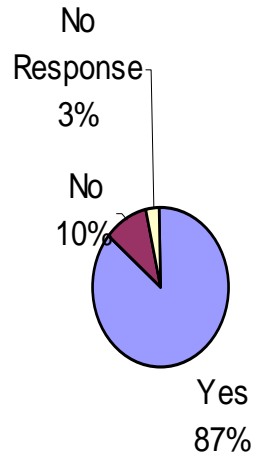


### Designated Safety Coordinator

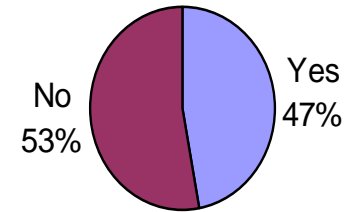


Written safety and health programs including a designated competent safety coordinator and regular safety inspections have become almost universal. The safety coordinator is usually a full time employee. Very few respondents utilize a third party to be responsible for company safety.

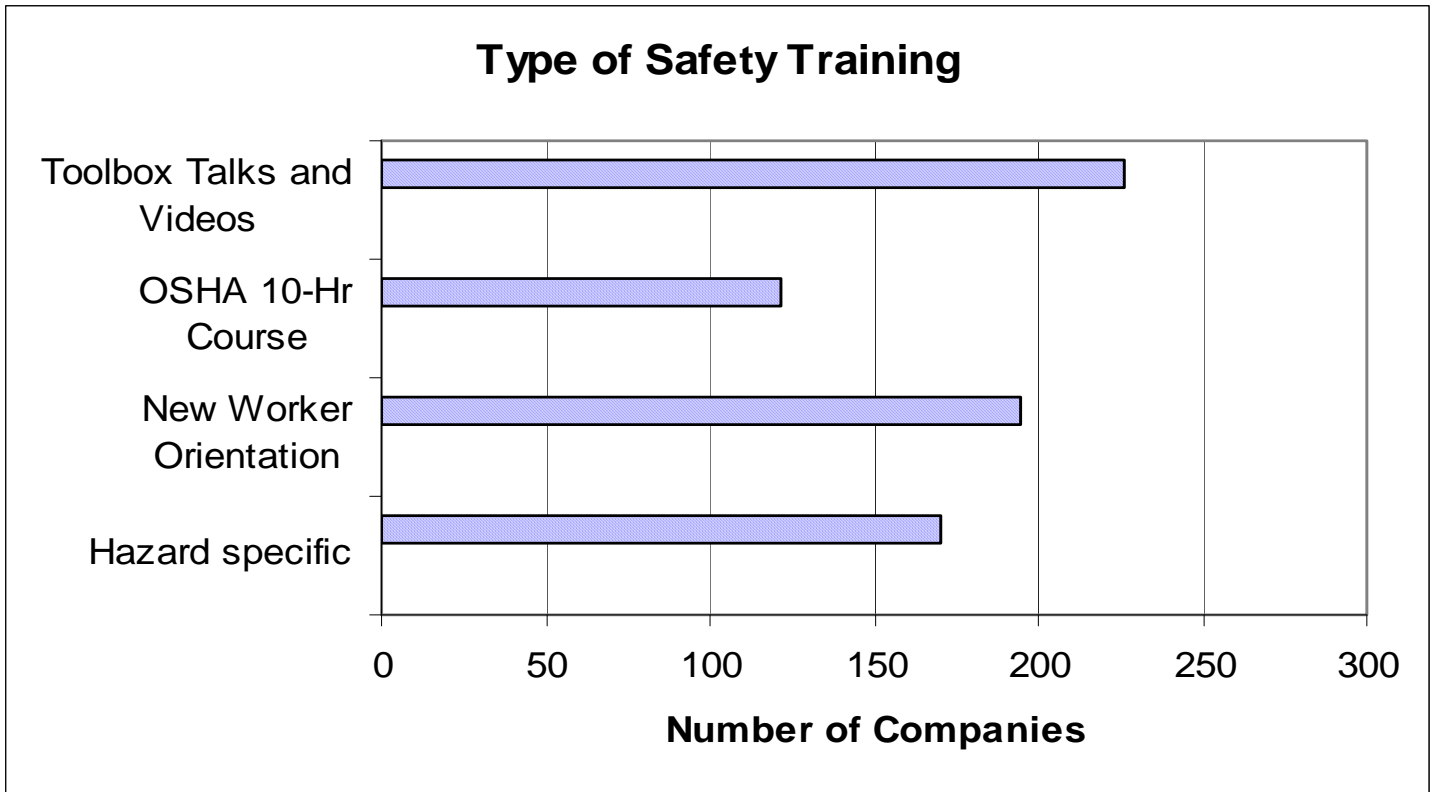
### Use Safety Products & Services from SMACNA



### Use SMOHIT Safety Products

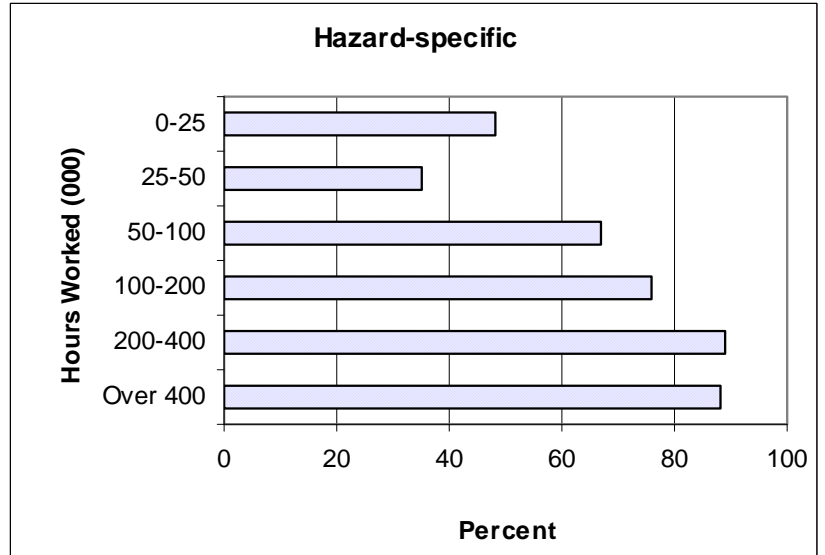
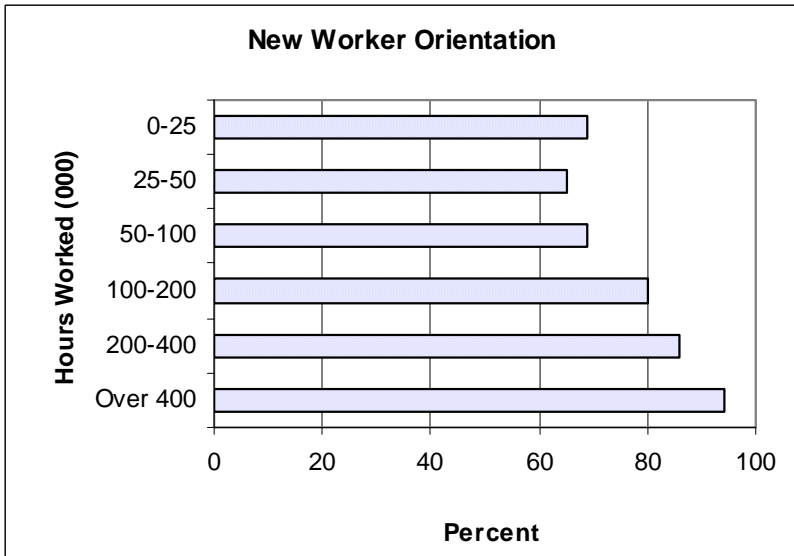
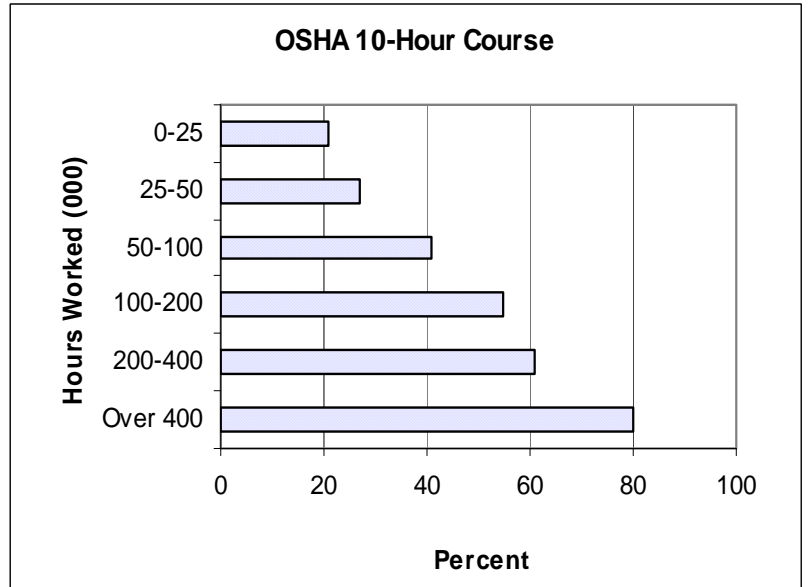
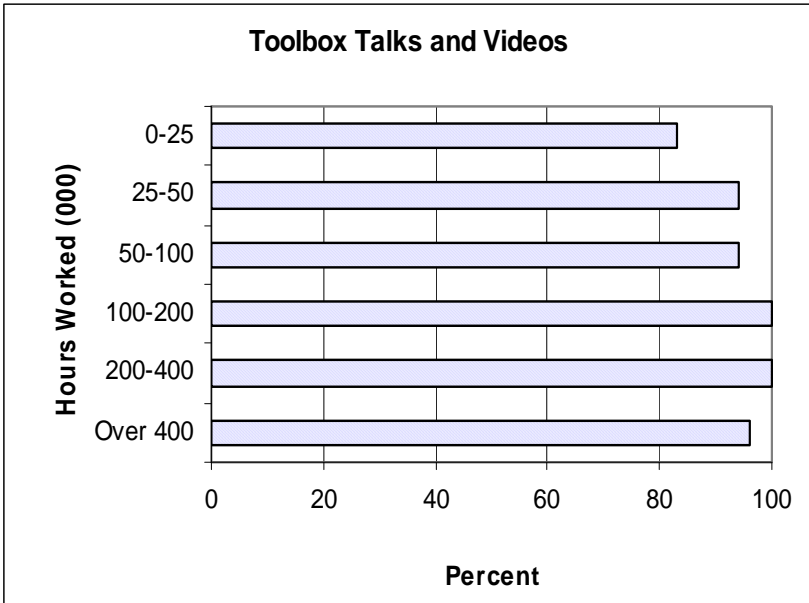


Most contractors use SMACNA safety products and services. As reported each year, a much lower portion utilize SMOHIT safety products, but this on the increase. While larger companies were more likely to use SMACNA as a source of safety materials, moderate SMOHIT usage was apparent for all size contractors.

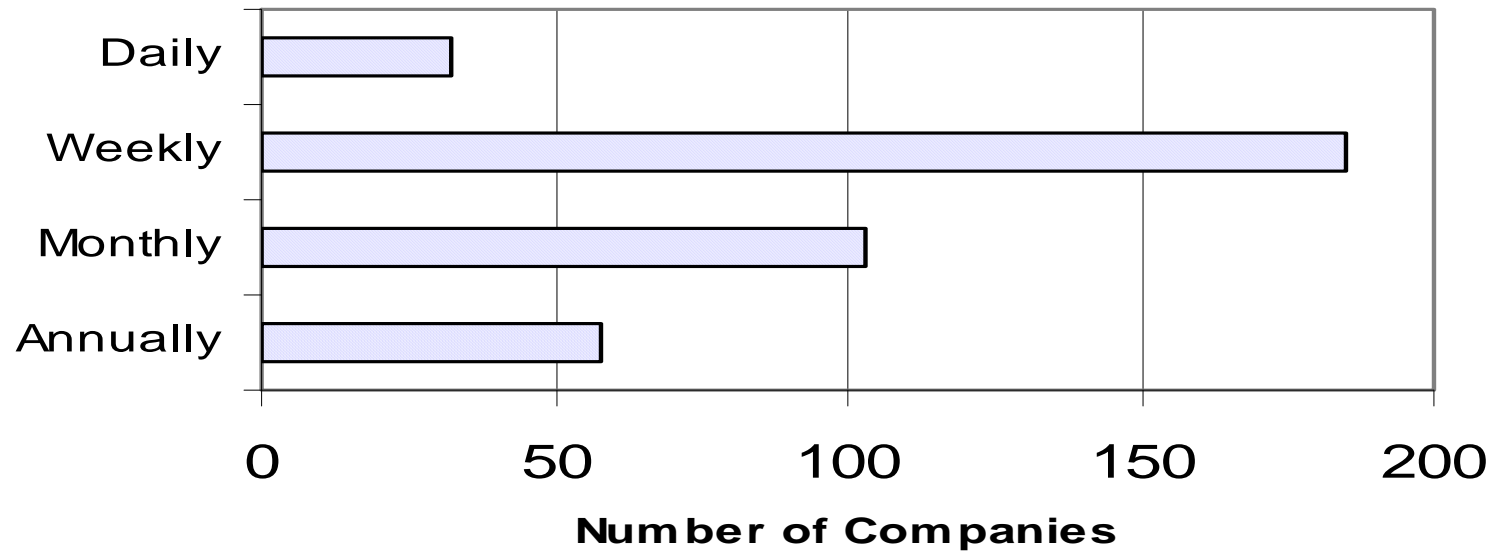


A number of types of training are utilized by contractors. Compared to a year earlier, there was little change in type of training or its prevalence, except wider use of hazard specific training. Generally, the usage of each category of training increased with the number of hours worked by the contractor.



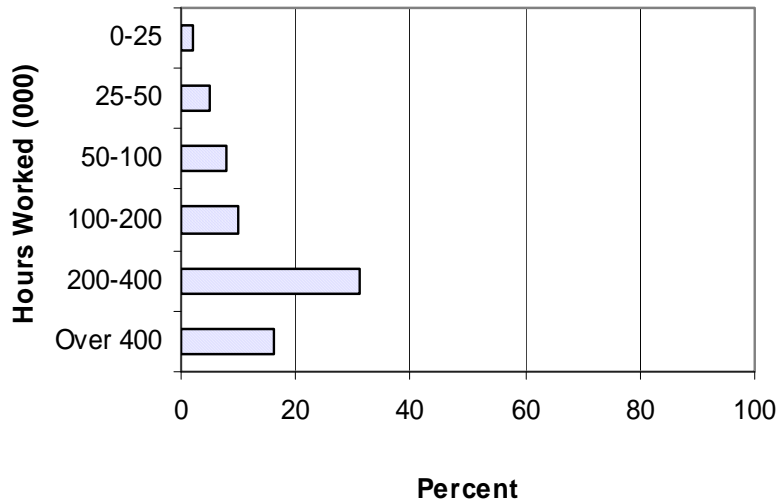


## Regularly Conduct Training

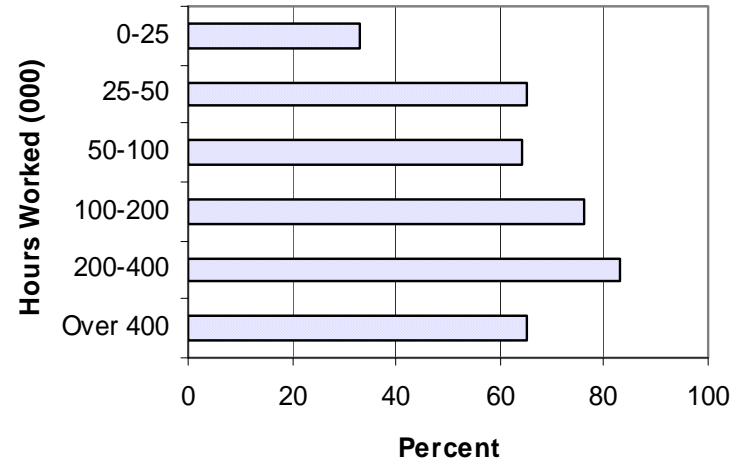


Most often contractors include training as a part of their weekly schedule. Contractors performing 200,000 to 400,000 hours of work were more likely to train at almost all intervals.

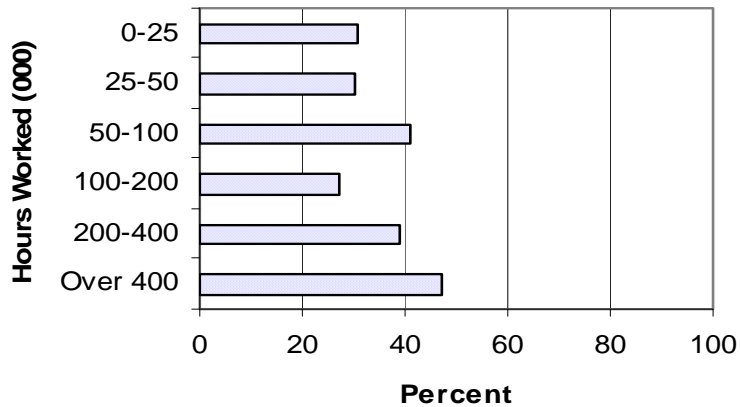
**Conduct Training-Daily**



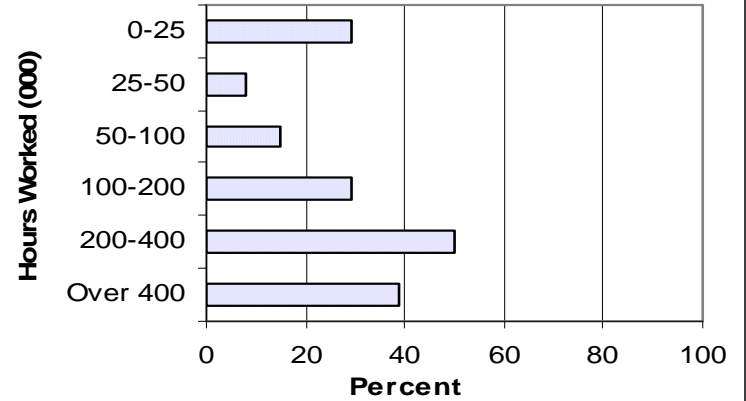
**Conduct Training-Weekly**



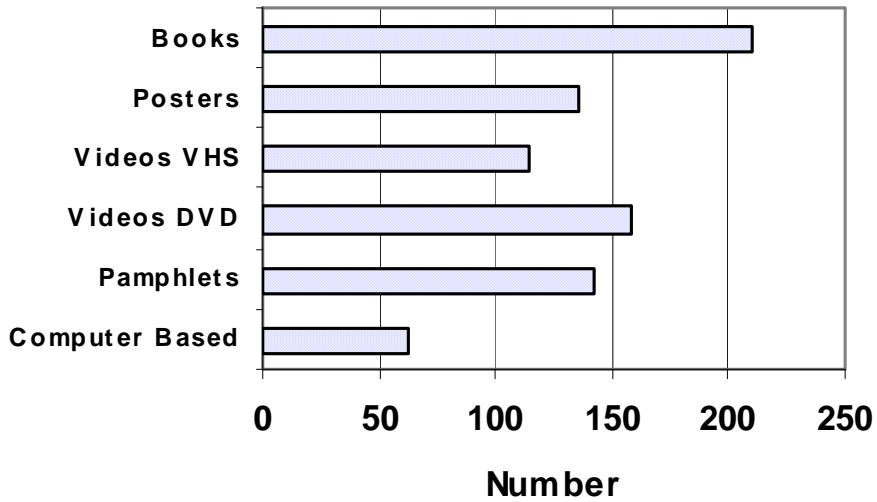
**Conduct Training-Monthly**



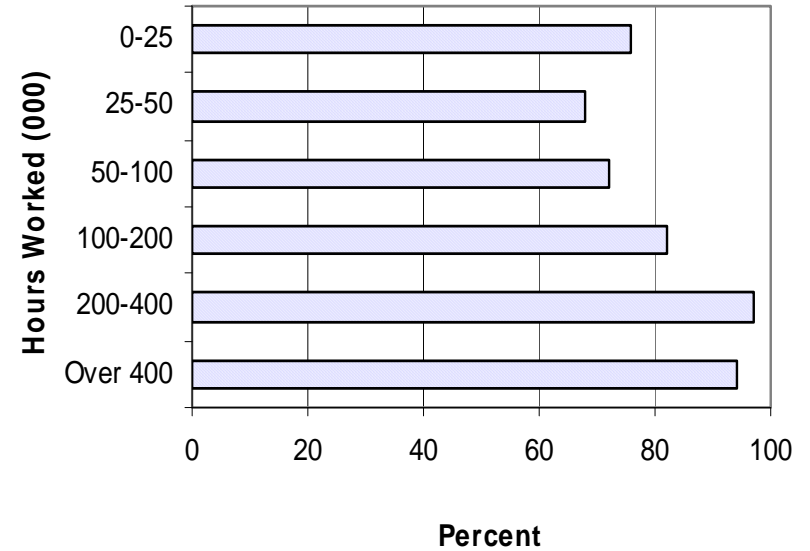
**Conduct Training-Annually**



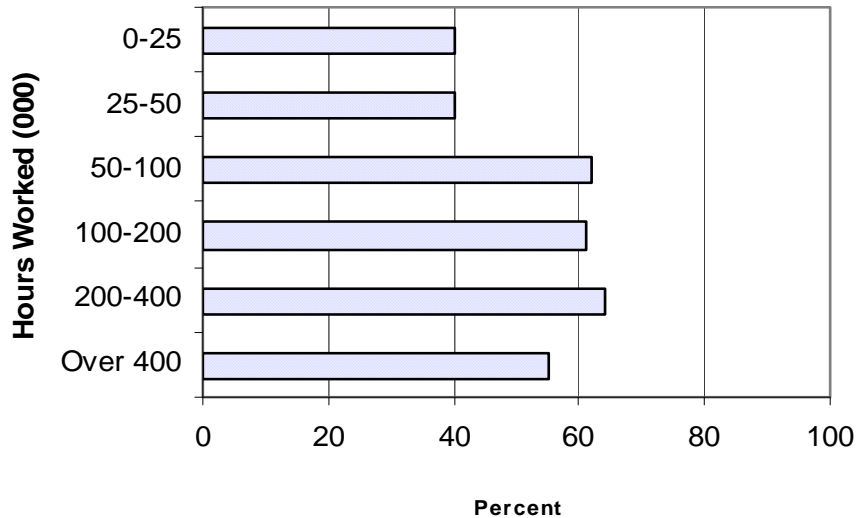
## Types of Training Materials Used



## Safety Training Materials-Books/Manuals

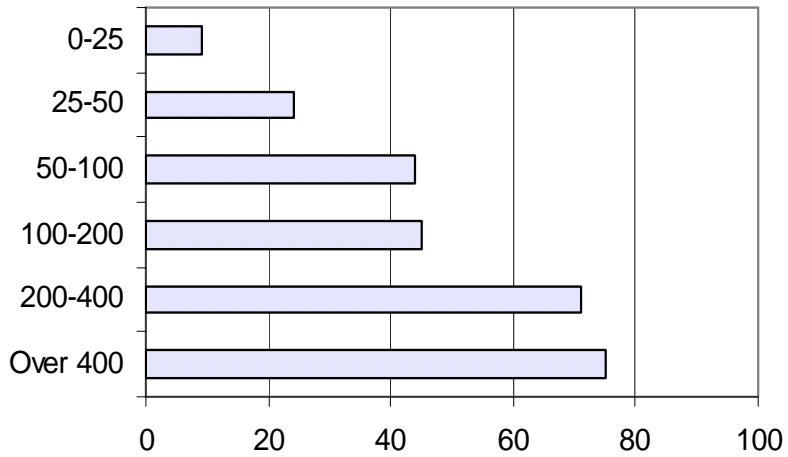


## Safety Training Materials-Posters

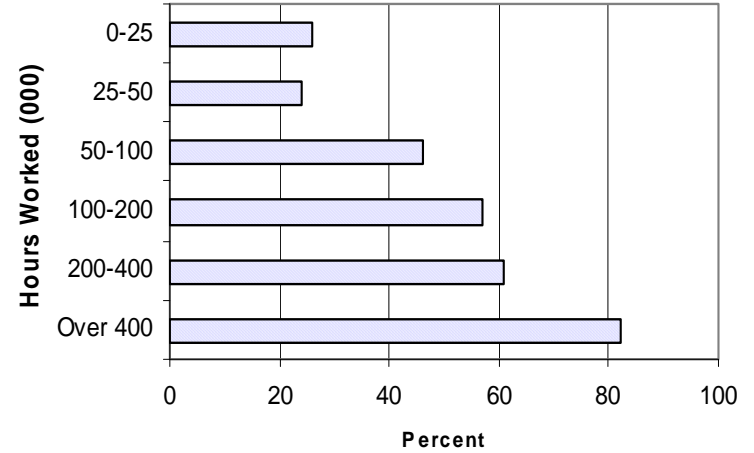


A variety of materials are widely used by contractors to transmit safety information. Usage of all materials generally increased with hours worked by the contractor, except for the largest size category. Larger contractors were most likely to use DVD's and computer assisted training.

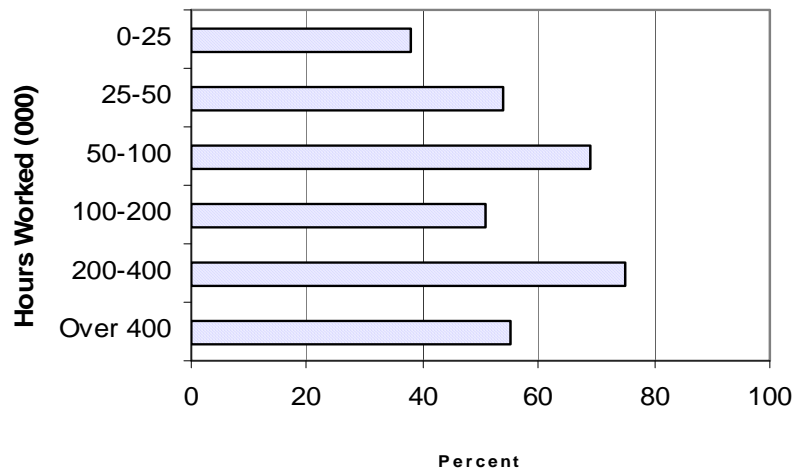
### Safety Training Materials-VHS



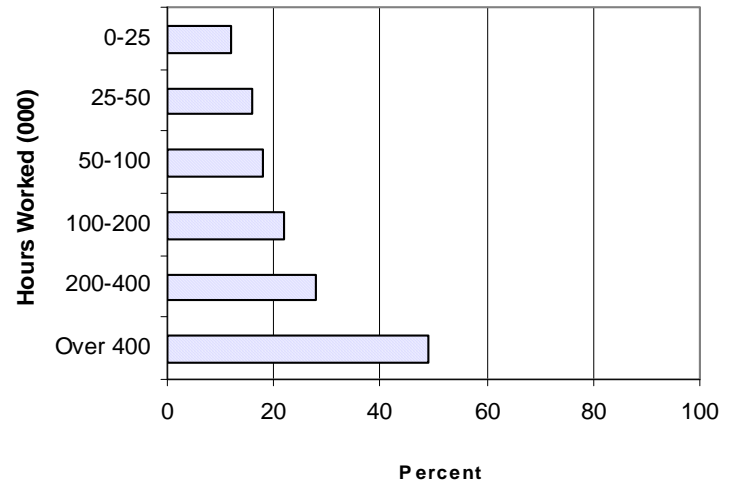
### Safety Training Materials-Videos DVD



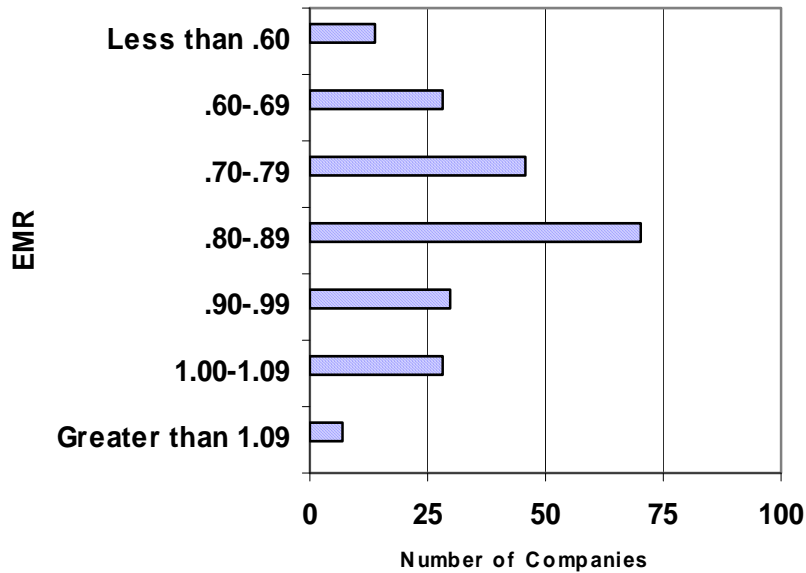
### Safety Training Materials-Pamphlets



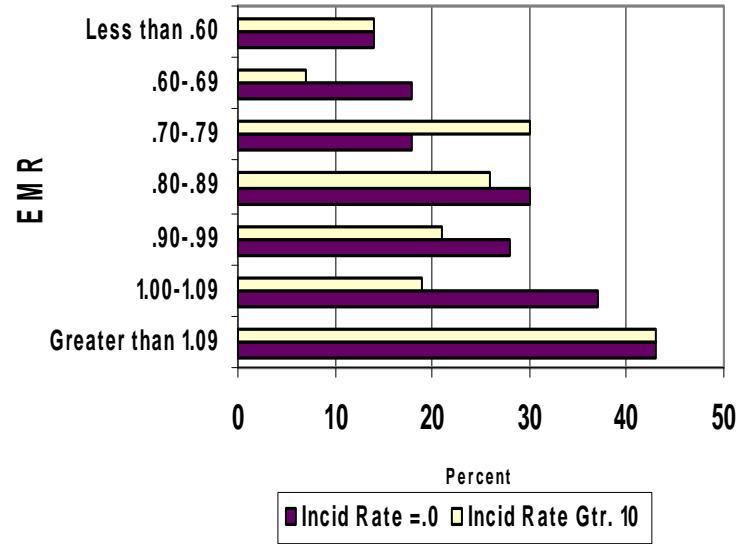
### Safety Training Materials-Computer Based Training



**Number of Responses by EMR**



**Relationship of EMR to Incidence Rate**



About 85 percent of companies reported an experience modification rate (EMR) of less than 1.0. More companies reported an EMR of .80 to .89 than any other category. The average EMR was .83, the lowest since 2001. There was only moderate correlation between a company's EMR and its lost workday incidence rate.

## Industry Segment Safety

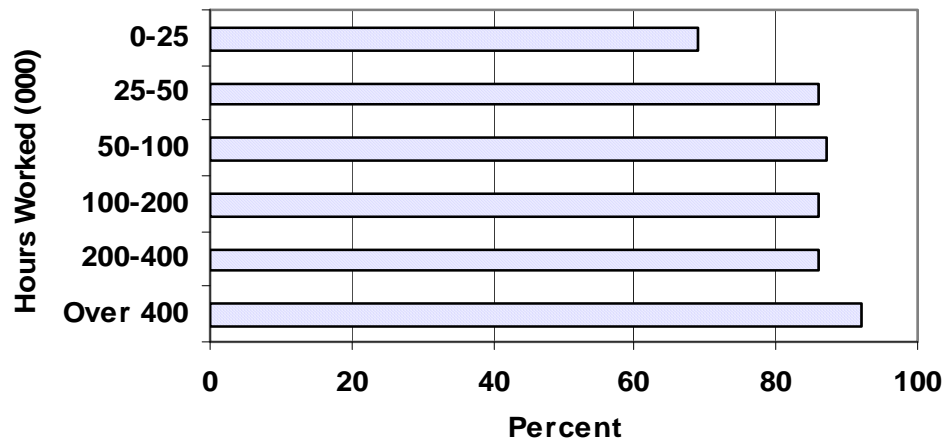
	Number	Hours	Incidents	Incident Rate
<b>Commercial HVAC</b>	124	24,837,128	483	3.89
<b>Residenetial HVAC</b>	32	669,186	14	4.18
<b>Architectural Sheet Metal</b>	57	1,330,518	37	5.54
<b>Industrial Sheet Metal</b>	101	6,402,093	119	3.70
<b>Kitchen Equipment/Food Svs.</b>	29	370,642	14	7.55
<b>Manufacturing</b>	35	644,560	14	4.24
<b>Testing and Balancing</b>	51	681,230	13	3.87
<b>Siding and Decking</b>	18	427,667	12	5.55

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 within about one of the overall industry average. The exception was Kitchen which was highest.

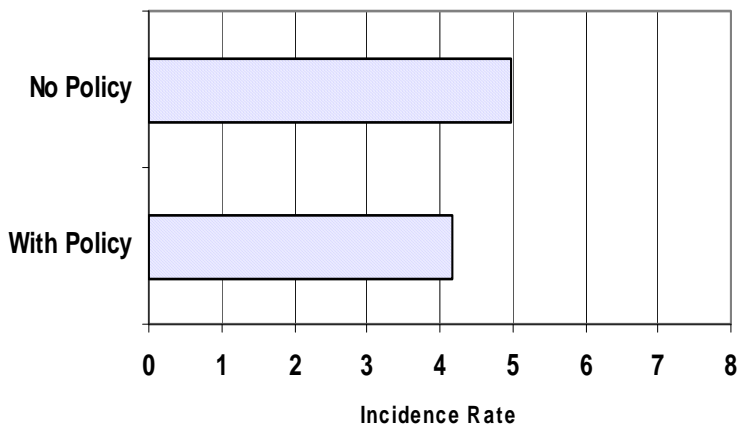
## Formal Program for Drug and Alcohol Abuse



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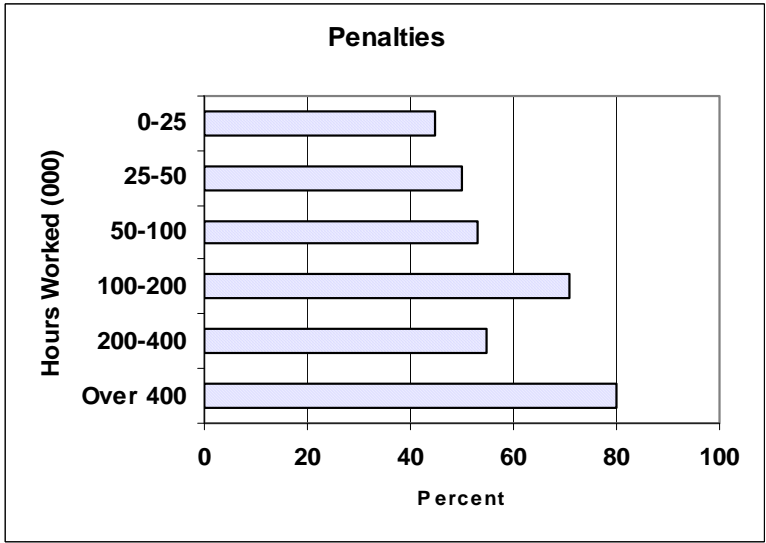
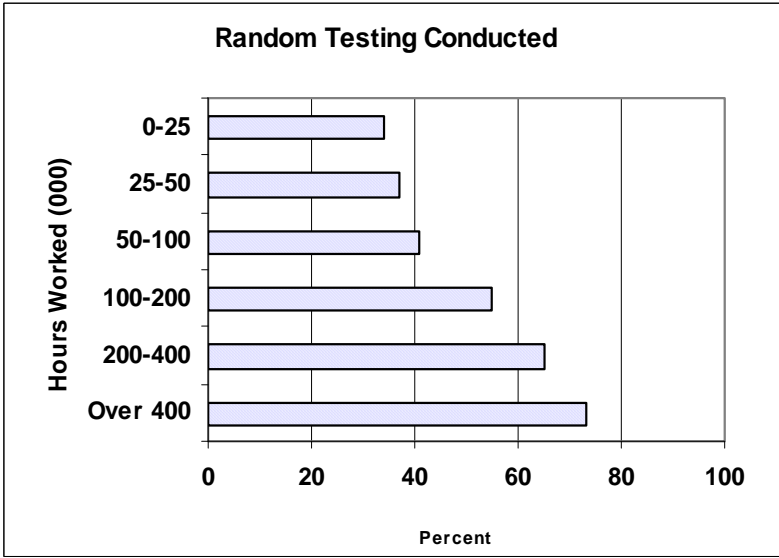
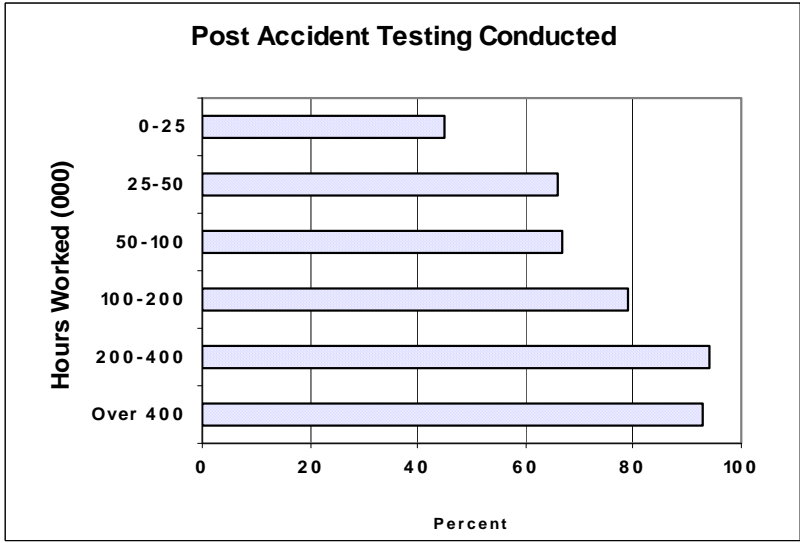
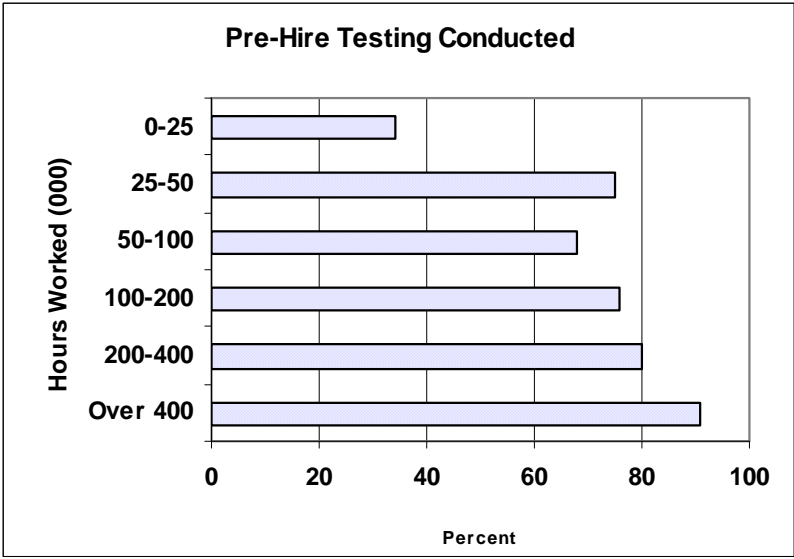


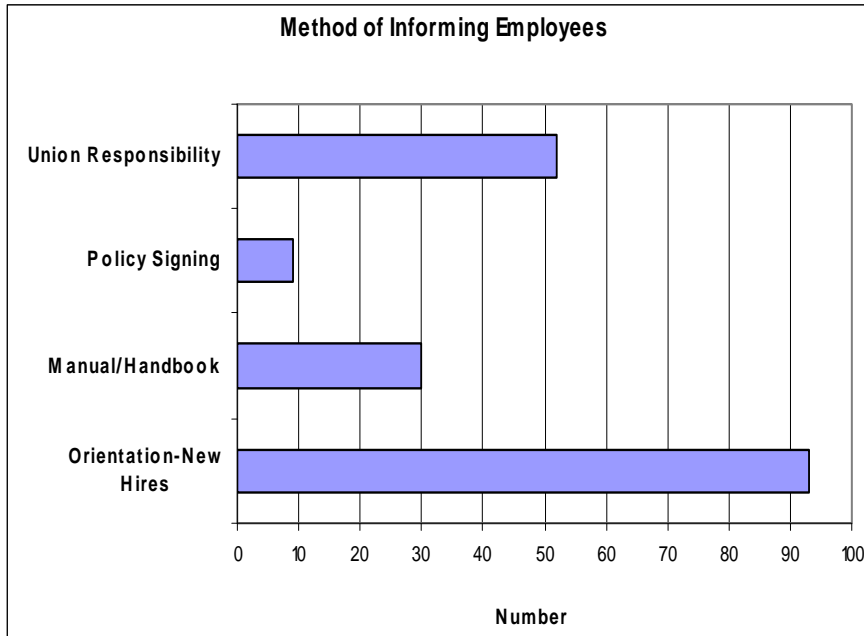
## Incidence Rate by Drug Policy



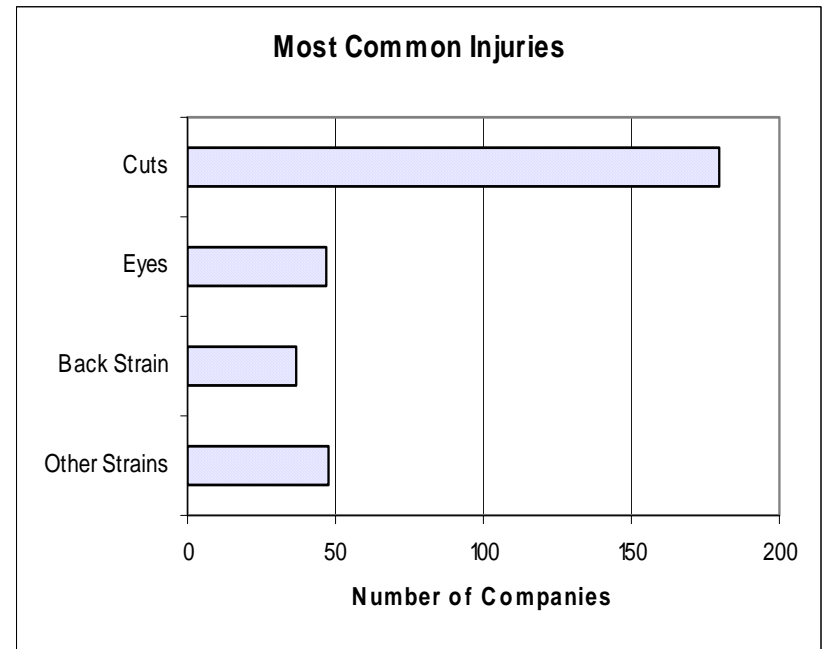
The number of companies reporting that they had a formal program for drug and alcohol abuse continues to increase and is now 84 percent. These companies worked 80 percent of all reported hours. As formal programs have become more prevalent, size of contractor has almost disappeared as a factor in determining the likelihood of a program existing. Again this year, companies with a formal program for drug and alcohol abuse had a lower lost workday incidence rate than those with no programs.







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



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

## SMACNA Safety Trends

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
Incidents	1,174	1,282	1,267	1,450	1,326	1,197	1,429	1,494	1,446	1,339
Incidence Rate	4.39	4.25	4.47	4.04	3.99	4.61	5.52	5.06	5.21	4.62
Lost Workdays	16,478	21,650	18,665	20,106	15,617	25,591	26,086	27,605	24,371	20,547
Average Lost Workdays	86	97	97	114	87	145	168	160	82	84
Reported Hours (millions)	*	*	*	71.8	66.4	52.0	51.8	59.0	56.0	58
Safety & Health Program	91%	94%	92%	91%	94%	92%	93%	93%	96%	98%
Designated Safety Coord.	88%	95%	95%	92%	94%	91%	87%	93%	97%	96%
SMACNA Products	82%	84%	89%	88%	88%	88%	83%	82%	84%	87%
SMOHIT Safety Products								28%	37%	45%
EMR	0.84	0.85	0.81	0.83	0.84	0.86	0.85	0.85	0.85	0.83
Drug Program	42%	46%	51%	58%	64%	67%	76%	74%	78%	84%
Number of Companies	312	334	303	292	322	296	252	283	298	243

\*Data not available.

## SMACNA Safety Performance Selected Issues

	<u>2007</u>		<u>2006</u>	
	<u>All</u> <u>Respondents</u>	<u>Superior</u> <u>Performances</u>	<u>All</u> <u>Respondents</u>	<u>Superior</u> <u>Performances</u>
Use SMACNA Safety Products	87%	90%	84%	75%
Have a Formal Drug Policy	84%	76%	78%	92%
Provide New Worker Orientation	80%	81%	75%	71%
Utilize OSHA 10 Hr. Training	50%	76%	53%	67%
Utilize Computer Based Training	25%	24%	21%	9%
Average EMR	0.85	0.86	0.85	0.79
Average Incidence Rate	4.62	1.01	6.31	0.67

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 a lost workday incidence rate of below 2.00.